

Agenda Cornwall City Council

Meeting #:	2024-19
Date:	Tuesday, August 13, 2024, 6:00 PM
Location:	City Hall, Council Chambers, 360 Pitt Street, Cornwall, ON K6J 4P6
Chair: Prepared By:	Justin Towndale, Mayor Jenelle Malyon, Deputy Clerk

Pages

Moment of Personal Reflection

Indigenous Acknowledgement

We acknowledge that we are gathered on the traditional territory of the Haudenosaunee peoples, the Mohawks of Akwesasne, the original keepers of this land. As settlers, we are grateful for the opportunity to meet here, and we thank all the generations of people who have taken care of this land for thousands of years.

National Anthem

Mayor's Update and Announcements

Roll Call

The Acting Mayor for this month is Councillor Maurice Dupelle.

Additions, Deletions or Amendments

Communication Items

Adoption of Agenda

The Agenda for the Regular Meeting of Council of August 13, 2024, is being presented for adoption as presented / amended.

Action Recommended

Motion to adopt the Agenda for the Regular Meeting of Council of August 13, 2024, as presented.

Pecuniary Interests

Adoption of Minutes

The Minutes of the Regular Meeting of Council of Tuesday, July 09, 2024, are being presented for adoption as presented / amended.

Action Recommended

Motion to adopt the Minutes of the Regular Meeting of Council of Tuesday, July 09, 2024, as presented.

Presentations and Delegations

1. Integrity Commissioner Report, 2024-70-CAO

Action Recommended

- That Council receive Integrity Commissioner Report 2024-01 and that the Office of the City Clerk be directed to post it on the City's website.
- b. That Council suspend the remuneration of the Member for a period of 90 days to reflect the seriousness of the conduct and to deter future contraventions.

2. Biosolids, Organics & Septage Master Plan, 2024-42-Infrastructure and Municipal Works

Action Recommended

- 1. That Council receive the Biosolids, Organics and Septage Master Plan report, master planning document and presentation.
- 2. That Council direct Administration to proceed with the recommended outcomes identified in the report which include:
- 3. Proceed with the preferred option of transporting biosolids generated at the Wastewater Treatment Plant to a third-party site for processing into an agricultural grade soil amendment.
- 4. Proceed with the preferred option of transporting and processing source separated organic material at a third-party facility.
- 5. Proceed with design and construction of a septage receiving station at the City's Wastewater Treatment Plant.

3. Parking Program Review, 2024-113-Planning, Development and Recreation

Action Recommended That report number 2024-113- Planning, Development and 8

368

Recreation be approved as presented.

Bulk Consent Reports

1.	Strategic Priorities Update, 2024-64-CAO	389
	Action Recommended That Council receive report 2024-64-CAO.	
2.	HR Services Review, 2024-19-Fire Services	425
	Action Recommended That Council receive Report 2024-12-FS for information.	
3.	2024 Annual Report for the Municipal Grants Program, 2024-85- Financial Services	521
	Action Recommended That Council receive Report 2024-85-Financial Services for the 2024 Annual Report for the Municipal Grants Program.	
4.	Second Quarter Non-Competitive Procurement Report 2024, 2024- 84-Financial Services	541
	Action Recommended That Council receive the First Quarter Non-Competitive Procurement Report for the period ending June 30, 2024.	
5.	Tender 24-T14 Third Street Reconstruction, 2024-82-Financial Services	544
	Action Recommended That Tender 24-T14 be awarded to Cornwall Gravel Company Limited at the total bid price of \$1,825,141.48 including HST, being the best bid meeting the tender specifications.	
6.	Tender 24-T16 Asphalt Resurfacing on Various City Streets, 2024- 83-Financial Services	546
	Action Recommended That Tender 24-T16 (excluding Part "I") be awarded to Malyon Excavation Limited at the total bid price of \$1,825,430.47 including HST, being the best bid meeting the tender specifications.	
7.	Tender 23-T48 Supply of Land Mobile Radio Infrastructure, 2024- 86-Financial Services	550

	That C Items Servic Motoro	Recommended Council approve proceeding with awarding Tender Provisional and with procuring additional radios for Police and Fire es including cost for programming and installation with bla Solutions Canada Incorporated for the total cost of I36.09 including HST.	
Repo	orts from	Inquiries	
1.	Masse	ey Commons	554
2.	Inquiri	es, Directions, Requested Action Reports Q2, 2024-66-CAO	558
Actio	n Repor	ts	
1.	Mid-Te	erm Governance Review Initiative, 2024-69-CAO	563
	That C proces	Recommended Council approve that the City Clerk initiate the consultation as and prepare a Mid-Term Governance Review Report as bed in Report 2024-69-CAO.	
2.	Counc	il Compensation Review, 2024-68-CAO	568
	That C	Recommended Council consider the following as it relates to their annual eration and benefits.	
	1.	That an adjustment of base pay for Members of Council, on an annual basis, reflect the same rate of increase as the Non-Union group (2023 2%, 2024 2%, 2025 3%, 2026 3%) for this term of Council;	
	2.	That Council provide direction based on the three options provided relating to health benefits;	
	3.	That Council provide direction based on the option below based on pension benefits;	
	4.	That the Clerk conduct a municipal review of Council's compensation for term starting in 2026 and that this review be presented to Council no later than July 1, 2025; and	
	5.	Following Councils' decisions regarding its 2023-2026 annual remuneration and expenses, that Staff prepare and present a By-law to Council for adoption.	
3.		rement of Goods and/or Services Policy - Revised, 2024-80- cial Services	574

Action Recommended

- 1. That Council receive the presentation by David Sherriff-Scott of Borden Ladner Gervais, LLP (appended to this report as Appendix 1) and Report 2024-80-Financial Services.
- That Council adopt the recommended revised Procurement of Goods and/or Services Policy effective September 1, 2024, as outline in Appendix 2, and
- 3. That Council rescind its Motion from November 12, 2019, which directed Administration provide a report to Council for input and approval for the Terms of Reference of an RFP valued greater than \$150,000 prior to the issuance of an RFP document.

4. South Glengarry – Water & Wastewater Servicing Request for Glen Walter, 2023-59-Infrastructure and Municipal Works

742

746

Action Recommended

- 1. That Council direct Staff (Infrastructure and Municipal Works) to formalize a Memorandum of Understanding with the Township of South Glengarry, which requires an equal division of all costs related to the necessary engineering and cost recovery studies, among others, to thoroughly evaluate the request for water and/or wastewater services; and
- 2. That Council direct Staff to prepare a report to Council upon the completion of the requisite engineering and cost recovery studies.

Proposed Self-Supported Cell Tower – 120 Boundary Road – Bell Mobilityc/o Canacre, 2024-144-Planning, Development and Recreation, 2024-145-Planning, Development and Recreation

Action Recommended

That Council pass the subject Resolution of support for the proposed Bell Mobility 75-meter-tall self-supported telecommunication tower at 120 Boundary Road following which a municipal concurrence letter can be issued by staff.

The operative clause of the accompanying Resolution is as follows:

Now, therefore, be it resolved that the Council of the Corporation of the City of Cornwall supports and endorses the proposed Bell Mobility 75-meter-tall self-supported telecommunication tower to be situated at 120 Boundary Road, as herein described.

6. 2023 Fourth Quarter Financial Overview – Preliminary Report,

2024-87-Financial Services

Action Recommended

That Council authorize the transfer of funds as follows:

- a. \$1,187,373 be transferred from the Working Reserve
- b. \$44,558 be transferred from the Water Works Reserve
- c. \$ 221,934 be transferred to the Wastewater Works Reserve

Inquiries

Reports from Committees

Notices of Motion

Avis de motion

Resolutions

Résolutions

1. Procedure By-law – Reconsideration of Start Times, 2024-21-Council Members

Now therefore be it resolved that Council reconsider Section 9.1 of By-law 2023-112 and re-establish 7:00 p.m. as the time of the Public Meetings and set the In Camera meeting to precede the public meeting, at 5:00 p.m., 5:30 p.m., 6:00 p.m. or even 6:30 p.m. as the Agenda necessitates. 799

In Camera Session / Rise and Report

Motion to move into a Closed Meeting to address matters pertaining to Section 239 (2) and (3.1) of the Municipal Act, 2001.

(2) A meeting or part of a meeting may be closed to the public if the subject matter being considered is,

Item #1 - Purchase of Land - 2024-161-PDR

(c) a proposed or pending acquisition or disposition of land by the municipality or local board;

Item #2 - Contruction Contract - 2024-159-PDR

(e) litigation or potential litigation, including matters before administrative tribunals, affecting the municipality or local board;

(f) advice that is subject to solicitor-client privilege, including

communications necessary for that purpose;

By-laws

By-laws 2024-066 to 2024-072 inclusive, listed on the Agenda, are being presented to Council for adoption.

1.	By-law 2024-066 Regulation of Water Supply By-law, 2024-55-IMW	801
2.	By-law 2024-067 AMPS Amendments- Business Licence, Lot Grading, and Water Supply By-Laws, 2024-158-PDR	841
3.	Bylaw 2024-068 CIP for 12 McConnell and 129 Carleton, 2024-147- Planning, Development and Recreation	866
4.	Bylaw 2024-069 regarding the Sale of Land in the Cornwall Business Park, 2024-162-Planning, Development and Recreation	869
5.	By-law 2024-070 Investing in Canada Infrastructure Program Agreement, 2024-52-IMW	871
6.	By-law 2024-071 Assumption Services East Ridge Subdivision Phase 8, 2024-53-Infrastructure and Municipal Works	873
7.	By-Law 2024-072 to authorize the borrowing upon a debenture in the principal amount of \$13,017,084.46 towards the construction of 550 9Th Street, East, Cornwall, Ontario, 2024-46-FS	878
Conf	irming By-law	
Cour	w 2024-073, being a By-law to confirm the proceedings of the ncil of The Corporation of the City of Cornwall at its meetings held on day, August 13, 2024, is being presented to Council for adoption.	

1.	Confirming By-law 2024-073 for August 13, 2024, 2024-67-CAO	995
----	---	-----

Adjournment and Next Regular Meeting of Council

The next Regular Public Meeting of Council will be held on Tuesday, September 10, 2024.



Minutes

Cornwall City Council

Meeting #: Date: Location:	2024-18 Tuesday, July 9, 2024, 6:00 PM City Hall, Council Chambers, 360 Pitt Street, Cornwall, ON K6J 4P6
Attendance Committee Members:	Justin Towndale, Mayor, Claude E. McIntosh, Councillor, Dean Hollingsworth, Councillor, Maurice Dupelle (left the meeting prior to the By-law section of the Agenda), Councillor, Sarah Good, Councillor, Carilyne Hébert, Councillor, Elaine MacDonald, Councillor, Syd Gardiner, Councillor, Denis Sabourin, Councillor, Fred Ngoundjo, Councillor
Regrets:	Todd Bennett, Councillor
Attendance Administration:	Mathieu Fleury, CAO, Manon L. Levesque, City Clerk, Jenelle Malyon, Deputy City Clerk, James Fawthrop, General Manager, Planning, Development and Recreation, Matthew Stephenson, Chief, Fire Services, Mellissa Morgan, General Manager, Human Services and Long- Term Care, Michael Fawthrop, General Manager, Infrastructure Planning and Municipal Works, Tracey Bailey, General Manager, Financial Services and Treasurer, Katherine Wells, Director, Government Relations and Corporate Strategies, Lori Gibeau, Manager, Recreation, Nicole Robertson, Supervisor, Purchasing Services, Brian Dufresne, Deputy Chief, Emily Samson, Student, Office of the Mayor
Chair: Prepared By:	Justin Towndale, Mayor Manon Levesque, City Clerk

1. Moment of Personal Reflection

2. Indigenous Acknowledgement

Mayor Towndale acknowledged that we were gathered on the traditional territory of the Haudenosaunee peoples, the Mohawks of Akwesasne, the original keepers of this land. As settlers, we are grateful for the opportunity to meet here, and we thank all the generations of people who have taken care of this land for thousands of years.

3. National Anthem

4. Mayor's Update and Announcements

Mayor Towndale requested that Fire Chief, Matthew Stephenson, for an update on the weather alerts for the area. Chief Stephenson briefed Council on the after effects of Hurricane Beryl. Prediction indicates that our area will likely experience heavy rainfall.

5. Roll Call

The Acting Mayor for this month is Councillor Todd Bennett.

6. Additions, Deletions or Amendments

- Bulk Consent Item #2, Request for Proposal 24-P03 Specialized & On-Demand Transit Scheduling Software, was moved to Action Item #1 for discussion.
- Bulk Consent Item #3, HR Services Review, was removed from the Agenda.
- Addition of a Notice of Motion Item #1, Procedure By-law -Reconsideration of Start Times
- Addition of a Resolution Item #1, Budget Direction for 2025

7. Adoption of Agenda

Moved By: Syd Gardiner, Councillor Seconded By: Carilyne Hébert, Councillor

Motion to adopt the Agenda for the Regular Meeting of Council of July 09, 2024, as amended.

Motion Carried

8. Pecuniary Interests

There were no pecuniary interests declared.

9. Adoption of Minutes

Moved By: Fred Ngoundjo, Councillor Seconded By: Maurice Dupelle, Councillor

Motion to adopt the Minutes of the Regular Meeting of Council of Tuesday, June 25, 2024, as presented.

Motion Carried

10. Presentations and Delegations

1. 2024 Ontario Winter Games Legacy Award Presentation, 2024-115-Planning, Development and Recreation

Leo Logan Currier and Siri Neville, both students from l'École secondaire catholique La Citadelle, received the Ontario Winter Games Legacy Award.

Cecilia Liolios will be receiving her Ontario Winter Games Legacy Award from the United Counties of Stormont, Dundas and Glengarry.

2. Procurement of Goods and/or Services Policy - Revised, 2024-77-Financial Services

Tracey Bailey, General Manager, Financial Services was accompanied by David Sherrif-Scott of Borden Ladner Gervais, LLP, to present the revised the Procurement of Goods and/or Policy. Mr. Sherrif-Scott detailed the revised policy and detailed 2024 policy update, ethical procurement, environmental considerations, electronic tendering, purchasing cards and emergency and urgent procurement. Mr. Sherrif-Scott went on to speak about competitive procurement within budget, non-competitive procurement within budget, over-budget expenditures and non-budgeted expenditures.

Moved By: Dean Hollingsworth, Councillor Seconded By: Fred Ngoundjo, Councillor

Motion to defer this item to the next scheduled Regular Meeting of Council of Tuesday, August 13, 2024.

Motion Carried

11. Bulk Consent Reports

Moved By: Elaine MacDonald, Councillor Seconded By: Maurice Dupelle, Councillor

Motion to approve the recommendations contained in Bulk Consent Items #1, #4, #5 and #6 as presented.

Motion Carried

1. Joint Tender for Winter Highway Coarse Salt, 2024-75-Financial Services

That the joint tender for the supply and delivery of winter highway coarse salt be awarded for a two-year period with an option to renew for two additional one-year periods to Cargill Salt, Road Safety at the total bid price of \$890,880.00 excluding HST for a year one period, being the best bid meeting the tender specifications.

2. Request for Proposal 24-P03 Specialized & On-Demand Transit Scheduling Software, 2024-79-Financial Services

This item was moved to Action Item #1 for discussion.

3. HR Services Review, 2024-15-Fire Services

This item was removed from the Agenda.

4. Regulatory Framework Governing Taxis and Similar Ground Transportation Services, 2024-63-CAO

That Council refer this request to Planning, Development and Recreation for a report.

5. Temporary Street Closure for the Cornwall Night Market, 2024-56-CAO

That Council approve the Temporary Street Closure of Pitt Street, from First Street to 58 Pitt Street, on Friday, August 16, 2024, from 4:00 p.m. to 10:00 p.m.,

6. Purchase of Three Ambulances for Paramedic Services, 2024-78-Financial Services

That Council approve the purchase of three (3) new, complete ambulances from Crestline Coach Limited at a total estimated price of \$881,900.87 including HST.

12. Reports from Inquiries

1. Climate Lens and Human Rights Lens in Reports, 2024-53-CAO

Moved By: Sarah Good, Councillor Seconded By: Syd Gardiner, Councillor

Motion to approve report 2024-53-CAO and direct staff to include a new section in Council reports titled "Climate Action Plan Alignment".

Motion Carried

2. Guindon Park Beach – Property Ownership, 2024-133-Planning, Development and Recreation

Moved By: Sarah Good, Councillor Seconded By: Maurice Dupelle, Councillor

That Council receive Memo 2024-133-PDR.

Motion Carried

3. Height and Parking Restrictions, 2024-134-Planning, Development and Recreation

Moved By: Sarah Good, Councillor Seconded By: Dean Hollingsworth, Councillor

That Council receive Report 2024-134-PDR.

13. Action Reports

1. Request for Proposal 24-P03 Specialized & On-Demand Transit Scheduling Software, 2024-79-Financial Services

This item was moved from Bulk Consent Item #2 to Action Reports Item #1 for discussion.

Moved By: Dean Hollingsworth, Councillor Seconded By: Sarah Good, Councillor

That RFP 24-P03 be awarded to Spare Labs Incorporated, at the revised bid price of \$440,700 including HST for a term of five years effective July 10, 2024, with the option to renew for two additional one-year terms being the best Proposal meeting the specifications.

Motion Carried

14. Inquiries (Inquiries do not require motions unless requested)

1. Generators, 2024-18-Council Members

Moved By: Justin Towndale, Mayor Seconded By: Sarah Good, Councillor

Whereas Report 2024-71-Financial Services indicated that the City of Cornwall currently has generators that are non-compliant and in need of upgrades in order to bring them in line with TSSA standards; and

Whereas the cost for the upgrades is an unbudgeted expense of \$263,340.85; and

Now therefore be it resolved that Administration provide Council with the years of purchase and installation for each generator listed as non-compliant.

Now therefore be it further resolved that Administration provide Council with the date that the latest TSSA standards for generators came into effect.

Motion Carried

2. Massey Commons

Moved By: Sarah Good, Councillor Seconded By: Elaine MacDonald, Councillor

Motion to obtain a cost estimate from the architects to transform the area that is currently designated for micro units to enclosed units including at least one two-bedroom unit, if not more.

(a) Suspension of the Rules

Moved By: Denis Sabourin, Councillor Seconded By: Dean Hollingsworth, Councillor

Motion to suspend the Rules (requiring a 2/3 majority vote) to allow for Councillor's Ngoundjo's Notice of Motion, which was out of order, to be read.

Motion Carried

(b) Notice of Motion

Moved By: Fred Ngoundjo, Councillor Seconded By: Maurice Dupelle, Councillor

Whereas the City of Cornwall seeks to establish much needed transitional housing in the best possible location with most appropriate medical and social supports in the surrounding area.

Whereas as currently planned, the individual micro units do not fit well into the development, as they are zoned "public", while the remainder of the building is zoned residential, a matter recently identified as an important planning issue by City officials before the Committee of Adjustment.

Whereas these temporary housing units, involving the constant changeover of residents in and out of the building and the area, do not blend with what Massey Commons is primarily intended to be.

Whereas moving these 8 units to the ground floor of the City's Housing complex on 9th Street where residents could be gradually transitioned to a more permanent housing situation within the same building and be closer to many amenities nearby accessible within walking distance, namely the Community Hospital and mental health assistance, as well as retail stores including a food store and other food facilities,

Whereas these important resources would provide better supports which would be of significant benefit to this crucial service, thereby helping to better ensure its success.

Now therefore be it resolved that Council reconsider its previous decision with regard to the placement of these micro units,

And be it further resolved that these units be situated at the 9th Street Housing Complex instead, with the Housing offices being relocated to the new facility within Massey Commons.

(c) Appeal

Councillor Dean Hollingsworth asked if the Motion was being debated and the Mayor stated that the Rules had been suspended.

At 8:15 p.m. Mayor Justin Towndale called for a five-minute recess.

Upon the return to the Regular Meeting of Council, Councillor Maurice Dupelle stated his displeasure with the Mayor and Members of Administration leaving the Council Chambers to meet behind closed doors.

Manon Levesque, City Clerk, began by reading Article 19, Motion to Appeal, of the Procedure By-law.

The Mayor was questioned on his Ruling. Mayor Towndale indicated that he supported the Clerk's recommendation and ruled the Notice of Motion, submitted by Councillor Ngoundjo, out of order.

Upon request, Ms. Levesque explained the process to move forward.

Councillor Sarah Good appealed Mayor Towndale's ruling and gave her reasons why. Mayor Towndale explained his position.

Motion to vote in favour of the appeal against Mayor Towndale's ruling.

Motion Carried

(d) Suspension of the Rules

Moved By: Sarah Good, Councillor Seconded By: Elaine MacDonald, Councillor Motion to suspend the Rules (requiring a 2/3 majority vote) to allow for the Motion to live on this Agenda as a Resolution.

Motion Carried

(e) Resolution

Council then debated the Resolution.

A vote on the Resolution was then called by Mayor Justin Towndale.

Motion Defeated

15. Reports from Committees

- Councillor Elaine MacDonald announced that the AfroDiversity Festival is taking place at Lamoureux Park on July 12, 13 and 14, 2024.
- Councillor Elaine MacDonald also announced that Pride 2024 is being held from Friday, July 12, to Sunday, July 21, 2024.

16. Notice of Motion

1. Procedure By-law – Reconsideration of Start Times, 2024-20-Council Members

Whereas, in December of 2023, as proposed by Mr. Rick O'Connor, President of MuniverseRO Consulting Inc., Council adopted the revised Procedure By-law 2023-112. By that By-law, Council adopted Article 9.1 of the Rules, that places the In Camera Meeting toward the end of the Public Meeting, rather than prior to it, as had been the custom for many years. At the time, there was no movement to resist the change in the order of occurrence of the two meetings, and certainly not the 2/3 vote that it would have taken to deviate from the prescribed order as described in Article 9.1., and

Whereas since that time, the law of unintended consequences suggests that Council reconsider the change in order of the meetings. It has become apparent that the change causes a severe stress to those Councillors who are employed full time and in some instances at great distances from Council Chambers, and

Whereas meetings subsequent to that of December 11, 2023, have demonstrated that punctual attendance at the public meeting is actually impossible for some Members of Council, and

Whereas some Ontario municipalities have adopted the public/incamera sequence, but not all have, and Whereas in larger cities, election to a seat on Council is an election to a full-time position, with a family-supporting wage as recompense. This situation allows a person to step away from their primary employment without jeopardizing their welfare and meet during business hours. But that is not the case in Cornwall, where the responsibility is equally weighty but capable of being discharged on a part-time basis, with part-time remuneration in return. Consequently, it is unreasonable to so arrange a timetable so members cannot serve on Council without incurring employmentrelated stress or transportation stress; and

Whereas the revised order is understood to be a "best practice" in Mr. O'Connor's words and in his opinion, the order of the meetings, like all the other provisions in the Procedure By-law, is the responsibility of Council.

Whereas this motion presupposes that the Public Meeting is more important than the In Camera Meeting, Council should so establish the timetable that if a member must be late, she/he would miss part of the In Camera Meeting rather than part the Public Meeting. It is in the Public Meeting that the business of the municipality is conducted, and tax dollars are spent. In Camera Meetings have a much narrower scope and effect.

Now therefore be it resolved that Council reconsider Section 9.1 of By-law 2023-112 and re-establish 7:00 p.m. as the time of the Public Meetings and set the In Camera meeting to precede the public meeting, at 5:00 p.m., 5:30 p.m., 6:00 p.m. or even 6:30 p.m. as the Agenda necessitates.

17. Resolutions

1. Youth Advisory Committee, 2024-17-Council Members

Mayor Justin Towndale stepped down and Councillor Maurice Dupelle stepped up to chair, the Meeting as Mayor Towndale was proposing the Resolution.

Moved By: Justin Towndale, Mayor Seconded By: Denis Sabourin, Councillor

Now therefore be it resolved that The City of Cornwall re-establish the Youth Advisory Committee; and

Now therefore be it further resolved that Terms of Reference be drafted for the Committee and presented to Council for approval

Motion Carried

2. Budget Direction for 2025, 2024-19-Council Members

Councillor Maurice Dupelle continued to Chair the Meeting, as Mayor Justin Towndale was proposing the Resolution.

Moved By: Justin Towndale, Mayor Seconded By: Denis Sabourin, Councillor

Now therefore be it resolved that Staff prepare the 2025 General Taxation Budget with a goal of no more than 4% tax levy increase excluding growth and provide similar objectives to the Police Services Board; and

Now therefore be it further resolved that Council and Staff support the community with expanded consultations in the annual budget process ensuring increased public participation.

Motion Carried

18. In Camera Session / Rise and Report

There was no In-Camera Session.

19. By-laws

Moved By: Elaine MacDonald, Councillor Seconded By: Fred Ngoundjo, Councillor

Motion to adopt By-laws 2024-057 to 2024-064 inclusive, listed on the Agenda.

Motion Carried

- 1. By-law 2024-057 Cornwall Colts Agreement Renewal, 2024-75-PDR
- 2. By-law 2024-058 CIP for 29A-29 Albert Street, 2024-124-Planning, Development and Recreation
- 3. By-law 2024-059 to Extend Cornwall Business Enterprise Centre Agreement with the Ministry of Economic Development, Job Creation and Trade and Repeal By-Law 2024-031, 2024-142-PDR
- 4. By-law 2024-060 to authorize The Corporation of the City of Cornwall to enter into a Municipal Funding Agreement with the Association of Municipalities of Ontario., 2024-76-Financial Services
- 5. By-law 2024-061 Collective Agreement with CPFFA (Local 849), 2024-13-Fire Services

- 6. By-law 2024-062 to ratify the Collective Agreement between the Corporation of the City of Cornwall and CUPE 234, 2024-16-Fire Services
- 7. By-law 2024-063 Collective Agreement Ontario Nurses' Association (ONA), 2024-17-Fire Services
- 8. By-law 2024-064 to ratify the Collective Agreement between the Corporation of the City of Cornwall and CUPE 4452, 2024-18-Fire Services

20. Confirming By-law

1. Confirming By-law 2024-065 for July 9, 2024, 2024-61-CAO

Moved By: Denis Sabourin, Councillor Seconded By: Elaine MacDonald, Councillor

Motion to adopt Confirming By-law 2024-065 to confirm the proceedings of Council Meeting of July 9, 2024.

Motion Carried

21. Adjournment and Next Regular Meeting of Council

The next Regular Public Meeting of Council will be held on Tuesday, August 13, 2024.

Moved By: Sarah Good, Councillor Seconded By: Fred Ngoundjo, Councillor

Motion to adjourn the Regular Meeting of Council of June 09, 2024, at 9:50 p.m.

Motion Carried

Manon L. Levesque, City Clerk

Justin Towndale, Mayor



The Corporation of the City of Cornwall Regular Meeting of Council Report

Department:	CAO
Division:	Office of the City Clerk
Report Number:	2024-70-CAO
Meeting Date:	August 13, 2024
Subject:	Integrity Commissioner Report 2024-01 (Complaint of January 30, 2024)

Purpose

To have Council receive the information in the report. Tony Fleming, Cornwall's Integrity Commissioner, will also be in attendance virtually at the Regular Meeting of Council of August 13, 2024, to answer any questions regarding the report.

Recommendation

- (a) That Council receive Integrity Commissioner Report 2024-01 and that the Office of the City Clerk be directed to post it on the City's website.
- (b) That Council suspend the remuneration of the Member for a period of 90 days to reflect the seriousness of the conduct and to deter future contraventions.

Background / Discussion

A Complaint was filed with Tony Fleming, the City's Integrity Commissioner on January 30, 2024, alleging that Councillor Carilyne Hébert (referred to as the Member) attempted to influence the voting on a funding request from the Social Development Council, her employer, in breach of the Code of Conduct.



The Integrity Commissioner found that:

- 1. The Member's communications with various organizations to request letters of support for the funding for the Social Development Council constituted a breach of Section 5(1)(c) of the *Municipal Code of Interest Act.*
- 2. The Member's attempt to communicate with Council during the questionand-answer period constituted a breach of Section 5(1)(c) of the *Municipal Conflict of Interest Act.*
- 3. The Member's authorship of the script and presentation delivered by the Social Development Council presenters and the preparation of the Social Development presenters constituted a breach of Section 5(1)(c) of the *Municipal Conflict of Interest Act.*
- 4. The Members's comment to another Member prior to the Council meeting considering the Social Development Council funding constituted a breach of Section 5(1)(c) of the *Municipal Conflict of Interest Act.*

It is the Integrity Commissioner's recommendation that Council suspend the remuneration of the Member for a period of 90 days.

Tony Fleming's report is presented in his role as the Integrity Commissioner. While it does name the Member of Council who is the subject of the complaint, that is not information about an identifiable individual that qualifies for an exemption under Section 239 as the identity of the Member of Council must be disclosed in order to comply with the Municipal Act requirement that the report be made available to the public. The identity of the Member of Council who is the subject of the complaint is a critical element of the report. No other category under section 239 applies to this report that would allow it to be considered in closed session.



Tony E. Fleming Direct Line: 613.546.8096 E-mail: tfleming@cswan.com

CONFIDENTIAL

July 30, 2024

Delivered by email: <u>mlevesque@cornwall.ca</u>

Mayor and Council c/o Manon Levesque, Clerk 360 Pitt Street, Cornwall, ON K6J 3P9

Dear Ms. Levesque:

RE: Code of Conduct Complaint – Report Our File No. 28637-16

Please be advised that our investigation under the Code of Conduct is now complete. We attach the final report herewith and the report should now be circulated to members of the Council. We have provided a copy of the report to the Member and Complainant separately.

This investigation is hereby closed.

Sincerely,

Cunningham, Swan, Carty, Little & Bonham LLP

Tony E. Fleming, C.S. LSO Certified Specialist in Municipal Law (Local Government / Land Use Planning) Anthony Fleming Professional Corporation TEF:ls Enclosures

{01378135.DOCX:}





Tony E. Fleming Direct Line: 613.546.8096 E-mail: tfleming@cswan.com

CONFIDENTIAL

July 29, 2024

SENT BY EMAIL TO: mlevesque@cornwall.ca

City of Cornwall c/o Manon Levesque, City Clerk 360 Pitt Street Cornwall, ON K6J 3P9

Dear Mayor and Council:

RE: Code of Conduct Complaint – Report Our File No. 28637-16

This public report of our investigation is being provided to Council in accordance with Section 223.6 of the *Municipal Act*. We note that Section 223.6(3) of the *Municipal Act* requires that Council make the report public. The Clerk should identify on the agenda for the next open session Council meeting that this report will be discussed. Staff should consider whether it is appropriate to place the full report on the agenda in advance of Council deciding how the report should otherwise be made public.

Should Council desire, the Integrity Commissioner is prepared to attend virtually at the open session meeting to present the report and answer any questions from Council.

At the meeting, Council must first receive the report for information. The only decision Council is afforded under the *Municipal Act* is to decide how the report will be made public, and whether to adopt any recommendations made by the Integrity Commissioner. Council does not have the authority to alter the findings of the report, only consider the recommendations.

The Integrity Commissioner has included only the information in this report that is necessary to understand the findings. In making decisions about what information to include, the {01382733.DOCX:}

T E L : 6 1 3 - 5 4 4 - 0 2 1 1 F A X : 6 1 3 - 5 4 2 - 9 8 1 4 E M A I L : I N F O @ C S W A N . C O M W E B : W W W . C S W A N . C O M Integrity Commissioner is guided by the duties set out in the *Municipal Act*. Members of Council are also reminded that Council has assigned to the Integrity Commissioner the duty to conduct investigations in response to complaints under the Code of Conduct, and that the Integrity Commissioner is bound by the statutory framework to undertake a thorough process in an independent manner. The findings of this report represent the Integrity Commissioner's final decision in this matter.

Timeline of Investigation

The key dates and events for this investigation are as follows:

- ➤ Complaint Received January 30, 2024
- Preliminary Review Conducted
- Complaint sent to Member February 1, 2024
- Member's Response Received February 15, 2024
- Complainant's Response Received April 17, 2024
- Interviews Conducted May 2024

Complaint Overview

A complaint (the "Complaint") was received on January 30, 2024 that alleged Councillor Carilyne Hébert (the "Member") breached the Code of Conduct as follows:

- The Member is employed by the Social Development Council (the "SDC") as Executive Director;
- The Member declared a pecuniary conflict of interest with respect to the meeting of Council on January 29, 2024 for the 2024 Budget regarding a funding request made by the Social Development Council (the "SDC");
- The Member allegedly attempted to influence the voting on a funding request from SDC, including that:
 - Council received approximately twenty letters of support from various organizations for funding of the SDC. It was alleged that the Member sent emails to these organizations as Executive Director of SDC requesting the letters be sent to Council; and
 - The Member left Council Chambers when SDC made its funding request presentation. It is alleged, however, that the Member was communicating with her phone with her team members who were presenting to Council.

Jurisdiction

The Complaint engaged provisions of the *Municipal Conflict of Interest Act* (the "MCLA") but the inquiry was conducted under the Code of Conduct only. We were without jurisdiction to proceed under the *MCLA* as the Complaint was clearly formulated as a Complaint under the Code of Conduct.

Section 223.4.1 of the *Municipal Act* is clear that our jurisdiction is limited regarding inquiries under the *MCLA*. Specifically, an elector must apply in writing pursuant to Section 223.4.1(2) in the form detailed in Section 223.4.1(6) for our office to have jurisdiction to conduct an inquiry under the *Municipal Conflict of Interest Act*.

As such, the following reasons pertain to the Code of Conduct.

Relevant Legislative and Policy Provisions

Code of Conduct

The following provisions of the Code of Conduct were engaged by the Complaint:

9.1 Members must be familiar with and comply with the *Municipal Conflict of Interest Act*, as amended. It is the responsibility of each Member, not Staff, to determine whether they have a direct or indirect pecuniary interest with respect to matters arising before Council, a Board or Committee. Each Member shall determine whether he or she has a direct or indirect pecuniary interest and shall at all times comply with the Act.

9.4 Every Member has the following obligations:

. . .

. . .

c) To refuse to participate in the discussion of Council, the Board or Committee and to not vote on the matter or seek to influence the vote of any other Member where a conflict of interest exists;

<u>MCLA</u>

As Section 9.1 of the Code of Conduct requires compliance with the *MCLA* by reference, the following provisions of that Act are relevant:

2. For the purposes of this Act, a member has an indirect pecuniary interest in any matter in which the council or local board, as the case may be, is concerned, if,

3

(b) the member is a partner of a person or is in the employment of a person or body that has a pecuniary interest in the matter.

5(1) Where a member, either on his or her own behalf or while acting for, by, with or through another, has any pecuniary interest, direct or indirect, in any matter and is present at a meeting of the council or local board at which the matter is the subject of consideration, the member,

•••

(c) shall not attempt in any way whether before, during or after the meeting to influence the voting on any such question.

Factual Findings

Findings of fact were required as part of this investigation. Specifically, we were required determine the nature of the Member's interactions with Council with respect to the funding request for SDC despite declaring a pecuniary conflict of interest.

This investigation uses the standard of proof known as the "balance of probabilities" which applies to Integrity Commissioners in Ontario.¹ The standard requires the trier of fact to "scrutinize the relevant evidence with care to determine whether it is more likely than not that the alleged event occurred."²

The following factual issues arose during the investigation when determining the nature of the Member's interactions with Council with respect to the funding request for SDC:

- 1. Did the Member solicit letters to Council in support of funding for the SDC?
- 2. Did the Member attempt to communicate with Council through SDC presenters during the funding presentation?
- 3. What was the extent of the Member's involvement in the preparation of the presentation to Council?
- 4. Did the Member state to another Member prior to the meeting, "If we don't get the funding, I'm out of a job"?

Our findings with respect to each issue are outlined below.

¹ Chiarelli (re), 2020 ONMIC 20 at para 84.

² F.H. v McDougall, 2008 SCC 53 at para 49.

1. Did the Member solicit letters to Council in support of funding for the SDC?

We find that the Member did communicate with and provide a draft letter to various organizations requesting that they send a letter of support to Council regarding the SDC funding matter.

Council received approximately twenty letters of support from various organizations for funding of the SDC. We reviewed emails indicating that the Member requested the letters from the organizations. Further, the Member confirmed that she requested letters from various organizations for letters of support in her role as Executive Director of SDC and confirmed that she prepared a draft letter for the organizations to use as a template.

2. Did the Member attempt to communicate with Council through SDC presenters during the funding presentation?

We find that the Member did attempt to communicate with Council during the question-andanswer period at the Council meeting of January 29, 2024 by sending a text message to an SDC board member in Council Chambers asking her to correct an answer to a question.

We find that during the January 29, 2024 meeting where the funding for SDC was being considered the Member left the Council chambers when the SDC team was presenting. It was alleged, however, that the Member was observed communicating via telephone or text message with the delegation during the question-and-answer period with Council.

The Member's evidence was that, in response to a question posed by a Councillor about staffing to which an incorrect answer was provided, the Member sent a text message to a member of the SDC board who was present in the audience but was not presenting to Council. The message said, "Request is for one full-time and one-part time. The current two part-times are due to administrative costs from grants we've received; they are not permanent employees. Can you speak up? [name] and [name] are contract." The Member stated that the SDC board member responded that audience members were not being permitted to speak.

The Member's evidence supports a finding that the Member did attempt to communicate with Council during the presentation by specifically texting a response to a question to an audience member and asking them to "speak up".

3. What was the extent of the Member's involvement in the preparation of the presentation to Council?

Our investigation determined that the Member authored the script used during the presentation by the SDC presenters, created the presentation used and prepared the presenters for questions.

This finding was based on evidence received in the Complaint, from witnesses and from the Member. Witnesses were interviewed that observed or were aware of the Member preparing the SDC delegates for the presentation, including instructing the delegates as to what to say or how to answer questions. Lastly, the Member confirmed during the investigation that she authored the script used during the Council meeting by the delegates, created the presentation used and prepared staff and board members for questions.

4. Did the Member state to another Member prior to the meeting "If we don't get the funding, I'm out of a job"?

Our investigation found that, on a balance of probabilities, the Member made a comment to another Member prior to the meeting that "if we don't get the funding, I'm out of a job".

We received evidence that the Member made a comment to another Member in the lunchroom outside of Council chambers that "if [SDC] doesn't get the funding, I'm out of a job".

The Member's evidence was that she had no recollection of any such conversation with any Member of Council.

We find that it is more likely than not that the Member made the alleged comment. The evidence received regarding the comment made was convincing and credible and we accept it in its entirety.

Section 9.1 of the Code of Conduct

Section 9.1 of the Code of Conduct requires that Members comply with the provisions of the MCLA. The relevant provisions of the MCLA are Section 2(b) and Section 5(1)(c).

We find that the Member contravened Section 5(1)(c) of the *MCLA*.

As a result, we find that the Member contravened Section 9.1 of the Code of Conduct.

Interpretation of the MCLA

Courts have held that the MCIA is to be construed broadly and consistently with its purpose. The Court of Appeal has noted that the MCIA, "was enacted to encourage

{01382733.DOCX:} Cunningham Swan Carty Little & Bonham LLP

open, accountable and honest municipal government by demanding 'high standards of those elected to public office".³ This requirement to construe the *MCLA* broadly and consistently with this purpose is reflected in the reasons that follow.

Section 2(b) - Indirect Pecuniary Interest

The MCLA details that a Member has an indirect pecuniary interest in a matter if the Member is in the employment of a body that has a pecuniary interest in the matter.

We find that the Member, consistent with her declaration, had an indirect pecuniary interest in the grant by Council of the funding for SDC due to her employment as Executive Director with SDC.

Section 5(1)(c) – Attempt to Influence

This section of the MCIA reads:

5(1) Where a member, either on his or her own behalf or while acting for, by, with or through another, has any pecuniary interest, direct or indirect, in any matter and is present at a meeting of the council or local board at which the matter is the subject of consideration, the member,

•••

(c) shall not attempt in any way whether before, during or after the meeting to influence the voting on any such question.

The wording of this provision is broad, prohibiting a Member from attempting "in any way" whether "before, during or after" the meeting to influence the voting.

The following has been noted by the Court about this section:

Section 5(1)(c) of the *Act* requires an attempt to influence. This involves a deliberate act made with the intention of influencing another or which a reasonable person would objectively see as meant to influence another. I agree that a person may have breached this section if that person does something that he or she should have reasonably known could influence or would reasonably look like an attempt to influence.⁴

³ Orangeville (Town) v Dufferin (County), 2010 ONCA 83 at para 22.

⁴ Amaral v Kennedy, 2010 ONSC 5776 at para 54.

The Court also considered this section in *Jaffary v Greaves.*⁵ In that case, a Member of Council was also the secretary and director of a construction company. The Member wrote to the Mayor on the company's letterhead in his capacity as secretary and directory of the company and requested that the Town waive the development fee for a housing project. It was held that the Member's letter constituted a breach of Section 5(1)(c) and constituted an attempt to influence the voting of members before and during a council meeting.

We were required to determine if the following findings amounted to a breach of Section 5(1)(c) of the *MCLA*:

- 1. That the Member did communicate with and provide a template letter to various organizations requesting that they send a letter of support to Council regarding the SDC funding request;
- 2. That the Member did attempt to communicate with Council during the question-andanswer period by sending a text message to an SDC board member in Council Chambers asking her to correct an answer to a question;
- 3. That the Member authored the script used during the presentation by the SDC presenters, created the presentation used and prepared the presenters for questions; and
- 4. That the Member made a comment to another Member prior to the meeting that "if we don't get the funding, I'm out of a job".

Finding 1

We find that the Member's communications with various organizations to request letters of support for the funding for SDC constituted a breach of Section 5(1)(c).

We reviewed the communications from the Member regarding gathering the letters of support. The Member emailed community organizations to request a letter of support as well as providing a draft template letter of support. After receiving the letters of support, the Member emailed the letters to County Council with a copy to a Cornwall Council member. The Member advised that she instructed another SDC staff member to email the same letters to Cornwall Council.

Further, the Member later emailed the organizations that provided the letters to request that they send the letters of support directly to Cornwall Councillors' email addresses, noting that it might be "more impactful" if the letters were sent directly to the Councillors.

The above reflects a deliberate act made with the intention of influencing other members of Council with respect to the vote at the January 29, 2024 meeting regarding the funding for SDC. The Member intentionally sought these letters from various organizations for the sole

⁵ Jaffary v Greaves, 2008 CanLII 28055 (ONSC).

purpose of persuading Council to grant SDC funding. Further, directing the organizations to send the letters directly to individual members of Council was done for the purpose of attempting to influence those members.

The case Jaffary v Greaves support the finding that the Member was required to refrain from influencing Council, even if she was doing so in her capacity as Executive Director. That case indicates that a Member, even when acting in their professional capacity, is still bound by the provisions of the MCLA. If this were not so it would lead to an absurd result whereby Councillors could circumvent their obligations under the MCLA by declaring that they are acting in an alternate capacity (i.e. as a private citizen, in their professional role, etc.) at any given time.

We acknowledge that the Member did not have direct communication with Council Members with respect to the letters of support. The Member argued that she only communicated with the organizations who then in turn communicated with Council. We find, however, that this submission must fail. Specifically, we note that the Member organized the letter writing campaign as Executive Director of SDC by contacting each organization to request they write to Council, providing a draft template letter of support indicating what should be said and then directing each letter-writer to send the letters to individual Council members email addresses.

We find that these actions constitute an attempt to influence "in any way". The wording of the provision is broad and does not require direct communication. We find that the Member's actions constitute a deliberate act made with the intention of influencing Council.

As a result of the foregoing, Finding 1 results in a contravention of Section 5(1)(c) of the *MCLA*.

Finding 2

We find that the Member's attempt to communicate with Council during the question-andanswer period constituted a breach of Section 5(1)(c).

We found as fact that the Member attempted to communicate with Council during the presentation by specifically texting a response to a question to an audience member and asking them to "speak up".

We make no finding as to whether the audience member did in fact communicate with the presenters or if the Member otherwise communicated with the presenters.

The wording of Section 5(1)(c) is clear that all that is required to ground a contravention of the provision is an "attempt" to influence. It is not necessary that the Member was successful in influencing another member's vote to find a contravention of the *MCLA*.

{01382733.DOCX:} Cunningham Swan Carty Little & Bonham LLP

The Member in this instance was clearly seeking to communicate with Council by using the words "can you speak up" in her text message. We find that this was a deliberate attempt to attempt to correct the answer to the question from the Member of Council and thus influence the vote on the issue.

As a result of the foregoing, Finding 2 results in a further contravention of Section 5(1)(c) of the *MCLA*.

Finding 3

We find that the Member's authorship of the script and presentation delivered by the SDC presenters and the preparation of the SDC presenters constituted a breach of Section 5(1)(c).

As noted under Finding 1, the wording of Section 5(1)(c) is broad and does not require a direct communication with Council to find that there was a breach of the obligation not to seek to influence the voting on a matter.

The Member cannot circumvent the requirements of the *MCLA* by having another party deliver a presentation that she wrote and scripted. This degree of involvement in a matter in which the Member has a pecuniary interest constitutes a deliberate act intended to influence the voting of other Members of Council.

As a result of the foregoing, we find that Finding 3 resulted in a further contravention of Section 5(1)(c) of the *MCLA*.

Finding 4

We find that the Member's comment to another Member prior to the Council meeting considering the SDC funding that "if we don't get the funding, I'm out of a job" constituted a breach of Section 5(1)(c) of the *MCLA*.

This is a clear attempt by the Member to communicate with and influence another Member of Council into voting for the SDC funding. This is the precise type of communication or influence that is prohibited by the *MCLA* provisions.

As a result of the foregoing, we find that Finding 4 resulted in a further contravention of Section 5(1)(c) of the *MCLA*.

Section 9.4(c) of the Code of Conduct

The Code of Conduct requirements under this section overlap with the requirements under the MCLA.

{01382733.DOCX:} Cunningham Swan Carty Little & Bonham LLP

Specifically, this section requires that the Member not seek to influence the vote of any other member where a conflict of interest exists.

As outlined above, we find that the Member sought to influence the vote of other members when she had a pecuniary conflict of interest.

As a result, we find that the Member breached Section 9.4(c) of the Code of Conduct.

Recommendation

As detailed above, our jurisdiction in this instance was limited to an inquiry under the Code of Conduct which authorizes us to recommend that Council implement various penalties and/or sanctions.

The conduct detailed herein is very serious in nature and represents a significant disregard for the obligations of the *MCLA* and the Code of Conduct with respect to conflicts of interest. Had this matter proceeded under the *MCLA*, our office would have seriously considered an application to the Court to have the Member's seat declared vacant.

Under the Code of Conduct, however, our jurisdiction is limited to recommending that Council impose the penalties or sanctions outlined in Section 17.3 and 17.4 of the Code of Conduct.

It is our recommendation that Council suspend the remuneration of the Member for a period of 90 days to reflect the seriousness of the conduct and to deter future contraventions.

Sincerely,

Cunningham, Swan, Carty, Little & Bonham LLP

Tony E. Fleming, C.S. LSO Certified Specialist in Municipal Law (Local Government / Land Use Planning) Anthony Fleming Professional Corporation TEF:ls



The Corporation of the City of Cornwall Regular Meeting of Council Report

Department:	Infrastructure and Municipal Works
Division:	Environment
Report Number:	2024-42-Infrastructure and Municipal Works
Meeting Date:	August 13, 2024
Subject:	Biosolids, Organics & Septage Master Plan

Purpose

For Council to receive the Biosolids, Organics and Septage Master Plan and associated presentation by GHD Limited.

Recommendation

- 1. That Council receive the Biosolids, Organics and Septage Master Plan report, master planning document and presentation.
- 2. That Council direct Administration to proceed with the recommended outcomes identified in the report which include:
 - a. Proceed with the preferred option of transporting biosolids generated at the Wastewater Treatment Plant to a third-party site for processing into an agricultural grade soil amendment.
 - b. Proceed with the preferred option of transporting and processing source separated organic material at a third-party facility.
 - c. Proceed with design and construction of a septage receiving station at the City's Wastewater Treatment Plant.



Financial Implications

There are no financial implications from this report. If adopted by Council, the items defined in the recommendations above will be presented to Council as individual items in subsequent reports.

Strategic Priority Implications

This initiative aligns with the Municipal, Provincial, and Federal Governments' sustainability goals as it aims to reduce waste and increase diversion.

It also relates to Pillar 3: Achieve Net Zero By 2050 as diverting organic waste from the landfill will generate less landfill gas and flaring before it is released into the atmosphere which will result in less greenhouse gas emissions.

Background / Discussion

In 2018, the Provincial Government of Ontario released the Food and Organic Waste Policy Statement which stipulates that municipalities with a population greater than 20,000, but less than 50,000 shall implement an organic food waste collection by 2025. Since that time, Cornwall's Administration has been investigating options for organic food waste processing. In 2023, the City released RFP (#23-P04) for a master plan that encompasses organic food waste, wastewater biosolids and septage. The purpose for amalgamating the different material streams into one condensed master plan was to investigate potential collaborative solutions between the different material streams were also explored.

In March 2023, GHD Limited was awarded RFP #23-P04 for the development of a Biosolids, Organics and Septage Master Plan (BOSMP). The goal of the BOSMP was to take a holistic approach to the long-term management of wastewater biosolids, source separated organics and septage. The master planning process identified and evaluated diversion options for each of the material streams.

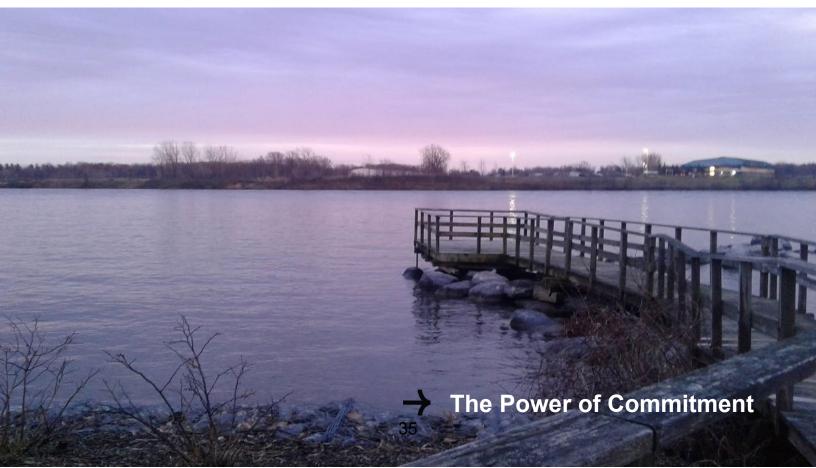
The comprehensive Master Plan assessed the technical and financial feasibility of processing these materials in house vs third party facilities. The preferred options were identified based on their long-term capital and annual operating financial feasibility, environmental impact and operational challenges.

The results identified in the BOSMP will be explained thoroughly in the presentation.



Cornwall Biosolids, Organics and Septage Master Plan

City of Cornwall July 17, 2024 (Final Draft)



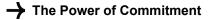
Project n	ame	Cornwall - Managen	Cornwall - Management of Biosolids, Organics and Septage Master Plan				
Documer	nt title	Cornwall Biosolids, Organics and Septage Master Plan					
Project n	umber	12604640					
File name	9	12604640-RPT-1-Final Draft.docx					
Status	Revision	Author	Reviewer		Approved for issue		
Code			Name	Signature	Name	Signatur e	Date
S3	1	Nigel Joyce Susan Shi	Andrew Smale Brian Hein				February 12, 2024
S3	2	Nigel Joyce Susan Shi	Andrew Smale Brian Hein				May 16, 2024
S4	3	Genevieve L'Heureux	Brian Hein	BL	Andrew Smale	A	July 17, 2024

GHD

Contact: Andrew Smale, Technical Director - Future Energy, Waste, Wastewater | GHD 179 Colonnade Road South, Suite 400 Ottawa, Ontario K2E 7J4, Canada **T** +1 613 727 0510 | **F** +1 613 727 0704 | **E** info-northamerica@ghd.com | **ghd.com**

© GHD 2024

This document is and shall remain the property of GHD. The document may only be used for the purpose for which it was commissioned and in accordance with the Terms of Engagement for the commission. Unauthorised use of this document in any form whatsoever is prohibited.



Contents

1.	Introc	duction			1
	1.1	Purpos	se of this R	Report	3
	1.2	Scope	and Limita	ations	3
2.	Envir	onmenta	l Assessm	nent Process	4
	2.1	Munici	pal Class E	EA Process	4
	2.2	Projec	t Classifica	ation	7
3.	Phase	e 1: Prob	lem / Opp	ortunity	7
	3.1			Description of the Problem / Opportunity	7
	3.2	Proble	m/Opportu	inity Statement	8
4.	Phase	e 2: Alter	native Sol	utions	9
	4.1	Identif	ication and	Description of the Alternative Solutions	9
		4.1.1	Septage		9
		4.1.2	Biosolids	Alternative Solutions	11
			4.1.2.1	Alternative 1 – Do Nothing	11
			4.1.2.2	Alternative 2 – Biosolids Processing by Others	11
			4.1.2.3	Alternative 3 – Add a Thermal Hydrolysis Process at Cornwall WWTP	11
			4.1.2.4	Alternative 4 – Sludge Drying Process at Cornwall WWTP	13
			4.1.2.5	Alternative 5 – Hybrid Alternative (Alternative 2 short term with further consideration of Alternatives 3 or 4)	17
		4.1.3	Organics	Alternative Solutions	17
			4.1.3.1	Alternative 1 – Do Nothing	18
			4.1.3.2	Alternative 2 – Organics Processing by Others	18
			4.1.3.3	Alternative 3 – Organics Processing by City via Aerobic Composting	20
	4.2	Descri	ption of the	e Environment Potentially Affected	21
		4.2.1	Cornwall	Wastewater Treatment Plant	22
			4.2.1.1	Natural Environment	22
			4.2.1.2	Built Environment	23
			4.2.1.3	Social Environment	24
			4.2.1.4	Economic Environment	24
			4.2.1.5	Cultural Environment	25
		4.2.2	Cornwall	Landfill Site	25
			4.2.2.1	Natural Environment	25
			4.2.2.2	Built Environment	26
			4.2.2.3	Social Environment	27
			4.2.2.4	Economic Environment	27
			4.2.2.5	Cultural Environment	27
		4.2.3	Potential	Transfer Routes	28
			4.2.3.1	Natural Environment	28
			4.2.3.2	Built Environment	28
			4.2.3.3	Social Environment	28
			4.2.3.4	Economic Environment	28
			4.2.3.5	Cultural Environment	29
	4.3	Asses	sment of th	e Alternative Solutions	29
	-	4.3.1		nent of Evaluation Criteria and Indicators	29
					-0

i

		4.3.2	Application of Net Effects Analysis	30	
	4.4	Compa	arative Evaluation of the Alternative Solutions	31	
		4.4.1	Identification of the Preliminary Recommended Solution	44	
			Septage	44	
			Biosolids	44	
			Organics	44	
	4.5	Identifi	cation of the Preferred Solution	44	
5.	Descrip	otion an	d Implementation of the Preferred Design Concept	45	
	5.1	Detaile	d Description of the Preferred Solution	45	
		5.1.1	Management of Septage	45	
		5.1.2	Management of Biosolids	45	
		5.1.3	Management of Organics	45	
	5.2				
		5.2.1	Climate Change	46	
			5.2.1.1 Regional Perspective	46	
			5.2.1.2 Effects of the Project on Climate Change	46	
			5.2.1.3 Effects of Climate Change on the Project	47	
		5.2.2	Source Water Protection	47	
		5.2.3	Proposed Impact Management Measures and Environmental Monitoring	48	
	5.3	Comm	itments for the Preferred Design Concept	49	
	5.4	Approv	als Required for the Preferred Design Concept	50	
	5.5	Implementation of the Preferred Design Concept		51	
		5.5.1	Summary of Projects Included in the Master Plan and their Approval Status	51	
		5.5.2	Notice of Completion	51	
		5.5.3	MCEA Phase 5	52	
6.	Overvie	ew of th	e Consultation Process Carried Out	53	
	6.1	Public	Consultation Plan	53	
	6.2	Stakeh	older Review Agency Consultation	53	
		6.2.1	Public Information Centre	53	
		6.2.2	Review of Comments Received	53	
7.	Summa	ary		55	

ii

Table index

Table 2.1	Municipal Class EA Schedules	4
Table 4.1	Summary of Sludge Drying Options for Cornwall WWTP	14
Table 4.2	Biosolids and Organics Evaluation Criteria and Indicators	29
Table 4.3	Biosolids Net Effect Analysis and Comparative Evaluation Table	33
Table 4.4	Organics Net Effect Analysis and Comparative Evaluation Table	39
Table 5.1	Summary of the Net Effects and Proposed Monitoring Programs for the Confirmed	
	Management of Septage, Biosolids and Organics	49
Table 5.2	Class EA Commitments and Compliance Monitoring	50
Table 5.3	Anticipated Post EA Permits and Approvals	51
Table 5.4	Summary of Projects in Master Plan and Status	51
Table 6.1	Review Agency Comments	54
Table 6.2	Public Comments	54

Figure index

Figure 1.1	Study Area	2
Figure 2.1	Overview of the Municipal Class Environmental Assessment Process	6
Figure 4.1	Excerpt from Drawing SK1-3, from Septage Receiving Station Preliminary Design for City of Cornwall WWTP (WSP, January 2024)	10
Figure 4.2	Example THP Reactors installed in-facility at Lakeshore WPCP in Innisfil, ON (Courtesy Lystek International)	12
Figure 4.3	Partial section of Cornwall WWTP Biosolids Building showing how THP reactor vessel could potentially be installed alongside existing infrastructure	13
Figure 4.4	Example Belt Dryer (courtesy of Huber)	15
Figure 4.5	Example Paddle Dryer Installation (courtesy of Komline-Sanderson, Inc.)	15
Figure 4.6	Example Screw Dryer (courtesy of KMT International Inc.)	16
Figure 4.7	Proposed Location for Biosolids Facility Expansion for Sludge Drying and Pellet Storage	17
Figure 4.8	Proposed Location of New Organics Transfer Building at the Cornwall Landfill.	19
Figure 4.9	Example Organic Food Waste Receiving Building (Cambridge Waste Management Centre, Cambridge, ON)	19
Figure 4.10	Example Covered Composting System for approximately 20,000 tonnes per year located in Moncton, NB (Courtesy of W.L. Gore & Associates)	20
Figure 4.11	Available footprint adjacent to Cornwall Landfill for Organics Processing (Reproduction of Figure 3 from Co-Digestion, Energy Generation, and Biosolids	
	Feasibility Study, GHD, February 2021)	21
Figure 4.12	Satellite Photograph of Cornwall WWTP and adjacent areas	23
Figure 4.13	City of Cornwall Zoning around Cornwall WWTP	24
Figure 4.14	Satellite Photograph of Cornwall Landfill	26
Figure 4.15	City of Cornwall Zoning (Landfill Site	27
Figure 4.16	Potential Transfer Routes and Locations for Organics Material	28
Figure 5.1	MECP Source Protection Information Atlas	48

Appendices

- Appendix A Basis of Capacity Requirements for Options Evaluation
- Appendix B Long List Review of Available Technologies and Evaluation
- Appendix C Septage Receiving Station Preliminary Design Memo
- Appendix D Results of Public Information Centre
- Appendix E Notice of Completion
- Appendix F Stakeholder Correspondence
- Appendix G Financial Review of Options

1. Introduction

This report documents the planning and design process the City of Cornwall carried out for the Biosolids, Organics and Septage Master Plan (BOSMP). The study area is shown in **Figure 1.1**. The Master Plan is being completed in accordance with Approach 2 of the Municipal Engineers Association (MEA) Class Environmental Assessment (MCEA) (March 2023).

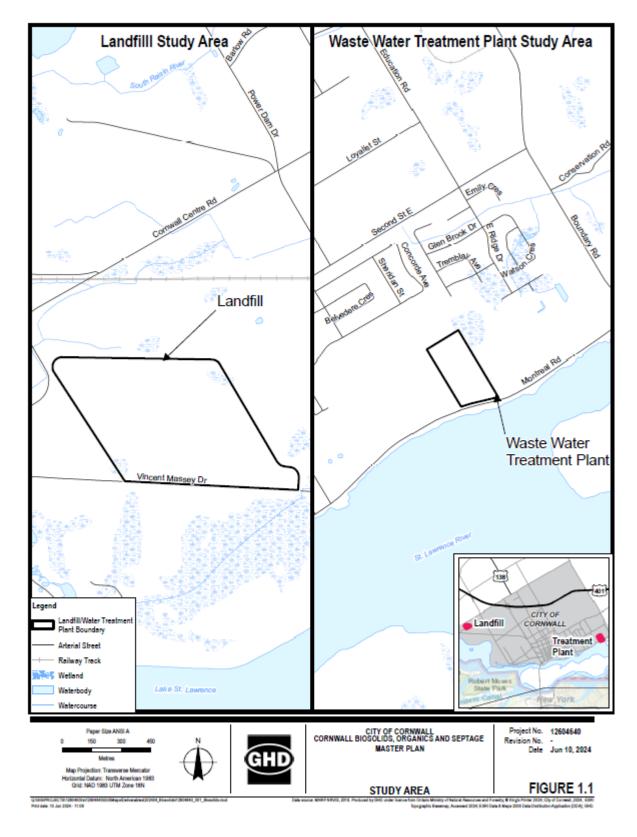
The City currently disposes of dewatered biosolids processed at the Cornwall WWTP at their landfill located at 2590 Cornwall Centre Road West. Alternative options exist for beneficial use of this material. Septage is also accepted at the landfill location where it is collected along with leachate and conveyed through the City's sanitary collection system ultimately to the WWTP. The City has previously been advised from the Ministry of Environment, Conservation and Parks (MECP) that an alternate septage receiving system must be implemented as the current system isn't a viable long-term solution. Organics materials are also currently disposed of at the landfill through the current curb side waste collection program. However, the City has also initiated the planning for a residential green bin source separated organics program, expected to take effect on January 1, 2025 and a designated destination for this organics material (other than the local landfill) is yet to be determined. The BOSMP project was initiated based on the City's previous work and analysis, where it was estimated that the City's existing landfill has less than 10 years of capacity remaining if significant diversion of waste away from the landfill cannot be achieved.

Based on the above, there are three main waste streams that need to be diverted away from the landfill, Biosolids, Septage and Organics.

The City has previously started investigating possible options for two of these three waste streams:

- The City has undertaken a study to evaluate the requirements and expected quantities to implement a green bin program for the curb side collection of organics, which is to begin on January 1, 2025.
- In response to a directive from the MECP to stop accepting septage in the landfill leachate collection system, the conceptual design for a septage receiving station located directly at the WWTP was completed; and,
- The City has previously undertaken a comprehensive study to review possible co-digestion of collected green bin
 organic waste with WWTP sludge at the Cornwall WWTP, and although this approach was approved by Council;
 funding from upper levels of government for the project was not secured.

The City is interested in exploring other possible options and taking a holistic review of all three of these waste streams through this current Master planning assignment. In addition to the above initiatives, the City has independently reviewed other technologies, processes, and waste management strategies.





Report Overview

Section 2 outlines the approach carried out by the City of Cornwall for Phase 1 and 2 of the Class EA process. **Section 3** documents Phase 1 of the MCEA planning and design process by identifying the problem/opportunities; namely, opportunities to improve the management of three key waste streams currently handled at the municipal landfill.

Next, several potential alternatives to address the defined problem/opportunity were generated as part of Phase 2 of the MCEA planning and design process. As documented in **Section 4**, the alternatives were assessed for feasibility to meet the problem and opportunity statement and for presentation to the public and stakeholders at a Public Information Centre (PIC) along with a recommended alternative for management of Biosolids, Organics and Septage. Input received from review agencies, Indigenous communities, and the public was then used to comprise the final preferred alternative.

Section 5 documents the confirmed solution in detail, including the proposed implementation requirements (e.g., designed infrastructure). Using this information, the potential adverse effects on the environment were confirmed, the proposed impact management measures were specified, and environmental monitoring programs were proposed as appropriate. In addition, post MCEA approvals and permits required as part of detailed implementation and design were noted as future work commitments.

Consultation with the City's stakeholders and the public was carried out throughout the Project in accordance with the MCEA as documented in **Section 6**.0 As a result, input was sought and obtained from the involved participants at key decision-making points before moving forward with those decisions in the Project.

1.1 Purpose of this Report

This report is intended to document the Class EA master planning process including explaining the rationale of arriving at the preferred management alternative(s) for the three waste streams noted above.

1.2 Scope and Limitations

This report: has been prepared by GHD for City of Cornwall and may only be used and relied on by City of Cornwall for the purpose agreed between GHD and City of Cornwall as set out in section 1 of this report.

GHD otherwise disclaims responsibility to any person other than City of Cornwall arising in connection with this report. GHD also excludes implied warranties and conditions, to the extent legally permissible.

The services undertaken by GHD in connection with preparing this report were limited to those specifically detailed in the report and are subject to the scope limitations set out in the report.

The opinions, conclusions and any recommendations in this report are based on conditions encountered and information reviewed at the date of preparation of the report. GHD has no responsibility or obligation to update this report to account for events or changes occurring subsequent to the date that the report was prepared.

The opinions, conclusions and any recommendations in this report are based on assumptions made by GHD described in this report (refer section(s) 1 of this report). GHD disclaims liability arising from any of the assumptions being incorrect.

Accessibility of documents

If this report is required to be accessible in any other format, this can be provided by GHD upon request and at an additional cost if necessary.

2. Environmental Assessment Process

The BOSMP was carried out in accordance with the requirements of the Municipal Class Environmental Assessment (MCEA).¹ There are two types of Environmental Assessment (EA) and approval processes for municipal projects to follow prior to being implemented in order to meet the requirements of the *Environmental Assessment Act (EA Act)*:

- Comprehensive EAs (Part II.3 of the EA Act) those projects for which a Terms of Reference and a Comprehensive EA are carried out and submitted to the Minister of the Environment, Conservation and Parks (Minister) for review and approval.
- Class EAs (Part II.1 of the EA Act) those projects that are approved subject to compliance with an approved Class EA process with respect to a class of undertakings. Providing the approved process is followed, a proponent has complied with the *EA Act*.

Thus, the MCEA provides an approved process whereby specified infrastructure projects such as this can be planned, designed, constructed, operated, maintained, rehabilitated, and retired without having to obtain project-specific approval under the *EA Act*.

2.1 Municipal Class EA Process

The approved MCEA process consists of five planning and design phases. The five phases are briefly summarized as follows:

- **Phase 1 -** Identify the problem or opportunity.
- Phase 2 Identify alternative solutions to address the problem or opportunity and establish the preferred solution taking into account the existing environment and review agency and public input.
- Phase 3 examine alternative methods for implementing the preferred solution and determine the preferred implementation method taking into account the existing environment and additional review agency and public input.
- Phase 4 document the preceding phases in an Environmental Study Report (ESR) and make it available for scrutiny by review agencies and the public.
- Phase 5 complete contract drawings and documents and proceed to construct the preferred method for implementing the preferred solution.

Four Project Classifications

Since projects vary in their potential for adverse environmental effects, they are classified in the MCEA in terms of schedules. The schedules are briefly summarized in **Table 2.1**.

Municipal Class EA Project Description Schedule		Municipal Class EA Requirements	
Schedule A projects	 Limited in scale Minimal adverse environmental effects Primarily municipal maintenance and operational activities 	 Exempt from the Environmental Assessment Act 	
Schedule A+ projects	 Similar to Schedule A projects 	 Same as Schedule A projects, but the public must be notified prior to construction 	

Table 2.1 Municipal Class EA Schedules

¹ Municipal Engineers Association, Municipal Class Environmental Assessment, October 2000 (as amended in 2007, 2011 and 2015).

Municipal Class EA Schedule	Project Description	Municipal Class EA Requirements
Schedule B projects	 Potential for some adverse environmental effects Primarily improvements and minor expansions to existing facilities 	 Phases 1 and 2 Consult with review agencies and the public Project File
Schedule C projects	 Potential for significant adverse environmental effects Construction of new facilities and major expansions to existing facilities 	 Phases 1 to 4 Consult with review agencies and the public Environmental Study Report

Figure 2.1 illustrates the five phases of the MCEA planning and design process within the context of the preceding four project classifications or schedules.



Overview of the

Municipal Class Environmental Process

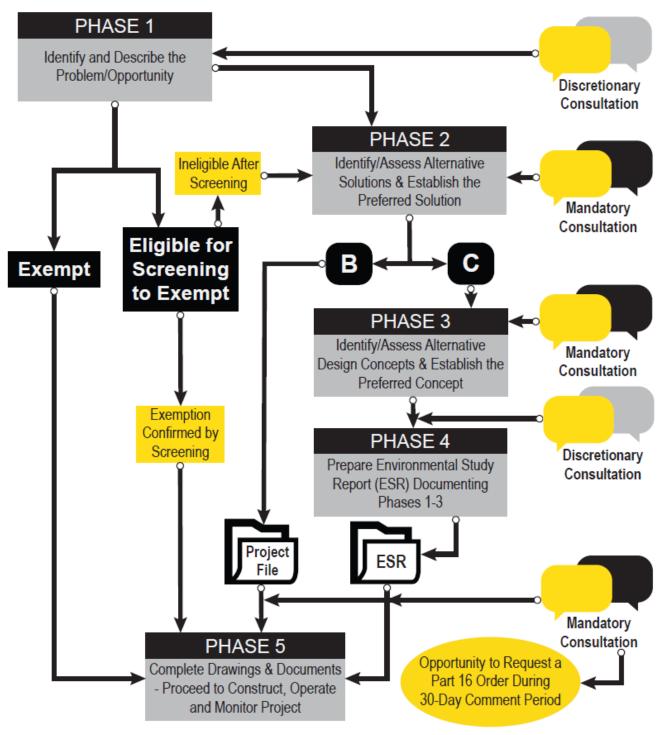


Figure 2.1 Overview of the Municipal Class Environmental Assessment Process

Master Plan Process

The City of Cornwall is undertaking this project as a Master Plan which integrates infrastructure requirements for existing and future land uses with environmental assessment planning principles. Master Plans document the long-term infrastructure needs for an area that can range from a local area to an entire municipality. Taking a holistic view of an area, the Master Plan outlines an integrated plan guiding subsequent infrastructure projects that overlap into the same area.

Project Implementation

A person or party involved in either a Schedule B or C project may request that the Minister make an order for a project to comply with Section 16 of the *EA Act* if they feel that there are outstanding concerns that the project may adversely impact constitutionally protected Aboriginal and treaty rights, which cannot be resolved in discussion with the proponent. This is referred to as a Section 16 Order, which addresses Individual Environmental Assessments. The person or party can make this request if they feel that their concerns raised cannot be resolved in discussion with the proponent by the end of the mandatory 30 calendar day comment period.

In addition, the Minister may issue an order on his or her own initiative within the 30 calendar days after the conclusion of the mandatory 30 calendar day comment period. Therefore, a proponent can only implement Schedule B and C projects if there are no outstanding "Section 16 Order" requests.

2.2 Project Classification

This Master Plan was completed in accordance with Approach No. 2 fulfilling the MCEA Schedule B process requirements. The MCEA process is a self-assessment process. As such, it is the proponent's responsibility to identify the correct project schedule and meet the associated MCEA process requirements. Failure to do so places the proponent in contravention of the EA Act, which is an offence subject to penalties.

3. Phase 1: Problem / Opportunity

3.1 Identification and Description of the Problem / Opportunity

As described in Section 1, the City needs to divert three waste streams from the Landfill. This need derives from wanting to maximize the remaining capacity of the existing landfill, provincial policies pertaining to management of organics and direction from MECP on septage management.

The main goals for BOSMP project include:

- Establishing a long-term planning framework for the management of biosolids generated from the WWTP, source separated organics from a new green bin collection program (2025), and septage that is currently being transported to the landfill and conveyed with leachate via the sanitary collection system to the WWTP.
- Clearly identifying projects to be "fast tracked" to get them underway to address one or all of these waste streams before the Master Planning stage is completed; and,
- Laying the groundwork to allow any identified next stage EA processes to proceed, having provided proposed preferred alternatives that will be carried forward.

Waste Policy Framework

A major driver and goal for this project will be to ensure the preferred waste management strategy meets current and upcoming policy and regulatory requirements. As part of the legislative considerations, the appropriate and relevant provincial and federal policies and regulations have been reviewed, as well as other policies and guidelines that may

be pertinent to the management of organic waste, septage and potential future policies, regulations, and changes, such as the proposed changes to Environmental Assessment requirements for advanced recycling facilities, the potential for a ban on organic material to landfill, and the movement towards a circular economy.

The Strategy for Waste Free Ontario outlines actions to accelerate diversion and reduce the need for expanded or new landfills. These actions include:

- The goals set as part of the food and organic waste action plan and policy statement to direct municipalities and the IC&I sector to reduce the volume of food and organic waste going to landfill.
- Transitioning existing waste diversion programs to the new producer responsibility framework to increase waste diversion.
- Banning several materials going to landfills, including food and organic waste, print paper and packaging, electronics, and tires.
- Requiring producers to be responsible to divert more materials from landfills, including small appliances, electrical tools, batteries, fluorescent bulbs and tubes, mattresses, carpets, clothing and other textiles, furniture and other bulky items.
- Encouraging better product design and the promotion of a circular economy.
- Putting policies in place to require the Industrial, Commercial and Institutional sector to take immediate actions to recover resources by amending Regulations that require them to separate certain wastes, including plastics.
- Monitoring residential recycling the 'evolving tonne' as the composition of materials in the waste stream changes – to better forecast trends and possibly develop new metrics to reduce residual materials entering the waste stream (with the implementation of Extended Producer Responsibility (EPR), this may alter the outlook on composition of materials).

All of the above actions will be critical to the success of the Waste-Free Ontario Act and Strategy in reducing the need for additional landfill capacity within Ontario, including the City. The projects proposed in this Master Plan will directly address several of the actions outlined in Ontario's strategy.

3.2 Problem/Opportunity Statement

The preferred management of biosolids, organics and septage Master Plan alternative will address the following short term and long-term goals:

- Extend the overall operating lifespan of the landfill through diversion of biosolids, source separate organics and potentially other waste stream materials.
- Reduce the overall amount of greenhouse gas (GHG) emissions through diversion from landfill and potential utilization of resource recovery technologies.
- Incorporated flexibility to accommodate changes in waste stream feedstock composition/tonnage over time and
 processing adaptability to recover additional waste process products such that the solution is easily scalable.
- Optimize operational, financial and environmental benefits of biosolids, SSO and septage from collection phases to end use/disposal phases.
- Adhere to all required and relevant environmental legislation on local, provincial and federal levels, while also taking advantage of potential grants and funding opportunities.
- Protect public health and the environment.

4. Phase 2: Alternative Solutions

As summarized in Section 2, the six steps associated with Phase 2 of the MECA were carried out for the Cornwall BOSMP. Phase 2 encompassed the development and assessment of alternative solutions, identification of a recommended solution and the ultimate selection of the preferred solution.

As an initial step, the required capacity was developed as a baseline for any alternatives review. This included review of current Septage, Biosolids and Organics material that is expected to be handled by the City through existing and future operations. This detailed capacity review is included in Appendix A. A long list of alternatives for each of the three aspects associated with the Master Plan was then developed. The long lists of alternatives were reviewed and evaluated to determine which alternatives were reasonable and feasible to implement and are included in Appendix B. As per the MCEA, only reasonable/feasible alternatives are to be considered as part of the MCEA planning and design process². As a result, the alternatives were each assessed to determine if they were a "reasonable/feasible" solution for this particular Project. Only those solutions considered "reasonable/feasible" were no longer considered any further as part of the Project. The reasonable and feasible alternatives identified for each of the three waste streams are described in Section 4.1.

4.1 Identification and Description of the Alternative Solutions

As stated previously in this report, for the BOSMP, alternative disposal methods for three separate waste streams were assessed:

- Dewatered biosolids generated by the Cornwall WWTP that is currently deposited at the local landfill located at 2590 Cornwall Centre Road West, at a rate of 4,000 wet tonnes per year (approximately 27% total solids)
- Organics material collected through a green bin program that will be commencing January 1, 2025 (projected at a minimum 4,000 wet tonnes/year)
- Septage generated by residents and local customers, that is also currently accepted at the local landfill, and combined into the leachate collection system where it ends up at the Cornwall WWTP (estimated at 5- 10 m³/day).

Although these three waste streams are collected from three different sources, they cannot all be managed and/or disposed of in the same way, or with each other. Therefore, the objective of the BOSMP was to develop individual alternative solutions concurrently and identify recommended preferred alternatives for each of the waste streams generated by the City. These alternatives have been described in the following subsections by waste stream.

4.1.1 Septage

The City has indicated that there is a current roster of residents and local customers that use the septage service at the local City of Cornwall Landfill, where it is combined with landfill leachate and conveyed through the sanitary collection system to the WWTP. As noted previously, a key driver of looking at alternative means for septage disposal is that the MECP has identified this current practice to be unacceptable. The current roster of the City's customers for this service is made up of generators located within the City limits, such as residents that are not on sanitary sewer service, and portable washrooms that were used in City functions and events. The City is currently developing an alternative solution for the acceptance of septage at the Cornwall WWTP and will continue to accept septage material from these existing customers, which provides a baseline for quantity analysis and operational requirements. Providing a solution that allows for additional, smaller quantities of septage on a case by case basis also encourages Cornwall's tourism and economic development.

². Municipal Engineers Association, Municipal Class Environmental Assessment, March 2023, page 23.

To this end, the City has completed the preliminary design of a new septage receiving station located at the Cornwall WWTP. Details on the preliminary design of this package is included in a technical memorandum drafted by WSP Canada Inc. and is included in Appendix C. Through evaluation of three options, "Option C" was selected as it provides the required functionality to the City, minimal impact to process footprint and access to the WWTP and was the most cost-effective option.

The MCEA constitutes the construction of a new septage receiving station at the facility as undertaking 29a - Expand / refurbish / upgrade sewage treatment plant including outfall up to existing rated capacity where no land acquisition is required. Undertaking 29a is deemed exempt from the requirements of the EAA by the MCEA.³ Given this exemption alternative solutions for septage do not need to be developed or assessed, however given the holistic goals of this Master Plan the proposed design configuration for septage will be presented.

The septage receiving station would consist of a prefabricated receiving station, located outside the existing screening building of the Cornwall WWTP, along the building's west wall. The enclosure would provide the space required for operators to work and would contain a rock trap to catch large objects within the septage, a grinder to reduce the particle size of solids not caught in the rock trap, control valves, and flow meter to regulate and measure the septage received by the facility. Haulers would use the existing access road and paved area in front of the existing screening building to access the station. The interior of the station would be accessed via an entrance on the north side of the enclosure. After pre-screening, the septage would be deposited directly into the eastern sanitary trunk sewer and conveyed via gravity to the main sewage pumping station, then pumped via force main to the sewage treatment plant. This discharge location provides the benefits of dilution of the pre-treated septage with collected sewage, and as a result provides the highest level of protection to downstream WWTP processes. The arrangement of this receiving station in relation to the Plant headworks can be seen in Figure 4.1. For a full drawing and description of the septage receiving station functionality, please refer to Appendix C.

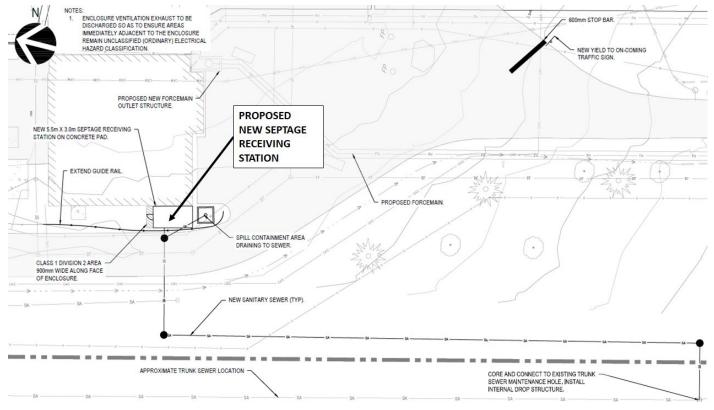


Figure 4.1 Excerpt from Drawing SK1-3, from Septage Receiving Station Preliminary Design for City of Cornwall WWTP (WSP, January 2024)

³ Ibid, Appendix 1, page 181.

4.1.2 Biosolids Alternative Solutions

Anaerobic digestion is currently utilized to treat primary and secondary sludge generated by the wastewater treatment process and the resulting biosolids are dewatered using centrifuges. Biosolids are dewatered to approximately 27% Total Solids (TS) cake, at a rate of approximately 3,000 wet tonnes/year. This material is currently hauled to the City's landfill, where it is taking up significant volume when considered alongside existing domestic solid waste going to the landfill. Therefore, it will be beneficial to divert this material away from the landfill to increase remaining air space of the landfill, and its remaining life.

4.1.2.1 Alternative 1 – Do Nothing

The "Do Nothing" approach would constitute continuing to deposit biosolids at the City's landfill, as is the current practice. While the City has expressed some concern that this is not feasible long term due to available landfill capacity, in the "short term" it may be viable until a more permanent solution is developed (one of the following other Alternatives).

4.1.2.2 Alternative 2 – Biosolids Processing by Others

There are some merchant capacity facilities located in the Eastern Ontario that can take biosolids for co-processing with compost material. During the development of these options, some of them were contacted for capacity availability based on the annual biosolids production at Cornwall WWTP, and it was confirmed that at least one facility would be able to accept this material that is within 70 km from the WWTP (one-way).

For this alternative, the Cornwall WWTP would operate as it currently does in producing biosolids, including loading the associated trucks that would under normal conditions haul to the City's landfill. Instead, these trucks would transport the material to the merchant capacity facility, where the material would undergo further processing increasing its usefulness for after-market customers (such as the agricultural sector), relative to the current practice of disposal at the City's landfill.

Biosolids haulage trucks would be outfitted with appropriate covers, as they currently are, to prevent the escape of dry biosolids material and minimize odour during travel. The biggest difference between current operations and going to a third-party facility would be the distance driven, which has an impact on fuel consumption and GHG emissions from the vehicles.

4.1.2.3 Alternative 3 – Add a Thermal Hydrolysis Process at Cornwall WWTP

Thermal Hydrolysis is a process that is typically used in process intensification applications at wastewater treatment plants, to get more digestion throughput within existing digesters, and enhance biogas production. It is a high-heat, high pressure-based process followed by a sudden drop in pressure that causes the cell walls of organic matter to break and make more material available within the digester vessel. This produces a Class A biosolid (by EPA 40 CFR Part 503) through destruction of the cell wall and the reduction of pathogens. This process creates additional? avenues for land application as a purpose-made fertilizer at the output of the process. There are many thermal hydrolysis processes systems in operation at wastewater treatment plants across North America.

Thermal Hydrolysis would have to be integrated at the existing Cornwall WWTP within the current digestion, dewatering, and solids management processes. The following modifications are anticipated, as a minimum:

- Reconfiguration of the existing dewatering centrifuges (>25% TS) to thickening centrifuges (15-20% TS) to provide feedstock to the thermal hydrolysis process, which is typical for THP process manufacturers.
- Installation of the thermal hydrolysis package within the existing dewatering building at Cornwall WWTP, including
 new hot water boiler (dual fired, to be able to use biogas or natural gas).
- Installation of exterior storage tankage for the final hydrolyzed sludge output, and a loading facility for haulage away from site.

Other modifications to the Cornwall WWTP biosolids management process would be required based on ultimate design of the process and selection of final thermal hydrolysis equipment. This would potentially include changes to process piping, gas supply piping, electrical supply and motor control centers (MCC), and structural modifications to integrate new equipment. An example THP installation at a wastewater treatment plant is shown in Figure 4.2, while a sketch showing how the core THP equipment could be integrated into the Cornwall WWTP Biosolids building is shown in Figure 4.3.



Figure 4.2 Example THP Reactors installed in-facility at Lakeshore WPCP in Innisfil, ON (Courtesy Lystek International)

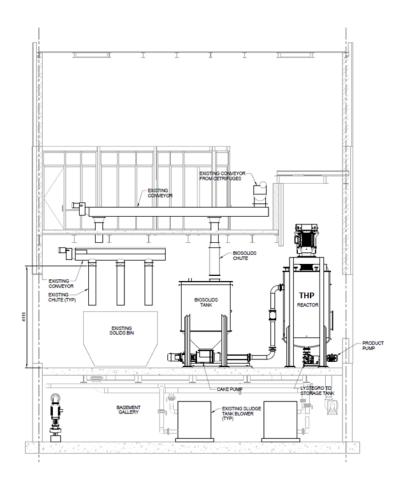


Figure 4.3 Partial section of Cornwall WWTP Biosolids Building showing how THP reactor vessel could potentially be installed alongside existing infrastructure

The assumption for the THP solution is that it would not have to run 24 hours per day, 7 days per week, but rather within normal operating hours at the WWTP, 12 hours per day, Monday to Friday.

Some THP vendors offer services to market, manage and sell the final output material to local customers in the agricultural sector, including programs where a portion of the revenue from sale of the fertilizer product can be shared with the City. This can be advantageous to the City, as managing the sale and distribution of this material in-house may require additional resources and associated costs.

4.1.2.4 Alternative 4 – Sludge Drying Process at Cornwall WWTP

Through the development of the long list of options for the City to manage biosolids, sludge drying was considered as a potential alternative. Sludge drying involves the evaporation of the remaining water from the dewatering process, bringing biosolids material from 25% TS (on average) up to 98% TS. This is a proven process employed by many wastewater treatment facilities in North America to reduce the volume of dewatered biosolids cake to be managed. This material can then be disposed of at a landfill, pelletized to create a fertilizer, or the dry solids material could be used as fuel to produce energy (using combustion to produce steam and eventual electricity). Some dryer manufacturers can provide these end-use processing packages on the back end of their systems.

Given the annual sludge production volumes generated by the City, only certain drying technologies would be considered viable, and this was established during the long options list review. Sludge drying by belt dryer, paddle dryer or screw dryer would be suitable as technologies to further investigate. A summary of each of these technologies is outlined in Table 4.1 below, and photo examples are included in the figures that follow.

Table 4.1	Summary of Sludge Drying Options for Cornwell W/W/TP
1 abie 4.1	Summary of Sludge Drying Options for Cornwall WWTP

Technology	Heat Transfer Method	Benefits	Drawbacks
Belt Dryer	Direct (Convection)	 Operates at relatively low temperature (80-175oC) Well suited to smaller WWTP facilities Opportunities for energy recovery, and energy re-use (such as waste heat) Large number of options for supplier/manufacturer and aftermarket support 	 Large footprint for associated throughput
Paddle Dryer	Indirect (Conduction)	 Depends on material displacement (and therefore feed rate, not paddle speed) Modular, smaller footprint – can expand number of units to suit additional capacity as needed Relatively simple to operate Good support from manufacturers in North America (though not as extensive as belt dryers) 	 Need supply of heating fluid (steam, oil) Energy transfer not as efficient as direct drying Lower throughput on a per-unit basis
Screw Dryer	Indirect (Conduction)	 Modular, smaller footprint – can expand number of units to suit additional capacity as needed Relatively simple to operate 	 Depends on speed of screw, which may cause issues with dryer performance Technology not used as widely in North America as main manufacturer's installations replaced over time due to functional issues; design and manufacturing has been taken over by others Need supply of heating fluid (steam, oil) Energy transfer not as efficient as direct drying Lower throughput on a per-unit basis



Figure 4.4 Example Belt Dryer (courtesy of Huber)



Figure 4.5 Example Paddle Dryer Installation (courtesy of Komline-Sanderson, Inc.)



Figure 4.6 Example Screw Dryer (courtesy of KMT International Inc.)

In each case, natural gas would be required as an input fuel to provide the evaporative capacity needed to achieve a dry material. Alternatively, biogas could be used but, as a general rule of thumb roughly twice the amount of biogas would be required to achieve the equivalent evaporative capacity of natural gas, with direct driers performing better than indirect driers in this mode of operation.

For "Direct" driers, the gas would heat the air that does the drying. For "Indirect" driers, the gas would be required to heat the thermal medium, such as oil or steam that is passing through the surface drying the sludge. Furthermore, a separate pelletization system would be required as a post-drying step, if a uniform pellet is required as these types of dryers do not produce a consistent pellet (compared to a drum dryer for example, which provides a naturally round particle but is too large of a process for the City's needs).

Dried sludge particles that are produced by a sludge dryer would need to be stored on site, in a separate building due to concerns with the dried sludge particles tendency to self-heat and other safety requirements documented by NFPA standards (such as NFPA 654 – Standard for the Prevention of Fire and Dust Explosions from the Manufacturing, Processing, and Handling of Combustible Particulate Solids, NFPA 68 – Standard on Explosion Protection by Deflagration Venting, and NFPA 69 – Standard on Explosion Prevention Systems). Storage of dried biosolids is typically accomplished through one or more silos, designed with safety features such as explosion panels, nitrogen padding systems, and temperature monitoring in accordance with NFPA standards.

As a result of these requirements, a separate building to house this equipment would be required on the Cornwall WWTP site regardless of the drying technologies that are selected from Table 4.1. A loading facility (preferably separate from main drying facility) would also be required, including drive-through access for trucks that would haul the material offsite. A proposed location for these facilities is shown in Figure 4.7.

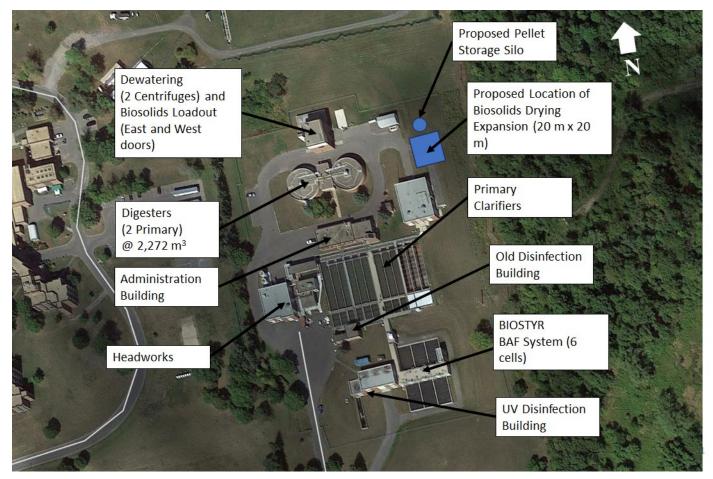


Figure 4.7 Proposed Location for Biosolids Facility Expansion for Sludge Drying and Pellet Storage

The assumption for this solution is that it would not have to run 24 hours per day, 7 days per week, but rather within normal operating hours at the WWTP. For the City's annual output of biosolids, a dryer would be required to run two – three times a day, for about 8 hours.

The produced material could potentially be sold to the agricultural sector as a fertilizer or soil amendment. Handling of this material will require safety and environmental measures in place, due to the generation of dust and odour. The City would also be responsible for the marketing, logistics, and management of the final material for future customers, as this is not typically provided by dryer manufacturers or system vendors.

4.1.2.5 Alternative 5 – Hybrid Alternative (Alternative 2 short term with further consideration of Alternatives 3 or 4)

This alternative would involve implementing Biosolids Processing by Others (Alternative 2) in the short-term, while a longer term solution can be developed by the City (Alternative 3 or 4).

4.1.3 Organics Alternative Solutions

Ontario's Food and Organic Waste Framework (2016)⁴ provides two components, the Action Plan, which outlines provincial commitments on food and organic waste, and the Policy Statement, which under the Resource Recovery and Circular Economy Act, 2016, provides direction to municipalities, the IC&I sector, owners and operators of resource recovery systems and others to take action to reduce and recover food and organic waste. The Policy

⁴ Refer to https://www.ontario.ca/page/food-and-organic-waste-framework

Statement, which was issued in April 2018, requires municipalities of populations greater than 20,000 but equal to or less than 50,000 and with a population density greater than or equal to 100 persons per square kilometer to offer curbside collection of food and organic waste. The City is developing a Green Bin program and will be commencing this January 1, 2025, which puts the City under a significant time constraint. Through this contract, organic food waste and leaf and yard waste will be collected and an outlet for this material will be required.

4.1.3.1 Alternative 1 – Do Nothing

The "Do Nothing" approach would be to maintain the status quo for food waste and leaf and yard waste that is currently collected by the City under their existing waste collection program. This would involve continuing to deposit the collected material at the City's landfill. Although the food waste is currently already deposited via "black bag" garbage, it would still be deposited as separated material collected at curbside via the City's Green Bin program. This option would not meet the objective of the Provincial Policy statement for the diversion of organic waste, in the long term, but may provide some relief in the near term while a permanent solution for the City can be implemented.

4.1.3.2 Alternative 2 – Organics Processing by Others

There are three (3) known merchant capacity facilities located in Eastern Ontario that can take organic material for composting. These facilities can take both food waste (SSO) and leaf and yard waste (LYW) material, or a mixture of both depending on the City's curbside collection practices. During the development of these options, some of them were contacted for availability based on the estimated organics production by the City. These third-party facilities expressed an interest in receiving this material, as the quantities could be managed within their existing facilities' rated capacities along with current received materials from other municipalities in the region. The facilities range from 40 km to 160 km away from the City's existing landfill.

To facilitate the processing of organic material by others, the City will have to design, construct and install a transfer station somewhere within the City limits, where the material will be deposited, temporarily stored and then picked up by a third party for processing elsewhere. After discussion with the City, this transfer station would be preferably located on the property of the City's existing landfill.

Conceptually, a building would be located on the west side of the landfill site near the entrance gate, adjacent to the existing leaf and yard waste handling area (refer to Figure 4.8). The building would be accessible for drop off and pick up by organic waste collection trucks. The proposed location for this facility within the City's landfill is shown in Figure 4.8. In general, the building would consist of a concrete slab with push wall, and a pre-engineered upper structure including roof. Runoff from the organic material would be collected in a sump pit cast into the concrete slab, which will be sloped away from the building opening.



Figure 4.8 Proposed Location of New Organics Transfer Building at the Cornwall Landfill.

An example of a simple organics storage and transfer facility is shown below in Figure 4.9 which is performing a similar function for the City of Cambridge at their waste depot. This facility accepts 10,000 tonnes/year of green bin food waste and is ultimately transferred to the City of Guelph's composting facility.



Figure 4.9 Example Organic Food Waste Receiving Building (Cambridge Waste Management Centre, Cambridge, ON)

4.1.3.3 Alternative 3 – Organics Processing by City via Aerobic Composting

As part of the long list review of alternatives for the City, self-processing of organics through aerobic composting (AC) was also found to be a suitable alternative for the expected quantities of organics material to be generated by the City. Compost is organic material that is used as a soil amendment or a medium to grow plants. Compost is created through the aerobic decomposition of organic material such as food waste, yard waste, and manures which are mixed with amendment material, such as small sized wood waste; and is placed in piles, windrows, or vessels. The biological process requires aerobic microorganisms to decompose the organic material. To optimize the degradation process, the following key parameters are important: oxygen concentration, moisture content, and carbon to nitrogen (C:N) ratio. Material structure (particle size distribution, level of contaminants, texture, and porosity), pH, and temperature are also important material qualities in the AC process. Covered, active aerobic composting via aerated static pile (ASP) is a typical approach that could be implemented with the City's SSO.

Incoming SSO would be received in an enclosed space with an odour control system where pre-processing and mixing will occur. Leaf and Yard Waste (L&YW) is already received and processed separately by the City at the City's landfill, but could be added to the incoming SSO stream to assist in bulking and the overall composting process by incorporating these waste streams at the composting site as described later. Screening and final product storage will also be outdoors. Stormwater in the outdoor processing and storage areas will be collected and directed to local stormwater management found on site.



An example covered composting system is shown below in Figure 4.10.

Figure 4.10 Example Covered Composting System for approximately 20,000 tonnes per year located in Moncton, NB (Courtesy of W.L. Gore & Associates)

As part of the previously completed "Co-Digestion, Energy Generation, and Biosolids Feasibility Study" (GHD, February 2021), an area of about 1 hectare adjacent to the City's existing landfill was selected for the potential location of a pre-processing facility that would accept SSO and produce a slurry that would be trucked over to Cornwall WWTP and integrated into the City's anaerobic digesters. This is within a larger area of 9.5 hectares, shown below in Figure 4.11.



Figure 4.11 Available footprint adjacent to Cornwall Landfill for Organics Processing (Reproduction of Figure 3 from Co-Digestion, Energy Generation, and Biosolids Feasibility Study, GHD, February 2021)

Based on the quantities of SSO material the City would be receiving every year, a waste receiving processing facility generating a compost byproduct would likely fit within the 9.5 ha of space shown in Figure 4.11, based on other similarly sized municipal composting projects.

Since this area is adjacent to the City's existing landfill where L&YW is already processed, some synergies from re-integrating LYW at the receiving area of the composting site on a seasonal basis could be considered.

The City would also be responsible for the storage, marketing and distribution of the compost material for any recovery of revenue.

4.2 Description of the Environment Potentially Affected

The environment potentially affected by the proposed alternative solutions is described according to the following components as defined in the Environmental Assessment Act (EA Act) based on existing information sources:

- Natural Environment
- Built Environment
- Social Environment
- Economic Environment
- Cultural Environment

The following sections will review potential environmental impacts from the alternative solutions. Three site locations have been identified as being impacted by the processing and treatment of septage, biosolids and organics, including:

- Cornwall Wastewater Treatment Plant
- Cornwall Landfill

Along the trucking route(s) to final destination of these waste streams

Specifically, the Cornwall WWTP, the Cornwall Landfill and various locations along the organics and biosolids transfer routes may be affected.

4.2.1 Cornwall Wastewater Treatment Plant

The Cornwall WWTP is located at 2800 Montreal Road East. The Cornwall WWTP receives municipal wastewater, provides treatment, and discharges treated effluent into the St. Lawrence River. The solids produced by treatment are anaerobically digested, dewatered, and transferred to the City's landfill for disposal. Refer to the following figure for a google image of the Cornwall WWTP site.

To accommodate septage receiving and treatment, a fully enclosed prefabricated septage receiving station is proposed to be located outside of the existing headworks building at the WWTP. Other biosolids management options described herein also contemplate the construction of additional on-site infrastructure.

4.2.1.1 Natural Environment

The natural environment associated with the Cornwall WWTP includes the St. Lawrence River, air and the surrounding natural area.

The surface water impact because of treated effluent discharge from the Cornwall WWTP effluent is governed by the Environmental Compliance Approval (ECA) (Sewage) compliance limits. The discharge limits have been established and approved by the Ministry of the Environment, Conservation and Parks to avoid negative impact to the receiving water (i.e., St. Lawrence River). The most recent plant upgrades increased the level of treatment from primary to secondary level, with a significant improvement in effluent quality.

The impact to air is a result of the odour sources and noise emissions from the WWTP. The plant operation is currently governed by the Environmental Compliance Approval (Air and Noise) for odour sources at screening, degritting, and sludge thickening buildings. The onsite diesel backup generators are also documented in the approval.

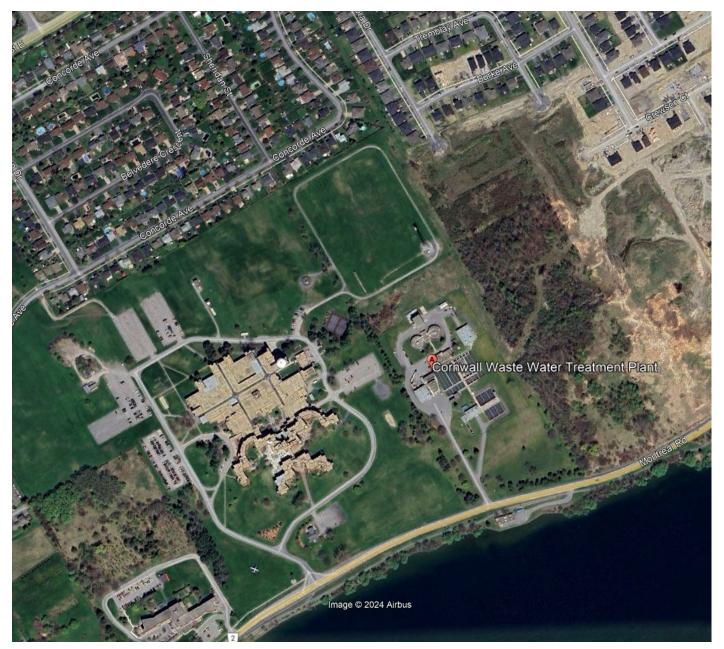


Figure 4.12 Satellite Photograph of Cornwall WWTP and adjacent areas

4.2.1.2 Built Environment

The Cornwall WWTP is currently zoned as Major Institutional (MI). The site is bordered by Major Institutional in the north, east and west direction, and by Montreal Road/ St. Lawrence River to the south. The site is surrounded by medium density residential area further to the north and east. The WWTP site has gone through major construction and expansion in 2014. The site has been extensively disturbed during construction over the years.

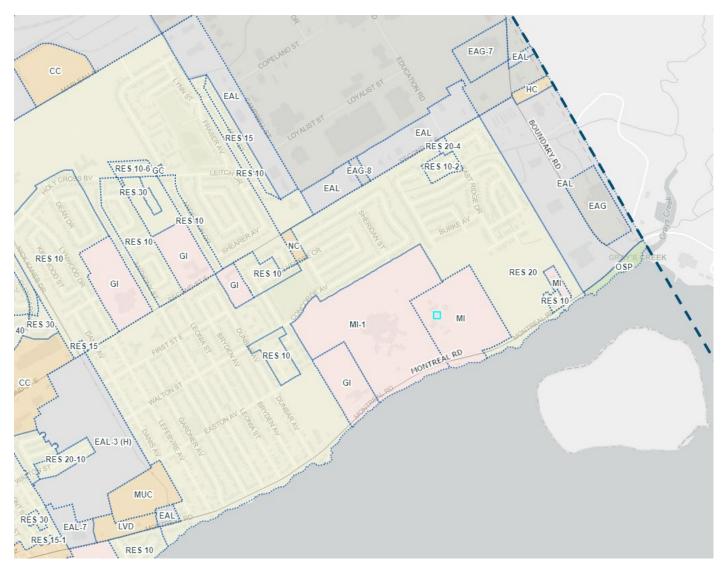


Figure 4.13 City of Cornwall Zoning around Cornwall WWTP

4.2.1.3 Social Environment

The WWTP provides wastewater treatment to the City of Cornwall.

The increased traffic along Montreal Road for septage haulers should be considered. Combined with the busy summer season of septage clean outs, a new septage receiving station will impact waterfront recreational use. Public perception of septage receiving should also be considered. Septage can be viewed as odorous and people consider this stream to impact quality of life when living close to the site. The result of septage trucks idling can also increase the noise levels in the surrounding areas. By depositing septage at the WWTP, it will impact the residual plant capacity for future development within the Cornwall WWTP catchment area.

The impact from additional biosolids treatment could involve increased building footprint and on-site depending on the alternative but also beneficial end uses of the biosolids (i.e. relative to the current disposal at the landfill).

4.2.1.4 Economic Environment

The economic impact from additional work on this site, particularly related to septage receiving and biosolids treatment, will trigger changes in revenue, operating budget, and water/sewer rates to upgrade the facility. Septage receiving is generally considered a revenue generating operation. Depending on the number of truck loads, this

operation could add O&M effort to manage the additional loading. Biosolids treatment and processing can potentially affect the O&M cost for disposal, and instead generate revenue for improved end product quality.

4.2.1.5 Cultural Environment

There are various buildings onsite at the Cornwall WWTP. There are no built heritage features for the existing infrastructure. Since the site is already disturbed during previous plant upgrades, there is no archaeological potential anticipated. Any future potential structures will be in previously disturbed areas.

4.2.2 Cornwall Landfill Site

The Cornwall Waste Disposal Site, located at 2590 Cornwall Centre Road and receives waste material for disposal. It is currently proposed to redirect septage receiving from this site to the WWTP and divert/transfer the organics off site to a third party. To receive and process organics, a new transfer station is proposed to be constructed within the existing site. This transfer station will not require an expansion of the existing waste disposal site, nor will it increase the amount of waste tipped at the landfill since the current practice involves hauling organics combined with domestic waste.

4.2.2.1 Natural Environment

The natural environmental impact from a landfill site is generally related to groundwater/surface water resources, and air quality. With the proposed construction of a new organics transfer station, it could generally impact the air quality in the surrounding areas but as noted, this waste is already being brought to site. Air quality impact will be related to odour, dust emissions, and noise pollution. Since this is an active landfill site, the new transfer station will increase traffic in this area with the organics being hauled away. The hydrogeological impact is not anticipated as the transfer station will be designed to mitigate impacts.



Figure 4.14 Satellite Photograph of Cornwall Landfill

4.2.2.2 Built Environment

The landfill site is currently zoned as Rural Area (RA) and the site is bordered by Environmental Constraint – Floodplain to the northeast, residential to the west, and open space to the south.



Figure 4.15 City of Cornwall Zoning (Landfill Site

4.2.2.3 Social Environment

With the establishment of an organics collection program, the social environment could be impacted from the Municipality's positive action/ commitment to protecting the environment. Providing an organics transfer station will enhance the messaging in ensuring that the organics materials are being re-diverted from the landfill and treated for ultimate beneficial use while at the same time gaining airspace for domestic waste disposal.

4.2.2.4 Economic Environment

With organics transfer station and material diversion, it will free up the space in the landfill site to accept additional waste material. This will increase the landfill life span and defer capital spending.

Constructing a transfer station will involve capital and operational spendings that will need to be considered.

4.2.2.5 Cultural Environment

There are no built heritage features for the existing infrastructure. Since the site is already disturbed, there would be no archaeological resource impacts anticipated.

4.2.3 Potential Transfer Routes

For organics, one of the alternatives being evaluated involves transferring to a third-party merchant for processing. Figure below shows the potential receiver of the organics materials.

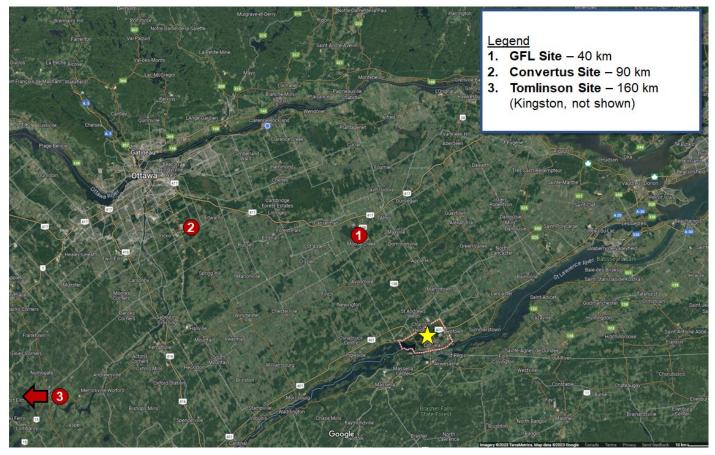


Figure 4.16 Potential Transfer Routes and Locations for Organics Material

4.2.3.1 Natural Environment

The additional transport distance for the organic materials will result in the generation of greenhouse gas emissions (GHGs) but will be offset by the beneficial uses for the organics and biosolids.

4.2.3.2 Built Environment

There is no impact on the built environment as the materials are being transported offsite along pre-established transportation routes.

4.2.3.3 Social Environment

There will be some increased truck traffic along the transport route(s) however these are pre-established transportation routes.

4.2.3.4 Economic Environment

The economic environment will be impacted based on the destinations. Further negotiations and bidding process should be undertaken to select the preferred transport destination(s).

4.2.3.5 Cultural Environment

There are no anticipated effects on the cultural heritage or archaeological potential.

4.3 Assessment of the Alternative Solutions

The alternative solutions for each project component were assessed based on a net effects analysis. A net effects analysis is composed of the following activities reflecting the process specified in the MCEA:

- Identify potential effects on the environment (both positive and negative).
- Develop appropriate impact management measures.
- Apply the impact management measures to the identified potential environmental effects to identify net effects on the environment (both positive and negative).

4.3.1 Development of Evaluation Criteria and Indicators

To identify and consider the potential effects of each alternative solution on the environment in a traceable, logical, understandable, and reproducible manner, evaluation criteria were developed as a first step. The evaluation criteria were developed based on the alternative solutions being considered, the existing environmental conditions associated with the solutions, the type and scale of potential environmental effects anticipated from the alternatives and their relative significance.

Each evaluation criterion was connected to a particular aspect of the environment (e.g., natural environment, built environment, etc.) as defined in the EA Act, which is also reflected in the MCEA. In addition, criteria were included for assessing the technical and financial aspects of the alternative design concepts. One or more indicators were developed for each evaluation criterion to identify how the potential environmental effects were to be measured for each criterion. **Table 4.2** list the evaluation Criteria and their respective indicators.

Category	Evaluation Criteria	Indicator
Technical	Operation and Maintenance Requirements	Operation and Maintenance requirements associated with the solution, including complexity of operations, staffing requirements, parts and after-market service
	Process suitability for City's existing process infrastructure ("inside the fence")	Is this an appropriate alternative to consider, that would align with City's existing infrastructure at WWTP or landfill?
	Process resiliency	Adaptable to process changes, regulatory changes, changes in logistics/material management
	Ease of Implementation	How quickly can this option be implemented? Are there additional infrastructure requirements?
	Flexibility for Energy Independence	Is the option a source of energy/can be made into a source of energy?
	Beneficial Use Material Generated	Is the end product generated by this option a beneficially usable material?
	Process Risk	What are process risks or impacts associated with this alternative?

Table 4.2 Biosolids and Organics Evaluation Criteria and Indicators

Category	Evaluation Criteria	Indicator
Natural Environment	Effect on GHG Emissions	Does the proposed alternative have the potential to reduce or eliminate GHG emissions?
Built Environment	Effect on existing infrastructure	Effect on Wastewater Treatment Plant
Economic Environment	Effect on Municipal Planning Policies	Compatibility with Provincial Planning Policies
Financial	Capital Costs	Estimated Costs (refer to Appendix G for details)
	Operating and Maintenance Costs	Estimated Costs (refer to Appendix G for details)

4.3.2 Application of Net Effects Analysis

Following the development of evaluation criteria and indicators, the three tasks associated with the net effects analysis were carried out for the alternatives for managing biosolids and organics. As previously noted in Section 4.1.1, the alternative for septage management has been identified and is not subject to further options comparison.

Task No. 1 - Identify Potential Effects on the Environment

The potential effects on the environment were identified for the alternatives by applying the evaluation criteria via their associated indicator(s) to each of the alternatives. The application was done within the context of each specific alternative and the associated environment. The identified potential effects were then documented in the "Potential Effects" row of the net effects analysis tables for each alternative.

Task No. 2 - Develop and Apply Impact Management Measures

Next, impact management measures were developed, where possible and as required, and applied to avoid, mitigate, or compensate for potential negative environmental effects for each alternative. More specifically, the intent of the impact management measures is as follows:

Avoidance: The priority is to prevent the occurrence of negative (adverse) environmental effects associated with implementing an alternative.

Mitigation: Where negative environmental effects cannot be avoided, appropriate measures to remove or alleviate, to the greatest extent possible, the negative effects associated with implementing an alternative should be sought.

Compensation: In situations where appropriate mitigation measures are not available, or significant net negative effects will remain following their application, compensation measures may be required to counterbalance these negative effects through replacement in kind, substitution, reimbursement or other agreed compensation.

The impact management measures were developed based on professional expertise of the Project Team reflecting current procedures, historical performance, and existing environmental conditions. These measures were documented in the "Impact Management Measures" row of the net effects analysis tables for each alternative.

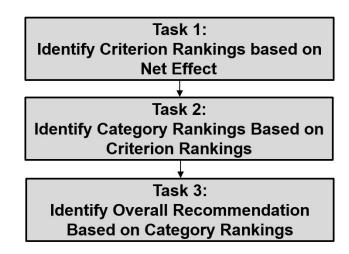
Task No. 3 - Determine Net Effects on the Environment

Once the appropriate impact management measures were developed and applied to the potential environmental effects of each alternative, the remaining net effect(s) were determined and documented in the "Net Effects" row of the net effects analysis tables for each alternative. In cases where the net effect could not be improved through the application of impact management measures, the potential effect remained unchanged. Therefore, it was still identified as the "net effect."

4.4 Comparative Evaluation of the Alternative Solutions

Next, the alternative solutions for the project components were comparatively evaluated using the Reasoned Argument or "Trade off" approach based on the results of the net effects analysis. This approach identifies the relative differences in net effects between the alternative design concepts to determine the relative advantages (positive) and disadvantages (negative) to the environment of each alternative design concept.

As per MECP's Code of Practice: Preparing and Reviewing Environmental Assessments in Ontario, the EA Act does not differentiate between the importance of the different environments (that is, natural, built, social, economic, cultural), and it is expected that the net effects to one environment may be greater than the effects to another. In light of this, one alternative is rarely preferred to all others in every respect and relative advantages in one environment may be offset by relative disadvantages in another. As a result, the evaluation process consists of trade-offs in which the advantages and disadvantages to the environment are considered holistically in determining a recommended design concept. In general, the alternative design concept that has the best balance of advantages and disadvantages is identified as the recommended design concept.



The following figure illustrates the tasks associated with the "Trade-off" approach.

The three tasks are elaborated upon in the following sub-sections:

Task 1: Identify Criterion Rankings Based on Net Effects

First, the net effects identified for each alternative by evaluation criterion are compared to one another to identify a relative criterion ranking by alternative (i.e., Most Preferred, More Preferred, Moderately Preferred, Less Preferred or Least Preferred). The criterion ranking assigned to the alternative takes into account such considerations as the magnitude, geographic extent, timing, frequency and duration of the net effects in comparison to one another. If the corresponding net effects of a criterion ranking (i.e., Tied for Most Preferred). A rationale for the alternative rankings by criterion is provided within the Net Effects and Comparative Evaluation Table.

Task 2: Identify Category Rankings Based on Criterion Rankings

In Task 2, the criterion rankings identified through the preceding task are considered collectively to assign a relative alternative ranking (i.e., Most Preferred, More Preferred, Less Preferred or Least Preferred (includes Ties)) by individual category (e.g., Technical, Natural Environment, Financial, etc.).

In situations where a category has more than one evaluation criterion, all the evaluation criterion rankings are considered collectively to identify an overall alternative ranking for the category. For example, in the case of the Technical Category, rankings assigned for all three technical evaluation criteria were considered collectively in determining the alternative rankings for the Technical Category. In determining the alternative rankings by individual

category, trade-offs are made based on the criterion rankings in which such considerations as the magnitude, geographic extent, timing, frequency and duration of the net effects in comparison to one another are accounted for. A rationale for the alternative rankings by category is provided within the Net Effects and Comparative Evaluation Table.

Task 3: Identify Overall Preliminary Recommendation Based on Category Rankings

In Task 3, one of the alternative design concepts is identified as the preliminary recommended design concept considering the relative category rankings determined through Task 2. In determining the overall preliminary recommendation, trade-offs are made based on the relative category rankings in which such considerations as the magnitude, geographic extent, timing, frequency and duration of the net effects in comparison to one another are accounted for. As a result, the alternative with the best balance of advantages and disadvantages relative to one another overall is identified as the preliminary recommended design concept. A rationale for the recommended solution is provided within the Net Effects and Comparative Evaluation Tables included on the following pages. Although summary financial information is presented in these comparison tables as part of the evaluation criteria, detailed and sources for this information is provided in Appendix G.

Category/ Evaluation Criteria	Indicator		Alternative No. 1: Do Nothing	Alternative No. 2: Biosolids Processing By Others	Alternative No. 3: Thermal Hydrolysis Process (THP)	Alternative No. 4: Sludge Drying Process	Alternative No. 5: Processing by Others and THP
Technical Operation and Maintenance Requirements	Operation and Maintenance requirements associated with the solution, including complexity of operations, staffing requirements, parts	Potential Effects	This would have no impact on existing O&M Practices. Biosolids material would continue to be sent to landfill, and managed at the landfill until no space is available.	Minor change to current operations. Biosolids would continue to be produced at WWTP. However, haulage would be from the WWTP to a 3 rd party site where biosolids would be managed there.	New process and equipment to operate and maintain, no new staff required, but general operational costs will increase. Additional energy inputs required for heating of sludge. Would still be managing City's biosolids at the WWTP site.	New process and equipment to operate and maintain, possibly no new staff required. Significant fuel (natural gas) for heating of drying medium.	In near term, use approach for Alternative No. 2. In medium-to- long term, engage a 3 rd party biosolids processor as described by Alternative No. 2.
	and after-market service	Impact Management Measures	No impact management measures available	No impact management measures available	Train staff on new process. Potentially engage in an after- market service contract with equipment supplier to assist in O&M.	Would assess specific technology selected and implementation to determine staffing impacts. Construct new building to house new process. Potentially engage in an after-market service contract with equipment supplier to assist in O&M.	Develop transition plan between stopping 3 rd party processing and self-processing biosolids on site.
		Net Effects	No change in potential effects.	No change in potential effects.	Staff will be trained on new processes however still an increase in O&M costs overall, because it is an added process to current WWTP operations.	Significantly increased costs on O&M side compared to current practices. New building at WWTP site.	Potential increase in O&M costs overall.
	Criterion Ranking		More preferred , as City would have to manage biosolids at landfill.	Most Preferred because Alternative No. 2 would result in no change to WWTP practices and biosolids management O&M costs are offloaded to 3 rd party processor.	Tied for Less preferred because Alternative No. 3 would have increased O&M requirements compared with Alternatives 1 and 2.	Least preferred because Alternative No. 4 would have significant increased O&M requirements compared with other alternatives.	Tied for Less preferred because Alternative No. 5 would have increased O&M requirements compared with Alternatives 1 and 2.
Process suitability for City's existing process infrastructure ("inside the fence")	Is this an appropriate alternative to consider, that would align with City's existing infrastructure at WWTP or landfill?	Potential Effects	This would have no impact on current practices at WWTP; however, it would have an impact on landfill capacity and is generally not in alignment with City's goals.	Minor change to current operations. Biosolids would continue to be produced at WWTP. However, haulage would be from the WWTP to a 3 rd party site where biosolids would be managed there.	Depending on technology selected, THP process could be integrated into existing biosolids building, with additional tankage for storage of post-processed materials outdoors. Process capacity suitable for processing City's biosolids.	Regardless of what sludge drying technology is selected, a new sludge drying process and associated dry product storage would require new building construction on site.	In near term, minor change to biosolids operation at WWTP where it is hauled away for processing. In medium-to-long term, THP solution is implemented at WWTP.
		Impact Management Measures	No impact management measures available	By diverting material away from landfill, would increase capacity for garbage and other solid waste streams.	Select THP process that is readily adaptable to existing WWTP infrastructure (ie. Would fit within biosolids building with minimum modifications), to avoid conflicts with existing installed equipment.	Sludge drying via belt, paddle, or screw may be appropriate based on City's required sludge throughput. However, would need a separate building for equipment, auxiliary systems, and end product storage.	By diverting material away from landfill, would increase capacity for garbage and other solid waste streams, and allow time for a medium-to-long term solution at the WWTP site.
		Net Effects	No change in potential effects.	Would add capacity for additional solid waste stream at landfill.	Design and installation of THP process will meet objective of biosolids processing capacity at WWTP and diverting biosolids away from landfill.	Design and installation of Sludge Drying process will meet objective of biosolids processing capacity at WWTP and diverting biosolids away from landfill.	Increase available space at landfill short term, while long terms allowing City to develop a solution for managing biosolids at WWTP.

Table 4.3 Biosolids Net Effect Analysis and Comparative Evaluation Table

Category/ Evaluation Criteria	Indicator		Alternative No. 1: Do Nothing	Alternative No. 2: Biosolids Processing By Others	Alternative No. 3: Thermal Hydrolysis Process (THP)	Alternative No. 4: Sludge Drying Process	Alternative No. 5: Processing by Others and THP
	Criterion Ranking		Less preferred because Alternative No. 1 will reduce available landfill capacity long term.	Most Preferred because Alternative No. 2 would have no change to WWTP practices and biosolids are no longer managed at City's landfill.	Tied for More preferred because Alternative No. 3 is adaptable to current infrastructure at WWTP, with minimum impact to existing process.	Least preferred because Alternative No. 4 would require significant alterations to infrastructure at WWTP site.	Tied for More preferred because in short term, no change to WWTP practices and biosolids no longer managed at City's landfill. In medium term, adaptable to current infrastructure at WWTP, with minimum impact to existing process.
Process resiliency	Adaptable to process changes, regulatory changes, changes in logistics/material management	Potential Effects	Not adaptable to regulatory changes. City would have to look at alternative disposal methods for biosolids material if not permitted at landfill.	No changes to City's current practices; biosolids continues to be produced at City's WWTP.	City would be responsible for updating/revising THP installation to compensate for any changes in regulations, or if produced material is no longer acceptable for beneficial use.	City would be responsible for updating/revising sludge drying installation to compensate for any changes in regulations, or if produced material is no longer acceptable for beneficial use.	No immediate changes to City's current practices; biosolids continues to be produced at City's WWTP in the short term, while allowing a potentially more flexible solution to be developed for medium to long term.
		Impact Management Measures	No impact management measures available	Any future regulatory changes would be responsibility of 3 rd party processor managing the final product.	No impact management measures available.	Have multiple avenues for dry product – not necessarily distribution as fertilizer, or as pellet. Can potentially use dry product as fuel for energy production on site, or further advanced thermal treatment (such as pyrolysis or combustion)	Development of a long-term solution (THP) so that City can self-manage biosolids instead of depending on 3 rd party processor.
		Net Effects	No change in potential effect	This alternative is adaptable, as long as 3 rd party processor continues to accept biosolids material from City.	No change in potential effect.	Sludge drying process would be fairly adaptable to regulatory changes.	Alternative would be flexible to adapt to regulatory or logistical changes.
	Criterion Ranking		Tied for Least preferred because Alternative Nos. 1 and 3 is not as adaptable to process and regulatory changes.	Tied for most preferred because Alternative No. 2 is adaptable to regulatory changes; any changes required to biosolids processing will be taken on by 3 rd party processor.	Less preferred because although the system can be made to be flexible, it will require investment of additional infrastructure (and footprint on site).	Less preferred because although the system can be made to be flexible, it will require investment of additional infrastructure (and footprint on site).	Tied for most preferred , as it adds flexibility in near term to allow for alternative solutions to be developed by going to third party processing facility, while a permanent solution can be developed.
Ease of Implementation	How quickly can this option be implemented? Are there additional infrastructure requirements?	Potential Effects	No potential effects, as biosolids would continue to go to landfill.	Biosolids would be taken to 3 rd party facility, directly from WWTP. No additional infrastructure required. City would require a tendering process for biosolids haulage contract. Tender for a haulage contract can be generated within 3 months. However, movement of material can begin as soon as contract is awarded.	Depending on THP technology selected, can implement THP process within existing biosolids building. Will require external tankage (outdoors) for material storage. Assume up to 24 months for full implementation including permitting. May also pursue alternative delivery option (Design build). During this time, biosolids continue to go to landfill.	Significant implementation time required. Environmental impacts (odour, other emissions from drying facility) will impact ECA permitting time. Construction of new facility at Cornwall WWTP. Assume a total project length of 3-4 years. During this time, biosolids continue to go landfill.	Tender a contract for haulage in near term while more permanent on-site biosolids processing solution is implemented. This diverts material away from landfill, while developing and implanting THP solution.
		Impact Management Measures	No impact management measures required.	Tender RFP for 3 rd party biosolid hauling contract.	Tender RFP for design and construction of a THP solution.	Begin consultation with MECP for ECA permitting requirements. Tender RFP for design and construction of dryer facility.	Tender RFP for 3 rd party biosolid hauling contract.
1		Net Effects	No change in potential effect.	No change in potential effect.	No change in potential effect.	No change in potential effect.	No change in potential effect.

Category/ Evaluation Criteria	Indicator		Alternative No. 1: Do Nothing	Alternative No. 2: Biosolids Processing By Others	Alternative No. 3: Thermal Hydrolysis Process (THP)	Alternative No. 4: Sludge Drying Process	Alternative No. 5: Processing by Others and THP
	Criterion Ranking		Most preferred because Alternative No. 1 can be implemented immediately.	Tied for More preferred because Alternative No. 2 can be implemented quickly/in near term.		Least preferred because Alternative No. 4 cannot be implemented quickly and requires significant infrastructure at Cornwall WWTP site.	Less preferred because Alternative No. 5 combines benefits of short term and long- term solution Alternative 2 and Alternative 3, but still requires significant capital cost.
Flexibility for Energy Independence	Is option a source of energy/can be made into a source of energy?	Potential Effects	No flexibility for energy independence.	Flexibility for energy independence is dependent on what the 3 rd party process is doing with the material.	Potential for enhanced biogas production from THP process, which would contribute to overall WWTP biogas output. However, not the same biogas output as "pure" AD.	Good potential for heat and energy recovery at points in dryer process, depending on selected dryer technology, that will offset some energy inputs. Can also recover energy through combustion of dried product.	No flexibility for energy recovery when hauling to 3 rd party. Some flexibility for energy recovery as part of THP process.
		Impact Management Measures	No impact management measures available.	No impact management measures available.	Design THP process to maximize biogas output, and recover as much energy as possible.	Design sludge drying process to maximize biogas output, and recover as much energy as possible.	Design THP process to maximize biogas output, and recover as much energy as possible.
		Net Effects	No change in potential effect	No change in potential effect	Can implement THP process with maximum biogas recovery, to offset some energy inputs long term.	Can implement THP process with maximum biogas recovery, to offset some energy inputs long term.	Can implement THP process with maximum biogas recovery, to offset some energy inputs long term.
	Criterion Ranking		Tied for Least preferred because Alternative No. 1 has no flexibility for energy independence.	Less preferred because Alternative No. 2 energy independence is dependent on what 3 rd party processor is doing with material.	Tied for More preferred because energy recovery is possible with enhanced biogas production as part of THP process.	Most preferred because there is good potential for heat and energy recovery at multiple points in drying process.	Tied for More preferred because energy recovery is possible with enhanced biogas production as part of THP process.
Beneficial Use Material Generated	Is the end product generated by this option a beneficially usable material?	Potential Effects	No beneficial use material would be generated by hauling material to landfill.	Beneficial use material would be generated by the 3 rd party processor.	Beneficial use material would be generated by THP process, and could be managed by THP system supplier.	Beneficial use material would be generated by THP process, but would be managed by the City.	Near term, beneficial use material would be generated by the 3 rd party processor. Medium to long-term, could be managed by THP system supplier.
		Impact Management Measures	No impact management measures available.	City would be able to have some discussions with processor, and incorporate into contract if specific requirements for a beneficial use material or revenue sharing are required through a contract agreement.	No impact management measures available.	No impact management measures available.	City would be able to have some discussions with processor, and incorporate into contract if specific requirements for a beneficial use material or revenue sharing are required through a contract agreement.
		Net Effects	No change in potential effect	Biosolids would become a beneficially used material through third party processing, in some form.	No change in potential effect	No change in potential effect	Biosolids would become a beneficially used material through third party processing, in some form. When THP solution is implemented, this material would be generated by City and could be managed by THP system vendor.
	Criterion Ranking		Least preferred because Alternative No. 1 does not produce any beneficial material.	Tied for More preferred because Alternative No. 2 and 3 have no guarantee that beneficial use material is generated, unless	Most preferred because Alternative No. 3 would generate a beneficial use material on site, and material distribution managed by others.	Less preferred because although Alternative No. 4 would generate beneficial use material, City responsible for management and distribution.	Tied for More preferred because Alternative No. 2 and 3 have no guarantee that beneficial use material is generated, unless

Category/ Evaluation Criteria	Indicator		Alternative No. 1: Do Nothing	Alternative No. 2: Biosolids Processing By Others	Alternative No. 3: Thermal Hydrolysis Process (THP)	Alternative No. 4: Sludge Drying Process	Alternative No. 5: Processing by Others and THP
				written specifically in the haulage and handling contracts.			written specifically in the haulage and handling contracts.
Process Risk	What are process risks or impacts associated with this alternative?	Potential Effects	Some process risk. This process would be suitable to fit within the existing biosolids haulage program. However, airspace/volume at landfill would continue to be taken up by this material.	No process risk. This has no impact on current biosolids production at WWTP, and biosolids material are diverted from landfill.	Some process risk, for integration with existing sludge digestion process. May not be able to create dewatered sludge to THP system supplier's specifications (15-20% TS). Selected THP equipment may not fit in existing dewatering building. During implementation of this option, biosolids still going to landfill.	Significant process operations risks. Odour, health and safety (explosion, fire) as observed in other sludge drying facilities. Dry product/Pellet may not conform to beneficial use requirements. During implementation of this option, biosolids still going to landfill.	In short term, no process risk. Biosolids diverted from landfill. In medium term, some process risk associated with THP process.
		Impact Management Measures	No impact management measures available.	No impact management measures available.	Retrofit existing centrifuges to thickening centrifuges to produce this material for THP system. Work directly with equipment supplier (pre-select or pre- purchase package) to minimize risk of not fitting into existing process at WWTP.	Design adequate odour control, health and safety, requirements. Ensure equipment supplier can meet final product requirements for beneficial use.	Engage 3 rd party biosolids processor in near term so that a solution can be developed to minimize process risk, while still diverting biosolids from landfill.
		Net Effects	No change in potential effect	No change in potential effect	Some change to WWTP to accommodate new process units for THP process.	Significant change to WWTP site to accommodate additional process units and associated requirements to support sludge drying.	In near term, no change to process. In medium to long-term, some change to WWTP to accommodate new process units for THP process.
	Criterion Ranking		Least preferred, as although there are no process risks to WWTP, the landfill will be taken up by biosolids volumes and a new site will be required sooner.	Most Preferred, as there is no process risk to City compared to other alternatives, other than securing haulage offsite.	Tied for Less preferred , as there is process risk at WWTP to integrate THP process.	Tied for Less preferred , as there is process risk at WWTP to integrate sludge drying process.	Tied for Less preferred , as there is process risk at WWTP to integrate THP process.
Technical Category F	Ranking		Less Preferred because Alternative No. 1 would continue to deposit biosolids in the landfill reducing its lifetime, it would not enable energy independence and no beneficial material would be produced.	Most Preferred because Alternative No. 2 would not impact existing operations with no process risks, can be implemented immediately, and is adaptable to regulatory changes.	Tied for More Preferred because although Alternative No. 3 has increased O&M costs and requires time to implement it would divert biosolids away from the landfill and produce beneficial material.	Least Preferred because Alternative No. 4 would have significant impacts on the WWTP with significant O&M costs.	Tied for More Preferred because although Alternative No. 5 has increase O&M costs and requires time to implement it would divert biosolids away from the landfill and produce a beneficial material. In addition biosolids would managed in the interim as THP process is implemented.
Natural Environmer							<u> </u>
Effect on GHG Emissions	Does the proposed alternative have the potential to reduce or eliminate GHG	Potential Effects	No change to current practices; trucks sill going from WWTP to landfill.	Additional distance for trucks to haul from WWTP to 3 rd party facility.	Increase in GHG from additional natural gas consumption for heating within the THP process.	Significant Increase in GHG from additional natural gas consumption for drying.	Additional distance for trucks to haul from WWTP to 3 rd party facility, until long term THP solution is implemented.
	emissions?	Impact Management Measures	No impact management measures available	No impact management measures available	Enhanced biogas production can potentially reduce GHG footprint.	Depending on drying technology selected, this may reduce GHG footprint through reduction in fuel consumption or energy recovery from waste heat from drying process.	Enhanced biogas production via THP can potentially reduce GHG footprint.
		Net Effects	No change in potential effects.	No change in potential effects.	May result in a net GHG reduction due to biogas production.	May result in a net GHG reduction due to energy recovery/conservation.	May result in a net GHG reduction due to biogas production. However, may not be

Category/ Evaluation Criteria	Indicator		Alternative No. 1: Do Nothing	Alternative No. 2: Biosolids Processing By Others	Alternative No. 3: Thermal Hydrolysis Process (THP)	Alternative No. 4: Sludge Drying Process	Alternative No. 5: Processing by Others and THP
							able to offset time spent hauling biosolids to 3 rd party facility.
	Criterion Ranking		Less Preferred because GHG would still be produced hauling biosolids from the WWTP to the Landfill, and would be generated on site from the waste itself (and landfill gas).	Least preferred because Alternative No 2 would involve hauling biosolids a longer distance than Alternative No. 1.	Tied for Most Preferred because Alternative Nos. 3 and 4 may result in net GHG reductions due to fossil fuel consumption for heat.	Tied for Most Preferred because Alternative Nos. 3 and 4 would result in net GHG reductions due to fossil fuel consumption for heat.	More Preferred because although GHGs would be produce hauling biosolids it would be on a temporary basis with Net GHG producer due to fossil fuel consumption for heat once the THP is implemented.
Natural Environmen	t Category Ranking		Less Preferred because GHG would still be produced hauling biosolids from the WWTP to the Landfill.	Least preferred because Alternative No 2 would involve hauling biosolids a longer distance than Alternative No. 1, producing more GHGs.	Tied for Most Preferred because Alternative Nos. 3 and 4 may result in a net GHG reduction due to biogas/renewable energy production.	Tied for Most Preferred because Alternative Nos. 3 and 4 may result in a net GHG reduction due to biogas/renewable energy production.	More Preferred because although GHGs would be produce hauling biosolids it would be on a temporary basis with Net GHG producer due to fossil fuel consumption for heat once the THP is implemented.
Built Environment							
9	Effect on Wastewater Treatment Plant	Potential Effects	No effects. Biosolids continue to be produced at WWTP and shipped to landfill.	No effects. Biosolids will be hauled to 3 rd party processing facility.	Depending on THP technology selected, can implement THP process within existing biosolids building. Will require external tankage (outdoors) for material storage.	Additional structure(s) to be constructed on the WWTP site for drying and storage of dried biosolids.	Biosolids hauled to 3 rd party facility in the near term, while a THP solution is developed for implementation. No near term impacts, but THP system would impact WWTP site.
		Impact Management Measures	No impact management measures available.	No impact management measures available.	Construct THP system within available space at WWTP.	Construct drying facility (and dry product storage facility) at WWTP site.	Construct THP system within available space at WWTP.
		Net Effects	No change in potential effect.	No change in potential effect.	Addition of THP system would provide an on site treatment solution for biosolids.	Addition of biosolids drying system would provide an on site treatment solution for biosolids that will be beneficially re-used.	Addition of THP system would provide an on site treatment solution for biosolids that will be beneficially re-used.
	Criterion Ranking		Tied for Most preferred because Alternative Nos. 1 and 2 would not impact the WWTP site or existing process.	Tied for Most preferred because Alternative Nos. 1 and 2 would not impact the WWTP site or existing process.	Tied for Less preferred because new infrastructure will impact the WWTP site (though limited to existing sludge digestion area).	Least preferred because new buildings/structures would need to be constructed and new infrastructure will impact the WWTP site.	Tied for Less preferred because new infrastructure will impact the WWTP site.
Built Environment C			Tied for Most preferred because Alternative Nos. 1 and 2 would not impact the WWTP site or existing process.	Tied for Most preferred because Alternative Nos. 1 and 2 would not impact the WWTP site or existing process.	Tied for Less preferred because new infrastructure will impact the WWTP site (though limited to existing sludge digestion area).	Least preferred because new buildings/structures would need to be constructed and new infrastructure will significantly impact the WWTP site.	Tied for Less preferred because new infrastructure will impact the WWTP site.
Economic Environn							
Effect on Municipal Planning Policies	Compatibility with Provincial Planning Policies	Potential Effects	Is not compatible with provincial policies to divert waste from landfills.	Is compatible with provincial policies to divert waste from landfills.	Is compatible with provincial policies to divert waste from landfills.	Is compatible with provincial policies to divert waste from landfills.	Is compatible with provincial policies to divert waste from landfills.
		Impact Management Measures	No impact management measures available.	No impact management measures required.	No impact management measures required.	No impact management measures required.	No impact management measures required.
		Net Effects	No change in potential effects	No change in potential effects	No change in potential effects	No change in potential effects	No change in potential effects
	Criterion Ranking		Least preferred because Alternative No. 1 is not	Tied for Most Preferred because Alternative Nos. 2, 3, 4 and 5 are	Tied for Most Preferred because Alternative Nos. 2, 3, 4	Tied for Most Preferred because Alternative Nos. 2, 3,	Tied for Most Preferred because Alternative Nos. 2, 3, 4

Category/ Evaluation Criteria	Indicator		Alternative No. 1: Do Nothing	Alternative No. 2: Biosolids Processing By Others	Alternative No. 3: Thermal Hydrolysis Process (THP)	Alternative No. 4: Sludge Drying Process	Alternative No. 5: Processing by Others and THP
			compatible with provincial	compatible with provincial	and 5 are compatible with	4 and 5 are compatible with	and 5 are compatible with
			planning policies.	planning policies.	provincial planning policies.	provincial planning policies.	provincial planning policies.
Economic Environi	ment Category Ranking		Least preferred because	Tied for Most Preferred because	Tied for Most Preferred	Tied for Most Preferred	Tied for Most Preferred
			Alternative No. 1 is not	Alternative Nos. 2, 3, 4 and 5 are	because Alternative Nos. 2, 3, 4	because Alternative Nos. 2, 3,	because Alternative Nos. 2, 3, 4
			compatible with provincial	compatible with provincial	and 5 are compatible with	4 and 5 are compatible with	and 5 are compatible with
			planning policies.	planning policies.	provincial planning policies.	provincial planning policies.	provincial planning policies.
Financial	Estimated Oceate	Detential Effects		Nie sewitel seets	Estimated constal cost of \$40.45	Estimated Consider a start	Estimated as with a set of \$40.45
Capital Costs Estimated Costs		Potential Effects	No capital costs	No capital costs	Estimated capital cost of \$10-15 Million.	Estimated Capital costs of between \$20 and \$35 million for new drying and product storage facility/building at WWTP site	Estimated capital costs of \$10-15 Million to implement THP process.
		Impact Management Measures	No impact management measures available.	No impact management measures available.	No impact management measures available.	No impact management measures available.	No impact management measures available.
		Net Effects	Potential effects remain unchanged.	Potential effects remain unchanged.	Potential effects remain unchanged.	Potential effects remain unchanged.	Potential effects remain unchanged.
	Criterion Ranking		Tied for Most Preferred	Tied for Most Preferred because	Less Preferred because	Least Preferred because	More Preferred because
			because 'Do Nothing' has no capital costs.	there are no capital costs association with Alternative No. 2.	Alternative No. 3 has the second highest capital costs.	Alternative No. 4 has the highest capital costs.	although Alternative No. 5 has the same capital costs as Alternative No. 3 the costs will be delayed.
Operating and Maintenance Costs	Estimated Costs	Potential Effects	Estimated operational costs of \$210/tonne to haul biosolids from WWTP to the Landfill. This is current operational practice.	Estimated operational costs of \$120/tonne to haul biosolids from WWTP to secondary facility.	Up to \$100,000 per year, including polymer, electricity, natural gas and other chemicals to support THP process.	\$700K per year, including polymer, electricity, natural gas, and other chemicals, and assuming 2 days per week operation to support drying process.	Temporary operational costs of Estimated operational costs of \$120/tonne to haul biooslids from WWTP to secondary facility. Once new THP process is in place, this would stop and THP operational costs would start (Alternative 3).
		Impact Management Measures	No impact management measures available.	No impact management measures available.	No impact management measures available.	No impact management measures available.	No impact management measures available.
		Net Effects	Potential effects remain unchanged.	Potential effects remain unchanged.	Potential effects remain unchanged.	Potential effects remain unchanged.	Potential effects remain unchanged.
	Criterion Ranking		Less preferred because Alternative No. 1 will be "status quo" for operational costs, and higher than Alternative No. 2.	Most Preferred because Alternative No. 2 has the lowest operational unit costs.	Tied for Less preferred because Alternative Nos. 1 and 3 have high operational costs.	Least Preferred because Alternative No. 4 has the highest operational costs	Less preferred, since high operational cost relative to other Alternatives in long term.
Net Present Value	Cost Per Tonne (over 20	0 year lifecycle)	\$157/tonne	\$90/tonne	\$124/tonne	\$521/tonne	\$118/tonne
Financial Category			More Preferred because Alternative No. 1 does not have capital costs and will be "status quo" for operational costs.	Most Preferred because Alternative No. 2 does not have capital cost and the lowest operational costs. end Alternative for the management	Tied for less Preferred because Alternative Nos. 3 and 5 have the second highest capital costs and high operational costs compared to other alternatives.	Least preferred because Alternative No. 4 has the highest capital costs and highest operational costs.	Tied for less Preferred because Alternative Nos. 3 and 5 have the second highest capital costs and high operational costs compared to other alternatives, however the capital costs would be delayed.

Category/ Evaluation Criteria	Indicator		Alternative No. 1: Do Nothing	Alternative No. 2: Organics Processing by Others	Alternative No. 3: On Site Covered Aerobic Composting
Operation and Maintenance Requirements	Operation and Maintenance requirements associated with the solution, including	Potential Effects	Green bin/ organics waste would need to be managed at the landfill indefinitely	Maintenance of a new transfer station at Landfill, to accept green bin waste prior to haulage to final destination.	Maintenance of a new composting facility.
	complexity of operations, staffing requirements, parts	Impact Management Measures	No impact management measures available	No impact management measures available	No impact management measures available
	and after-market service	Net Effects	No change in potential effect	No change in potential effect	No change in potential effect
	Criterion Ranking		Moderately preferred because Alternative No. 1 has more maintenance requirements than Alternative No. 2.	Most preferred because Alternative No. 2 has the fewest maintenance requirements.	Less preferred as Alternative No. 3 would have the highest maintenance requirements.
Process suitability for City's existing infrastructure	Is this an appropriate alternative to consider, that would align with City's existing infrastructure?	Potential Effects	This process would be suitable to fit within the new green bin collections program. However, airspace/volume would be taken up at City's landfill by this additional material.	City would require an organics transfer station to be constructed	A new composting facility would need to be sited and constructed. Also marketing and sale of compost material by City staff.
		Impact Management Measures	No impact management measures available	Construction of the transfer station at the landfill	Construction new composting facility (preferably near existing landfill to facilitate approvals and decrease impact on public)
		Net Effects	No change in potential effect	Construction of the transfer station would provide greater suitability with the City's existing infrastructure and long-term plans.	Construction of the composting facility would need to be sited and constructed, resulting in new assets to be managed and maintained.
	Criterion Ranking		Moderately preferred because Alternative No. 1 would place organic material in the Landfill limiting future capacity, but no changes to current practices required.	More preferred because Alternative No. 2 would divert organic waste away from landfill and allows for more space for garbage stream. Third party processor means city does not have to manage this material.	Less Preferred because the process would not be compatible with existing city infrastructure without construction of a new composting facility, to be sited.
Process resiliency	Adaptability to process changes, regulatory changes, changes in logistics/material management	Potential Effects	Not adaptable to regulatory changes. City would have to look at alternative disposal methods for green bin waste.	Organics would be collected and deposited at separate transfer station at City landfill. This would allow future options to be considered, without taking up any space in landfill.	Organics would likely be collected and deposited at a City-owned and operated composting facility.
		Impact Management Measures	No impact management measures available	Design of new infrastructure could take into account future flexibility.	Design of new infrastructure could take into account future flexibility.
		Net Effects	No change in potential effect	No change in potential effect, flexibility can be taken up in design.	No change in potential effect, flexibility can be taken up in design of new compost facility.
	Criterion Ranking		Less preferred because Alternative No. 1 is not adaptable to regulatory changes.	More preferred because Alternative No. 2 is potentially adaptable to regulatory changes, and risk is on third party processor to meet these changes.	Moderately preferred because Alternative No. 3 is adaptable to regulatory changes however City would have to operate and manage this new asset, including investments for any regulatory changes.
Ease of Implementation	How quickly can this option be implemented? Are there additional infrastructure requirements?	Potential Effects	No potential effect as organics would be placed in the landfill	A new transfer station would be designed for and constructed at the landfill. This would take 6-12 months to implement. A new RFP for haulage and processing of organics would also be required.	A new composting facility would need to be sited and constructed (preferabl near existing landfill to facilitate approvals and decrease impact on public). This would take approximatel 2 years, including permits and approvals.

Category/ Evaluation Criteria	Indicator		Alternative No. 1: Do Nothing	Alternative No. 2: Organics Processing by Others	Alternative No. 3: On Site Covered Aerobic Composting
		Impact Management Measures	No impact management measures required	No impact management measures available.	No impact management measures available.
		Net Effects	No change in potential effect	No change in potential effect	No change in potential effect
	Criterion Ranking		Most preferred because Alternative No. 1 could be implemented immediately.	Moderately preferred because Alternative No. 2 would take longer to implement compared to Alternative No. 1.	Least preferred because Alternative No. 3 would take the longest to implement.
Flexibility for Energy Independence	Is option a source of energy/can be made into a source of energy?	Potential Effects	No flexibility for energy independence.	There may be flexibility on energy independence, depending on how material is handled/processed at 3 rd party facility. For example, biogas through anaerobic digestion. However, this would not be a benefit to the City without proper contract terms.	Some heat recovery can be achieved from some aerated static pile composting processes through an optional glycol heat exchanger system, that can be recycled back to compost system, or used in neighboring buildings.
		Impact Management Measures	No impact management measures available.	Discuss options for environmental attribute sharing with processor, and incorporate into processing contract.	Design composting system around heat recovery process.
		Net Effects	No change in potential effect	City may be able to recover environmental credits (carbon offsets) depending on how material is processed at 3 rd party facility.	Can design and construct composting system with heat energy recovery as an objective.
	Criterion Ranking		Less preferred because Alternative No. 1 has no flexibility for energy independence.	Moderately preferred because Alternative No. 2 has an option to pursue energy recovery or associated environmental credits.	Most preferred , because Alternative No. 3 has more potential for energy generation and re-use that under control of City.
Beneficial Use Material Generated	Is the end product generated by this option a beneficially usable material?	Potential Effects	No beneficial use material would be generated by hauling material to landfill.	Beneficial use material would be generated at a 3 rd party facility, whether it is compost or another material that can be used in the agricultural sector. City would not have to manage this material themselves.	Compost would be generated that can be used in the agricultural sector, and can be sold to generate revenue.
		Impact Management Measures	No impact management measures available.	City would be able to have some discussions with processor, and incorporate into contract if specific requirements for a beneficial use material or revenue sharing are required.	Apart from operating the compost facility, City will also have to market and manage compost distribution and sale to take advantage of material.
		Net Effects	No change in potential effect	Organic waste would become a beneficially used material through third party processing, in some form, but would not be under control of City (they would receive no revenue)	Sell of compost material would help offset the cost of operating the facility.
	Criterion Ranking		Less preferred because Alternative No. 1 would not produce any beneficial material.	Moderately preferred because Alternative No. 2 would have the potential to create beneficial use material which is in alignment with City values and objectives.	Most preferred because Alternative No. 3 would generate beneficial material in alignment with the City values and objectives under full control of City, and provide revenue to offset O&M costs.
Process Risk	What are process risks or impacts associated with this alternative?	Potential Effects	Some process risk. This process would be suitable to fit within the new green bin collections program. However, airspace/volume at landfill would be taken up by this additional material.	Some process risk, if 3 rd party processing contract ends for any reason. City would no longer have an outlet for organic waste. No process risk to landfill – material is being diverted away.	Aerated static pile (ASP) technology is well understood and in use in both public and private facilities across Canada. Normal process risks with day to day operation by City staff. ASP technology can also be expanded for additional inputs.

Category/ Evaluation Criteria	Indicator		Alternative No. 1: Do Nothing	Alternative No. 2: Organics Processing by Others	Alternative No. 3: On Site Covered Aerobic Composting
		Impact Management Measures	No impact management measures available.	During competitive bidding process, require a guaranteed contract duration. Diversify distribution of organic material to multiple contractors/processors, to provide additional security.	Provide training and support, more staff as necessary to ensure compost facility remains in good working order and able to process the City's material.
		Net Effects	No change in potential effect	Opening up processing contract to a competitive bidding process would give a view of the market, competition and options for the City.	City will have a flexible long term solution with the ability to expand to meet future needs.
	Criterion Ranking		Less preferred because Alternative No. 1 posses some process risk by reducing landfill capacity and reducing future flexibility for additional garbage streams to landfill.	Most preferred because engaging in a competitive bid process allows potential for multiple takers of material, providing security for City and it diverts organic waste away from landfill to provide additional airspace/volume. It also offloads all processing risk to 3 rd party	Moderately preferred. Although can be flexible for City's needs, will still be responsible for operation, maintenance, and quality control of finished composting product.
Technical Category Ranking			Alternative No. 1 is less preferred from a technical category perspective because it has greater maintenance requirements compared to Alternative No. 2 and does not provide process resiliency, flexibility for energy depends or any beneficial material. In addition it provides process risk by requiring ongoing landfill capacity.	Alternative No. 2 is most preferred from a technical category perspective because it has few maintenance requirements compared to Alternative No. 1 and provides process resiliency, flexibility for energy independence or any beneficial use material. In addition it reduces process risk by enabling multiple takers for organic material and does not require ongoing landfill capacity.	Alternative No. 3 is moderately preferred , as it provides a solution that is flexible for future expansion, creates a compost product that is in full control of City and can offset O&M costs through revenue, City is responsible for marketing this material and ensuring quality finished product for sale.
Natural Environment	Deep the proposed	Detential Effects	Additional twoles on the wood to have	Additional twucks on the word to hou	Line notential to increase number of
Effect on GHG Emissions	Does the proposed alternative have the potential to reduce or eliminate GHG emissions?	Potential Effects	Additional trucks on the road to haul organic waste to landfill would increase GHG emissions (existing conditions).	Additional trucks on the road to haul organic waste to landfill, plus haul from landfill to 3 rd party facility which is further away from City's landfill. However, this GHG production could be offset by energy generation by 3 rd party.	Has potential to increase number of trucks or distance depending on siting of compost facility. An ASP system will be covered, so minimal emissions.
		Impact Management Measures	No impact management measures available	Could stipulate that energy production is a requirement of contract (e.g. through anaerobic digestion), to offset GHG production.	There may be no change to number of trucks if co-locating the compost facility at the City landfill where green bin and garbage trucks are going anyway.
		Net Effects	No change in potential effect.	No change in potential effect, unless stipulation of energy production in contract to offset GHG production.	Potential to reduce trucks by co- locating compost facility at landfill, but this location will have to be sited/confirmed.
	Criterion Ranking		More preferred because fewer GHG emissions would be produced hauling organics to the landfill (shorter distance, same trucks)	Less preferred because more GHG emissions would be produced hauling organics to a processing facility that is a longer distance from City. No guarantee regarding energy production to offset this impact.	Moderately preferred , because although trucks may increase they would be limited to within City limits and shorter distances to site of composting facility.
Natural Environment Category Ranking			More preferred because fewer GHG emissions would be produced hauling organics to the landfill (shorter distance)	Less preferred because more GHG emissions would be produced hauling organics to a processing facility that is farther away than City's landfill.	Moderately preferred, because although trucks may increase they could be limited to within City limits and shorter distances.

Category/ Evaluation Criteria	Indicator		Alternative No. 1: Do Nothing	Alternative No. 2: Organics Processing by Others	Alternative No. 3: On Site Covered Aerobic Composting
Effect on existing infrastructure	Effect on Landfill	Potential Effects	Will reduce available volume for garbage in existing landfill, therefore reducing remaining landfill life.	City would require an organics transfer station to be constructed within the City's existing landfill. From this point, a third party processor would haul the material away.	City would require a composting facility be constructed at new site location, preferably within City limits (e.g. near existing landfill to facilitate approvals and decrease impact on public)
		Impact Management Measures	No impact management measures available	Recommend construction of transfer station at City's landfill.	Construction of the compost facility adjacent or near the landfill, which would also make permitting process easier to manage, keep materials together, and minimize truck traffic.
		Net Effects	No change in potential effect.	With construction of transfer station, this would allow City to tender a third party contract for processing. If this changes in the future, the organic waste would still go to the same location.	Some synergies to be gained by co- locating proposed composting facility at or near the City landfill. LYW can also be integrated as potential compost feedstock, as this material already processed at landfill.
	Criterion Ranking		Less preferred because Alternative No. 1 would reduce the lifespan of the landfill.	More preferred because although an organics transfer facility would need to be constructed on the existing landfill site it would divert organics from the landfill extending the lifetime (and footprint of transfer station minimal)	Moderately preferred , since green bin waste will be diverted from landfill, but will still require space in and around landfill that is larger than just a transfer station (Alternative 2), impacting landfill's ability to expand in the future.
Built Environment Category Ranking			Less preferred because Alternative No. 1 would reduce the lifespan of the landfill.	More preferred because although an organics transfer facility would need to be constructed on the existing landfill site it would divert organics from the landfill extending the lifetime.	Moderately preferred, since green bin waste will be diverted from landfill, but solution will still take up space at or near landfill.
Social Environment					·
Effects to local residents from management of Organics	Increased odour from the management of organics	Potential Effects	No effect to local residents. Organics would continue to be managed at the Landfill, and landfill will produce same odours.	Minor increase in odour at the landfill site due to the storage of organics at a transfer station (3 walled building).	Minor increase in odour at landfill site with composting operation, especially when feeding process.
		Impact Management Measures	No impact management measures required	Odour can be managed by ensuring material is picked up every few days, and minimize long term storage (and odour generation)	Aerated static piles will be covered and aerated, minimizing odour egress.
		Net Effects	No change in potential effect.	Odour will be minimized through turnover of material in transfer station and removal from site.	Odour will be minimized through through covered static piles.
	Criterion Ranking		Less preferred , as there is no change to current odour profile at landfill site.	Moderately preferred, since although the building will be enclosed and material not stored long term within City landfill, if material cannot be picked up/turned over quickly this may contribute negatively to landfill odour profile.	Most preferred , as static piles will be covered to prevent odour emissions, and will be flexible to incorporate larger tonnages.
Social Environment Category Ranking			Less preferred , as there is no change to current odour profile at landfill site.	Somewhat preferred, since although the building will be enclosed and material not stored long term, if material cannot be picked up/turned over quickly this may contribute negatively to landfill odour profile.	Most preferred , as static piles will be covered to prevent odour emissions.

Category/ Evaluation Criteria	Indicator		Alternative No. 1: Do Nothing	Alternative No. 2: Organics Processing by Others	Alternative No. 3: On Site Covered Aerobic Composting
Economic Environment					
Alignment with Provincial Planning Policies	Alignment with Provincial Policy Statement (PPS)	Potential Effects	Does not align with the PPS for the diversion of organic waste.	Aligns with the PPS for the diversion of organic waste	Aligns with the PPS for the diversion of organic waste
		Impact Management Measures	No impact management measures available.	No impact management measures required.	No impact management measures required.
		Net Effects	No change in potential effect	No change in potential effect	No change in potential effect
	Criterion Ranking		Less Preferred because Alternative No. 1 does not align with the PPS for the diversion of organic waste unlike Alternative No. 2.	Tied for more Preferred because Alternative No. 2 aligns with the PPS for the diversion of organic waste unlike Alternative No. 1.	Tied for more Preferred because Alternative No. 3 aligns with the PPS for the diversion of organic waste unlike Alternative No. 1.
Economic Environment Category Ra	nking		Less Preferred because Alternative No. 1 does not align with the PPS for the diversion of organic waste unlike Alternative No. 2	Tied for more Preferred because Alternative No. 2 aligns with the PPS for the diversion of organic waste unlike Alternative No. 1.	Tied for more Preferred because Alternative No. 3 aligns with the PPS for the diversion of organic waste unlike Alternative No. 1.
Financial				T	
Capital Costs	Estimated Costs	Potential Effects	No capital costs	Estimated capital cost of \$1.2 million to construct the new transfer station at the City's landfill site	Estimated capital cost of \$9 million to construct a new composting facility (preferably adjacent to City landfill site).
		Impact Management Measures	No impact management measures available.	No impact management measures available.	Could find synergies by locating new composting facility at or near landfill.
		Net Effects	Potential effects remain unchanged.	Potential effects remain unchanged.	Cost savings on material handling
	Criterion Ranking		More Preferred because 'Do Nothing' has no capital costs.	Moderately Preferred because Alternative No. 2 has lower capital costs compared to Alternative No. 3.	Less Preferred because Alternative No. 3 has the highest capital costs of the options.
Operating and Maintenance Costs	Estimated Costs	Potential Effects	Cost of the City's haulage contract by Others, and management of organics at the existing landfill alongside solid waste streams.	Cost of the City's Organics collections contract plus an estimated cost of \$150/tonne to \$170/tonne for organics to be processed by others at a Facility in the Region.	O&M costs approximately \$850,000 per year, plus periodic regular repairs and improvements every 5 years of about \$2M.
		Impact Management Measures	No impact management measures available.	No impact management measures available.	Could find synergies by locating new composting facility at or near landfill.
		Net Effects	Potential effects remain unchanged.	Potential effects remain unchanged.	Cost savings on material handling.
	Criterion Ranking		More Preferred because there are no additional processing costs.	Moderately Preferred because Alternative No. 2 has lower O&M costs compared to Alternative No. 3.	Less Preferred because Alternative No. 3 has the highest operating costs.
Net Present Value Cost Per Tonne (o	ver 20 year lifecycle)		\$157/tonne (assuming City's 2024 operating cost of \$210/tonne)	\$177/tonne	\$267/tonne
Financial Category Ranking			More Preferred because Alternative No. 1 does not have capital costs and there are no additional processing costs.	Moderately Preferred because Alternative No. 2 has increased capital costs and additional operating and processing costs compared to Alternative No. 1, but less than Alternative 3.	Less preferred because Alternative No. 3 has highest capital and operating costs of the three options.
Overall Recommendation and Ration	ale		the City of Cornwall because although it is nothing' alternative does not respond to th The increased lifetime of the Cornwall Lar magnitude of effect compared to the effect	by Others is the Recommended Alternative is ranked less preferred from a Natural Environ the Problem/ Opportunity statement as depicted adfill and the alignment with the Provincial Pla its documented in the Natural Environment an oject lifecycle, it is the cheapest option that me	ment and Financial categories, the 'do d by the Technical Category Ranking. nning Policies have much larger d Financial Categories. Lastly, on a per-

4.4.1 Identification of the Preliminary Recommended Solution

Septage

As noted in previously in this document, the City has completed the preliminary design of a new septage receiving station located at the Cornwall WWTP. Details on the preliminary design of this package is included in a technical memorandum drafted by WSP Canada Inc. and is included in Appendix C. Evaluation of options will not be considered any further as a result, as the MCEA constitutes the construction of a new septage receiving station at the facility as undertaking 29a - Expand / refurbish / upgrade sewage treatment plant including outfall up to existing rated capacity where no land acquisition is required. Undertaking 29a is deemed exempt from the requirements of the EAA by the MCEA. The preliminary recommended solution is therefore continuing with the development of the septage receiving station located at the Cornwall WWTP as described in Section 4.1.1.

Biosolids

Alternative No. 2 Biosolids Processing by Others is the Recommend Alternative for the management of biosolids because it is ranked Most Preferred in most categories other than Natural Environment Category. Alternative No. 2 manages the biosolids produced at the WWTP, diverting them from the landfill provides compatibility with the provincial planning policies with the lowest cost to the City. It is also least impactful to current operations, while diverting away the material from landfill.

Organics

Alternative No. 2 Organics Processing by Others is the Recommended Alternative for the management of Organics for the City of Cornwall because although it is ranked less preferred from a Natural Environment, Built Environment and Financial categories, the 'do nothing' alternative does not respond to the Problem/Opportunity statement as depicted by the Technical Category Ranking. The increased lifetime of the Cornwall Landfill and the alignment with the Provincial Planning Policies have much larger magnitude of effect compared to the effects documented in the Natural Environment, Built Environment and Financial Categories.

4.5 Identification of the Preferred Solution

The Recommended Solutions for the management of biosolids and organics were confirmed as the Preferred Solutions having consideration for the comments received during the mandatory point of contact of the Master Plan Process. The Recommended Solutions were presented at the Public Information Centre (PIC) held on February 28, 2024. No comments were received during or after the PIC regarding the Recommended Solutions.

Section 6.0 documents the PIC in detail, including the specific consultation activities carried out, any comments that may have been received during the process and how these were specifically considered as part of the Master Plan.

5. Description and Implementation of the Preferred Design Concept

With confirmation of the Preferred Solution for the management of Biosolids and Organics, the next step of the Master Plan Process is to provide a more detailed description of the confirmed solutions for each project within the Master Plan.

5.1 Detailed Description of the Preferred Solution

5.1.1 Management of Septage

As described in Section 4.1.1, the City has elected to proceed with a purpose-built septage receiving station located at the Cornwall WWTP and this project is moving into the design independently of this Master Plan. Therefore, implementation of this solution will also be independent of this Master Plan and does not have any impact on our findings or recommendations. Please refer to Appendix C for preliminary details on the implementation of this solution.

5.1.2 Management of Biosolids

The preferred solution for the management of Biosolids is for the City's biosolids to be sent to a third party biosolids processing facility. There are several biosolid processing facilities within range of the City of Cornwall, which the City could enter into a contractual agreement to process their biosolids, as indicated previously in this study.

This preferred solution does not involve the construction of any infrastructure by the City of Cornwall and therefore does not have any capital construction costs. Storage, truck loading and generation operations and maintenance would remain the same as current practice at the Cornwall WWTP.

Similarly, current haulage practices from Cornwall WWTP would not change. The transportation routes from the Cornwall WWTP to the third-party processing facility would avoid residential areas as much as possible to prevent any effects to residents (e.g. noise, odour or traffic). As necessary, specifics can be written into the contract with the haulage contractor for any special requirements or considerations, or performance metrics regarding haulage and impact on residents.

5.1.3 Management of Organics

The preferred solution for the management of organics is for these materials to be sent to a third-party organics processing facility. There are several organics processing facilities within range of the City of Cornwall, which the City could enter into a contractual agreement to process their organics, as indicated previously in this study.

However, a new organics staging area will need to be constructed at the City of Cornwall Landfill site, as described previously in Section 4.1.3.3. This facility will act as a temporary holding area, where City staff or contractors will load the trucks of the third-party contractor, prior to being hauled away to the organics processing facility. Given the timeline for the City's organics program starting in January 2025, pre-work is already underway for the design and procurement of this staging area so that it can be completed prior to the end of 2024. The estimated capital costs to construct the organics staging is approximately \$1.2 million.

Organics collected by the City's waste collection program will be deposited at the transfer station where they will then be transported to a third-party processing facility. The transportation routes from the City of Cornwall Landfill to the third-party processing facility would avoid residential areas as much as possible to reduce effects to residents (e.g. noise, odour or traffic). As necessary, specifics can be written into the contract with the haulage contractor for any special requirements or considerations, or performance metrics regarding haulage and impact on residents.

5.2 Confirmation of Net Effects and Proposed Monitoring for the Preferred Design Concept

5.2.1 Climate Change

To protect against future impacts of climate change, climate change is now being considered early in infrastructure planning and design to create more sustainable and resilient infrastructure. Sustainable and resilient infrastructure will allow for the flexibility needed to account for the uncertainty associated with climate change.

MECP developed a guide entitled *Consideration of Climate Change in Environmental Assessments in Ontario* (the Guide) to aid proponents in considering climate change as part of environmental assessments for infrastructure and facilities. The Guide outlines the Ministry's expectations for considering climate change throughout the environmental assessment process and includes the following considerations:

- Effects of a project on climate change
- Effects of climate change on a project
- How the project will minimize identified negative effects on climate change

As a result, the Guide was reviewed as part of addressing climate change for the Project. This review is documented in the following sections.

5.2.1.1 Regional Perspective

Climate change has the potential to alter weather patterns that in turn can affect the wastewater collection system, Cornwall Wastewater Treatment Plant (WWTP) and the Cornwall Landfill site. Climate change can affect the quality and quantity of the collected wastewater stream and the reliability of the local electrical system. Changing precipitation patterns, temperatures, and other climatic conditions have already been shown to affect flows and quality in the major waterbodies, including St. Lawrence River.

5.2.1.2 Effects of the Project on Climate Change

Potential effects of the project on climate change include greenhouse gas (GHG) emissions associated with construction and maintenance of the preferred design concept. GHG emissions will be generated by the biosolids and organics transport trucks, septic tankers, equipment and machinery required for construction, the distance traveled by construction workers to get to and from project and the sourcing of construction materials.

Mitigation

To minimize or offset the potential effects of the Project on climate change, to reduce the GHG emissions associated with the construction, mitigation measures will be implemented. The MECP Guide defines mitigation as "The use of measures or actions to avoid or reduce greenhouse gas emissions, to avoid or reduce effects on carbon sinks, or to protect, enhance, or create carbon sinks". Mitigation measures include actions such as utilizing different technologies and construction materials.

Mitigation measures to reduce the Project's effect on the environment will be determined and implemented at the onset of construction. Possible BMP/mitigation measures for consideration include the following:

- Implement and enforce an anti-idling policy for all vehicles and machinery on site during the construction stage and operating stage.
- Ensure all vehicles/machinery and equipment are in good repair, equipped with emission controls, as applicable, and operated within regulatory requirements.
- Use materials that have a lower carbon footprint and a long lifespan.
- Plant additional vegetation to create a carbon sink.

5.2.1.3 Effects of Climate Change on the Project

There are several potential effects of climate change that may occur affecting the Project. For example, these may include:

- Increasing frequency of unusually high or low daily temperature extremes.
- Long-term increasing or decreasing mean annual temperatures and/or precipitation.
- Increasing or decreasing frequency of storm events (e.g., rainfall, snowfall, extreme wind).

The preceding potential climate change effects could cause disruption/delays to construction and increased soil erosion and runoff during construction. Throughout the lifetime of the proposed project the effects of climate change have the potential to cause increased maintenance requirements for roads and stormwater infrastructure and increased pavement damage from higher temperatures and freeze-thaw cycles.

Adaptation is focused on addressing effects of climate change on the Project. The Guide defines adaptation as "The process of adjustment in the built and natural environments in response to actual or expected climate change and its effects. In human systems, adaptation seeks to moderate or avoid harm or exploit beneficial opportunities. In some natural systems, human intervention may facilitate adjustment to expected climate and its effects" (MECP 2016, Page 38). Although it was determined that climate change will have no appreciable adverse effects on the Project, the identification of possible adaptation measures was undertaken to increase both the Project's and the local ecosystem's resilience to climate change.

Increased rainfall, especially in the form of high intensity events, can increase risks of flooding and the physical area surrounding the WWTP and landfill. The incoming wastewater to WWTP can carry large volumes of debris into the wet well, pumping station and headworks and can potentially cause increased operational challenges. Septage receiving during extreme weather events will lead to additional organic and hydraulic loads to the WWTP that needs to be carefully managed. Collection and treatment of runoffs from the transfer station at landfill will also need to be designed to account for increased intense rainfall events.

Increasing ambient temperatures, and the increase in the duration of consistently high temperature "heat waves" can increase demand on the power grid and lead to longer, or more frequent power failures/brown-outs. The emergency management and backup power system at the WWTP and the septage receiving station may need to be designed to address the potential longer and more frequent power grid failures. The extent of the risks is highly dependent on the local power grid and designs for any new backup power system will need to consider climate change effect. There are two potential methods of addressing this concern: by utilizing renewable energy generation (e.g., solar power generation) at the facilities to reduce or eliminate the reliance on the local grid, or adequately sizing the backup power systems to address the increased risk of longer duration of power outages.

The construction stage of the Project may be adversely affected by changes in weather patterns. The likelihood of these impacts is generally considered to be low because the construction periods are relatively short duration events; and therefore, it is possible to minimize potential climate change effects related to rainfall, storms, temperature, and moisture by managing the overall construction schedule so that it does not occur during periods beyond the typical/normal range for these parameters.

5.2.2 Source Water Protection

The Cornwall WWTP and Cornwall Waste Disposal sites are both located within the Raisin Region Source Protection Area of the Raisin-South Nation Source Protection Region. They are also both located within the Raisin Region Conservation Authority. Figure below shows the location of the Cornwall WWTP relative to the intake protection zones (IPZ) for the Cornwall Water Treatment Plant. Part of Cornwall WWTP site is located in IPZ-2 with a score of 6.3.

A IPZ is typically made up of different sized and shaped zones around the intake pipe.

IPZ-1 is the area closest to the intake pipe and is a set distance which extends one kilometer upstream and 120 m onto the shore.

- IPZ-2 includes the on and offshore areas where flowing water and any pollution would reach the intake pipe within two hours. The two-hour time of travel is based on the amount of time normally required to shut down a drinking water system if a spill occurs. Where the IPZ-2 abut a land mass the zone also includes the land within 120 m from the shoreline, as well as transport pathways (ditches or storm water systems).
- IPZ-3 is the total contributing area to the intake. The zone does not extend more than 120 m inland unless a transport pathway exists. Activities in this area would generally present less risk to the municipal drinking water.

The establishment, operation or maintenance of a system that collects, stores, transmits, treats or disposes of sewage is considered a prescribed drinking water threat. The Rasin-South Nation Source Protection Region Source Protection Plan should be reviewed and further evaluated for the proposed new septage receiving station to ensure the Project contain conditions and risk management strategies to protect sources of drinking water.

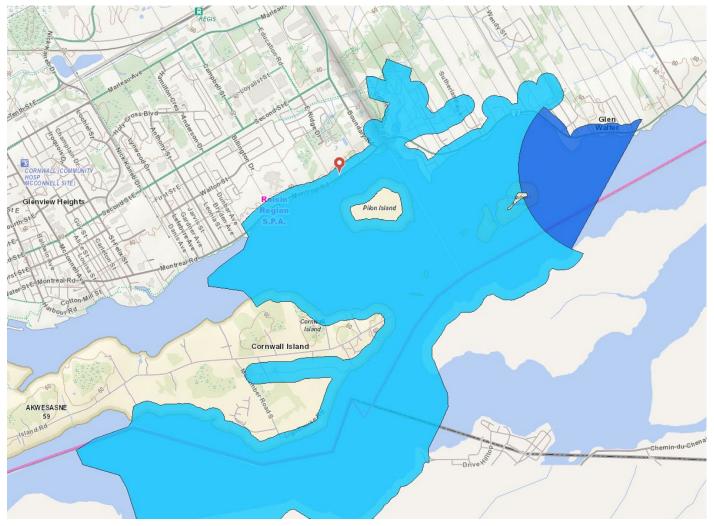


Figure 5.1 MECP Source Protection Information Atlas

5.2.3 Proposed Impact Management Measures and Environmental Monitoring

The potential effects, proposed impact management measures, and resultant net effects associated with the Management of Biosolids, Organics and Septage were identified based on the preliminary design level of detail and noted specific studies/assessments carried out. Table 5.1 summarizes the potential effects, proposed impact

management measures, and resultant net effects, which have been presented in the same order as the environment is described in **Sections 4.2** (beginning with the Natural Environment and ending with the Cultural Environment).

Along with confirming the net effects, Table 5.1 also specifies the pre-construction, construction and/or post-construction environmental monitoring programs associated with the proposed impact management measures where appropriate. Monitoring programs were determined based on the confirmed net effects anticipated. The purpose of the programs is to monitor the net effects associated with the Management of Biosolids, Organics and Septage, as necessary, and implement further impact management measures, monitoring, and contingency plans, where possible, so that:

- Predicted net negative effects are not more than expected.
- Unanticipated negative effects are addressed.
- Predicted benefits are realized.

The net effects have been confirmed based on preliminary design and will be re-confirmed as part of detailed design along with the proposed impact management measures and monitoring programs. The re-confirmed impact management measures and monitoring programs associated with the Management of Biosolids, Organics and Septage will be implemented unless they are determined to be no longer applicable or required.

 Table 5.1
 Summary of the Net Effects and Proposed Monitoring Programs for the Confirmed Management of Septage, Biosolids and Organics

Category	Potential Effects	Impact Management Measures	Net Effects	Proposed Monitoring Program
Natural Environment	Production of GHG emissions from the haulage of materials to a third-party facility.	Could stipulate that energy production is a requirement of contract (e.g. through anaerobic digestion), to offset GHG production.	No change in potential effect, unless stipulation of energy production in contract to offset GHG production.	No proposed monitoring program at this time.
Built Environment	Construction of an organics processing facility at the City of Cornwall Landfill.	No impact management measures available.	No change in potential effect.	No proposed monitoring program at this time.
Built Environment	Diversion of waste (septage, biosolids and organics) away from the City of Cornwall Landfill extending its projected lifespan	No impact management measures required.	No change in potential effect.	No proposed monitoring program at this time.
Economic Environment	Aligns with provincial policies on the diversion of waste from landfills.	No impact management measures required.	No change in potential effect.	No proposed monitoring program at this time.

5.3 Commitments for the Preferred Design Concept

The City of Cornwall have made several commitments regarding the proposed impact management measures, monitoring requirements, and in response to consultation activities carried out during the Project. Table 5.2 summarizes the commitments made for the Project under the following headings:

- Commitment description
- Commitment timing (when the commitment will be implemented)

The commitments have been further grouped into one of the following three categories:

- General (not specific to a particular environmental category or the result of consultation)
- Environment (Natural, Built, Social, etc.)
- Consultation

The City is committed to ensuring that the Project is constructed and maintained in accordance with the MCEA planning and design process and the following conclusions reached.

 Table 5.2
 Class EA Commitments and Compliance Monitoring

Category	ld No.	Commitment Description	Commitment Timing
General	1	The net effects, impact management measures, and proposed monitoring programs associated with the preferred design concept (Table 5.1) will be re-confirmed as part of detailed design.	Pre-construction
General	2	The confirmed impact management measures and monitoring programs associated with the confirmed preferred design concept will be implemented unless they are determined to be no longer applicable or required.	Pre-construction, Construction
General	3	All required permits and approvals will be obtained for the confirmed preferred design concept.	Pre-construction, Construction
General	4	Any unforeseen change to the confirmed preferred design concept identified during implementation will be reviewed by the City of Cornwall to determine if it should follow the MCEA addendum process. A change is defined as a significant modification to the project or change in the environmental setting for the project, which occurs after the filing of the Project File Report (PFR).	Pre-construction, Construction
Natural Environment	5	A Stormwater Management Plan (consistent with the (MECP Stormwater Management Planning and Design Manual (2003)), including erosion and sediment control measures will be developed and implemented for new construction.	Pre-construction, Construction
Natural Environment	6	The MECP will be consulted with during detailed design if necessary to confirm any approval requirements for water takings (e.g. Registration in the Environmental Activity and Sector Registry (EASR) or a Permit to Take Water) during construction, along with associated discharge water quality and quantity monitoring and mitigation programs.	Pre-construction, Construction
Natural Environment	7	Activities involving the management of excess soil will be conducted in accordance with O. Reg. 406/19 and the MECP's current guidance document titled "Management of Excess Soil – A Guide for Best Management Practices" (2014)	Pre-construction, Construction
Cultural Environment	8	If archaeological sites or human remains are discovered during construction of the Project, then appropriate action will be taken, including a cessation of construction work on the affected site, consultation with Indigenous communities and adherence to the Ministry of Citizenship and Multiculturalism (MCM) guidelines.	Construction

5.4 Approvals Required for the Preferred Design Concept

In addition to requiring *EA Act* approval, there are several provincial approvals anticipated to be required to implement the confirmed Management of Biosolids, Organics and Septage. Table 5.3 lists the anticipated post-EA permits and approvals by approval authority: municipal, regional, and provincial based on the understanding that the City of Cornwall will be the proponent for the design and construction.

Table 5.3 Anticipated Post EA Permits and Approvals

Approval Authority	Anticipated Permit and Approval Required	Legislation or By-law Reference
Municipal and Regional Approvals		
Raisin Region Conservation Authority	Regulation of Development, Interference With Wetlands And Alterations To Shorelines And Watercourses	O. Reg. 175/06
Provincial Approvals		
Ministry of Environment, Conservation and Parks	Environmental Compliance Approval Amendment for Waste Management System at the Waste Water Treatment Plant.	Environmental Protection Act, R.S.O. 1990, c. E.19 Section 27
Ministry of Environment, Conservation and Parks	Environmental Compliance Approval Amendment for Waste Management System at the Cornwall Landfill.	Environmental Protection Act, R.S.O. 1990, c. E.19 Section 27

5.5 Implementation of the Preferred Design Concept

As stated in Section 2, the City of Cornwall, as the proponent, is required to prepare a Master Plan documenting the first two phases of the MCEA followed and conclusions reached and make it available for a 30-calendar day comment period.

5.5.1 Summary of Projects Included in the Master Plan and their Approval Status

The Septage, Biosolids and Organics Master Plan undertook Phases 1 and 2 of the MCEA Process. Table 5.4 documents the projects and their approval status that were included in this Master Plan.

Project Description	MCEA Schedule	Status
Management of Septage	Exempt from the EA Act	Project can proceed
Management of Biosolids	Schedule B	MCEA requirements satisfied through the Master Plan. Project can proceed following the issuance of the Notice of Completion and comment periods.
Management of Organics	Schedule B	MCEA requirements satisfied through the Master Plan. Project can proceed following the issuance of the Notice of Completion and comment periods.

Table 5.4 Summary of Projects in Master Plan and Status

5.5.2 Notice of Completion

As part of the process of making the PFR available for review, the City and MECP issued a formal 'Notice of Completion' (**Appendix E**) for the Biosolids, Organics and Septage Master Plan through the following activities:

- Issuing a letter with the Notice via email and/or direct mailing to review agencies, stakeholders and interested public members
- Issuing the Notice through direct mailing to property/business within or directly adjacent to the Study area (Appendix E)

- Publishing the Notice in two consecutive editions of the Insert local newspaper, and the City of Cornwall website

30 Day Comment Period

The City of Cornwall established the 30-calendar day comment period starting on **XXX**, and ending on **XXX**, whereby any interested person can inspect the PFR and provide comments. The comments, including any issues or concerns, should be sent first to GHD, on behalf of the City and MECP, for potential resolution.

If there are outstanding concerns that the Project may adversely impact constitutionally protected Aboriginal and treaty rights, which cannot be resolved in discussion with the City of Cornwall, then a person or party may request that the Minister make an order for the Project to comply with Section 16 of the *Environmental Assessment Act*. This is referred to as a Section 16 Order, which addresses Individual Environmental Assessments.

In addition, the Minister may issue an order on his or her own initiative. In this situation, the Director of the Environmental Approvals Branch, MECP (Director), would issue a Notice of Proposed Order to the proponent if the Minister is considering an order for the project within 30 days after the conclusion of the comment period on the Notice of Completion. At this time, the Director may request additional information from the proponent.

Once the requested information has been received, the Minister would have 30 days within which to make a decision or impose conditions on the project.

This means the proponent cannot proceed with the project until at least 30 days after the end of the comment period provided for in the Notice of Completion.

5.5.3 MCEA Phase 5

A proponent can proceed to Phase 5 of the MCEA and implement the preferred alternative according to their schedule as follows:

- If no Part II Order requests are received during the 30-calendar day comment period or those that are received are satisfactorily resolved
- The Minister does not issue an order or impose conditions on the project.

Specifically, Phase 5 of the MCEA for this Project entails three steps:

- Complete detailed design, embodying the confirmed Management of Biosolids, Organics and Septage and associated preconstruction environmental provisions and commitments as specified in the PFR, including acquiring all necessary post-EA permits and approvals.
- Proceed to construct the confirmed Management of Biosolids, Organics and Septage, monitoring to ensure fulfilment of construction-related environmental provisions and commitments as specified in the PFR.
- Undertake monitoring to ensure fulfilment of infrastructure operations-related environmental provisions and commitments as specified in the PFR.

Anticipated Implementation Timeline

The preferred solutions should commence implementation in the near term. Specifically:

- Biosolids: The City should commence discussions with their procurement team to begin work on a request for proposal for a haulage and processing contract for the City's biosolids. There are no modifications required to the Cornwall WWTP. This contract could be implemented as soon as it is awarded by the City.
- Organics: Similarly, given the January 2025 Green Bin program start date, the City should begin work on a haulage and processing contract for the organics. They should also commence the process for design and construction of a transfer station to be located at the City's landfill.

6. Overview of the Consultation Process Carried Out

Effective consultation is key to successful environmental assessment planning. Through an effective consultation program, the proponent can generate meaningful dialogue between project planners and stakeholders, including, but not limited to, the public, stakeholder agencies, and interest groups.

6.1 Public Consultation Plan

A Public Consultation Plan was prepared at the onset of the project to ensure that the public and other stakeholders have meaningful opportunities to be involved in and to provide comments throughout the Master Plan. This plan included the consultation objectives of the Master Plan, a project mailing list, target groups for consultation, accessible standard, recommended stakeholder activities, timing for consultation, and evaluation mechanisms. Refer to Appendix F for a copy of the Public Consultation Plan.

6.2 Stakeholder Review Agency Consultation

A Notice of Study Commencement was issued on July 18, 2023 and posted on the City's website "Biosolids, Organics and Septage Master Plan – Have Your Say Cornwall"⁵. The Notice was also distributed directly to individuals on the mailing list and potential stakeholders. The notices were distributed by mail or email, depending on the recipient's preference. For agencies who has published email addresses, notices were emailed. For others, the notices were mailed.

A Public Information Centre (PIC) Notice was issued on February 21, 2024 and also published on the City's website.

Refer to Appendix D for a copy of the Notice and complete mailing list.

The project mailing list was kept up to date throughout the project identifying stakeholders that required full documentation, partial documentation, and other parties that either declined participation unless the project scope changes to affect their perspective agency or provided no response. Refer to Appendix F for stakeholder comments and correspondence received, and responses provided and an updated stakeholder distribution list.

6.2.1 Public Information Centre

A Public Information Centre was held on February 28, 2024 to discuss Phase 1 and Phase 2 Class EA findings. Refer to Appendix D for a copy of the presentation material. The PIC included a virtual presentation, followed by a Q/A period. No comment was received during and after the PIC presentation. A video recording of the presentation was made available on the City's website.

6.2.2 Review of Comments Received

A total of 3 comments were received during the Project. Two from Review Agencies and one from a member of the public requesting a copy of the PIC materials. No comments were received from Indigenous Communities. The comments and how they were considered/ responded to are included in Table 6.1 and Table 6.2.

⁵ URL: https://haveyoursaycornwall.ca/biosolids-organics-and-septage-master-plan

REVIEW AGENCY COMMENTS / RESPONSES

Review Agency

Ministry of Environment, Conservation and Parks (MECP)

Comments:

- 1. The MECP Letter dated February 22, 2024 provided general guidance on the Class EA Process, Master Plan Approach 2, MECP contacts, consultation with First Nations and Métis Communities, and MECP areas of interest (incl. planning policy, source water protection, climate change, air quality, dust and noise, species at risk, surface water/groundwater, excess materials management, contaminated sites, servicing, mitigation/monitoring, etc.).
- 2. MECP also highlighted the Amendments to the EAA through the Covid-19 Economic Recovery Act, 2020 which stated that the Proponent must issue a Notice of Completion providing a minimum 30-day period during the documentation may be reviewed and comment and input can be submitted to the proponent. The public has the ability to request a higher level of assessment on a project if they are concerned about potential adverse impacts to constitutionally protected Aboriginal and treaty rights. The Minister may issue an order on his or her own initiative within a specified time period.

Responses:

1. These comments are being addressed in the Master Plan report.

Review Agency

Ministry of Citizenship and Multiculturalism (MCM)

Comments:

- 1. The MCM letter dated March 18, 2024 provided MCM's interest in this master plan related to its mandate for conserving Ontario's cultural heritage, which includes archaeological resources, built heritage resources, and cultural heritage landscapes.
- 2. MCM has provided an outline of their requirements related to the following areas:
 - a. Identifying cultural heritage resources, including existing baseline environmental conditions, expected environmental impacts, and measures to mitigate potential negative impacts
 - b. Archaeological resources, via completion of "Criteria for Evaluating Archaeological Potential" and "Criteria for Evaluating Marine Archaeological Potential".
 - c. Built heritage resources and cultural heritage landscapes by describing existing baseline conditions, identifying preliminary potential project-specific impacts, and recommended measures to avoid or mitigate potential negative impacts.

Responses:

1. Refer to the attached filled out forms of 0478 and 0500 for screening checklist of archaeological and built heritage potentials. The screening checklist did not identify potentials in these areas.

Table 6.2Public Comments

PUBLIC COMMENTS / RESPONSES

Interested Public Member 1

Comments:

 The public member was unable to attend the Public Information Centre and was looking for a summary or link to discussion of the virtual presentation.

Responses:

- The project team provided a link to the video recording of the presentation.

7. Summary

The following is a summary of key activities and recommended next steps associated with the Biosolids, Organics and Septage Master Plan for the City of Cornwall.

The City developed their Problem and Opportunity statement for the Master Plan process as follows:

The preferred management of biosolids, organics and septage Master Plan alternative will address the following short term and long-term goals:

- Extend the overall operating lifespan of the landfill through diversion of biosolids, source separate organics and potentially other waste stream materials.
- Reduce the overall amount of greenhouse gas (GHG) emissions through diversion from landfill and potential utilization of resource recovery technologies.
- Incorporated flexibility to accommodate changes in waste stream feedstock composition/tonnage over time and
 processing adaptability to recover additional waste process products such that the solution is easily scalable
- Optimize operational, financial and environmental benefits of biosolids, SSO and septage from collection phases to end use/disposal phases.
- Adhere to all required and relevant environmental legislation on local, provincial and federal levels, while also taking advantage of potential grants and funding opportunities.
- Protect public health and the environment.

A long list and shortlist of potential approaches and technologies was developed and evaluated with the City, from the long list of evaluated approaches, the following short-listed approaches were considered:

- Septage installation of a purpose-built receiving station at the Cornwall WWTP (this was already under development, and in line with best industry practices.
- Biosolids
 - Alternative 1 Status quo, or "do nothing" alternative
 - Alternative 2 Biosolids Processing By Others
 - Alternative 3 Thermal Hydrolysis Process (THP)
 - Alternative 4 Sludge Drying Process
 - Alternative 5 Biosolids Processing by others near term, and then THP long-term
- Organics
 - Alternative 1 Status quo, or "do nothing" alternative
 - Alternative 2 Organics Processing By Others
 - Alternative 3 On-site covered aerobic composting

These shortlisted technologies and processes were then evaluated, to come up with the following preliminary preferred solutions due to their suitability to the City's objectives, diversion away from the City's landfill to preserve space, and lowest net present value on a cost per tonne basis over a 20-year project lifecycle:

- Septage proceed with septage receiving at Cornwall WWTP
- Biosolids commence contract development for haulage away from Cornwall WWTP by a third-party vendor, since it is lowest per tonne cost over a 20-year lifecycle and requires no significant capital investment at the Cornwall WWTP
- Organics commence design and construction of a transfer station located at the City of Cornwall Landfill, and the development of a contract for haulage away from this new transfer station. It requires the least capital investment, and the lowest cost per tonne over a 20-year lifecycle for the project.

These approaches were selected due to their ability to meet the City's short and long term goals, and that will achieve the objectives of the Master Plan's Problem and Opportunity statement.

After issuing a notice to the public, public information centre (PIC) was conducted on February 28th, 2024 to elicit feedback from the public on these preliminary preferred options. No feedback was received, other than a request for the PIC materials.

Our recommendation at this stage of the project is to put forward the preferred solutions indicated above for a 30 day review in accordance with MCEA process.

Appendices

Appendix A Basis of Capacity Requirements for Options Evaluation



Technical Memorandum

June 26, 2023

То	City of Cornwall	Contact No.	613-806-5861		
Copy to	Stephen Romano Dan Lauzon	Email	sromano@cornwall.ca dlauzon@cornwall.ca		
From	Andrew Smale	GHD Project No.	12604640		
Project Name	Cornwall – Management of Biosolids, Organics and Septage Master Plan				
Subject	Technical Memorandum 1 – Basis of Capacity Requirements for Options Evaluation – REVISED DRAFT (SEPTEMBER 18, 2023)				

Introduction and Background

The City of Cornwall (City) recently retained GHD Ltd. for the undertaking of the Management of Biosolids, Organics and Septage Master Plan (BOSMP). The City currently deposits dewatered biosolids generated from the Cornwall Waste Water Treatment Plant (WWTP), and septage received from outside sources, at the landfill located at 2590 Cornwall Centre Road West. The City has previously been advised from the Ministry of Environment, Conservation and Parks (MECP) that an alternate septage receiving system must be implemented as the current system isn't a viable long-term solution. The City has also initiated a residential green bin program, expected to take effect on January 1, 2025. There is currently no destination for this organic material. The BOSMP project was contemplated based on the City's previous work and analysis, where it was estimated that the City's existing landfill has less than 10 years of capacity remaining, if significant diversion of waste away from the landfill cannot be achieved.

Considering these constraints, there are three main waste streams that need to be diverted away from the landfill.

The City has already started investigating possible options for two of these streams:

- The City has undertaken a study to evaluate the requirements and expected quantities to implement a green bin program for the curb side collection of organics, which is to begin on January 1, 2025.
- In response to a directive from the MECP to stop depositing septage in the landfill leachate collection system, the conceptual design for a septage receiving station located directly at the WWTP is currently underway; and,
- The City has previously undertaken a comprehensive study to review possible co-digestion of collected green bin organic waste with waste sludge at the Cornwall WWTP, and two successive attempts were made by the City with the assistance of Ontario Clean Water Agency (OCWA) to apply for funding for this project, neither of which resulted in secured funding. The City is interested in exploring other possible options and taking a holistic review of all three of these waste streams through this current assignment. In addition to the above initiatives, the City has independently reviewed other technologies, processes, and waste management strategies.

Through the collection and review of background information, expected waste projection, and evaluation of appropriate alternatives that can be implemented, we will clearly indicate any projects coming out of this study have the necessary information and justification to move forward.

The main goals for Biosolids, Organics and Septage Master Plan project include:

The Power of Commitment

This Technical Memorandum is provided as an interim output under our agreement with the City of Cornwall. It is provided to foster discussion in relation to technical matters associated with the project and should not be relied upon in any way.

- Establishing a long-term planning framework for the management of biosolids from the WWTP, organics from a new green bin collection program (2025), and septage that is currently being transported to the landfill and conveyed with leachate via the sanitary collection system to the WWTP.
- Clearly identifying projects to be "fast tracked" to get them underway to address one or all of these waste streams before the Master Planning stage is completed; and,
- Laying the groundwork to allow any identified next stage Environmental Assessment (EA) processes to proceed, having provided proposed preferred alternatives that will be carried forward.

A major driver and goal for this project will be to ensure the preferred waste management strategy meets current and upcoming policy and regulatory requirements. As part of the legislative considerations, we have reviewed the appropriate and relevant provincial and federal policies and regulations as listed in the Request for Proposal (RFP), as well as other policies and guidelines that may be pertinent to the management of organic waste, septage and potential future policies, regulations, and changes, such as the proposed changes to Environmental Assessment requirements for advanced recycling facilities, the potential for a ban on organic material to landfill, and the movement towards a circular economy.

1.1 Purpose of this Memorandum

This Technical Memorandum (TM) is provided to the City to serve as a baseline for alternatives development and subsequent concept designs to be presented as part of the Biosolids, Organics and Septage Master Plan. This TM will consolidate, summarize and contextualize the available information provided to GHD by the City, the legislative review that will inform the proposed alternatives, and is intended to be used as a basis by GHD for the subsequent TMs and Reports to be issued to the City. Any information that is deemed to require additional detail to adequately develop alternatives for the City's consideration will also be clearly identified at this stage. It should be noted that no financial criteria, costing (capital or operations) has been used from existing reports prepared by others, as the initial option evaluation for shortlisting will be initially considered from a technical feasibility perspective only, prior to a detailed cost evaluation.

1.2 Scope and limitations

This technical memorandum has been prepared by GHD for the City of Cornwall. It is not prepared as, and is not represented to be, a deliverable suitable for reliance by any person for any purpose. It is not intended for circulation or incorporation into other documents. The matters discussed in this memorandum are limited to those specifically detailed in the memorandum and are subject to any limitations or assumptions specially set out.

Accessibility of documents

If this Technical Memorandum is required to be accessible in any other format this can be provided by GHD upon request and at an additional cost if necessary.

GHD has prepared this memorandum on the basis of information provided by the Client and others who provided information to GHD (which may also include Government authorities), which GHD has not independently verified or checked for the purpose of this memorandum. GHD does not accept liability in connection with such unverified information, including errors and omissions in the memorandum which were caused by errors or omissions in that information.

2. Summary of Existing Systems and Capacity Available

2.1 Landfill

The City owns two (2) landfill sites located at 2590 Cornwall Centre Road West. The landfill at the north end of the site under Environmental Compliant Approvals (ECA) No. 480101 issued by the MECP was closed in 1985. The other a landfill site to the south is active under ECA No. A480109 and receives approximately 35,000 metric tonnes per year of solid waste annually for disposal including residential waste, commercial, and institutional (IC&I), and sludge from the Cornwall WWTP based on data received by the City. Landfill Gas and Leachate are managed at both sites through respective collection systems. The gas is collected

This Technical Memorandum is provided as an interim output under our agreement with the City of Cornwall. It is provided to foster discussion in relation to technical matters associated with the project and should not be relied upon in any way.

and flared on site. The Leachate is collected in a gravity-based Leachate Collection System (LCS) and directed to the City's sanitary sewer for treatment at the WWTP.

In accordance with the ECA, the active landfill is licensed to receive only municipal solid waste from residential and industrial, (IC&I) sources, and contaminated soil. The landfill is also currently configured to receive Septage which is discharged into the LCS, mixes with the Leachate and directed to the Cornwall WWTP. The quantity of solid waste material received at the landfill site was included in the City's RFP and is summarized below in Table 1. Note that contaminated soil was included in this table for reference only, as given the erratic nature of deposits, it skews the average higher and cannot be considered regular operation of the landfill. Septage was not included in the table, as this material is not stored in the landfill – it is deposited in the LCS directly.

Year	Residential	IC&I	Sludge	Contaminated Soil	Total (with Soil)	Total (no Soil)
2014	14,883	18,990	3,044	323	37,240	36,917
2015	14,492	19,942	3,534	37	38,005	37,968
2016	14,227	16,928	2,679	7,244	41,078	33,834
2017	14,778	18,007	2,780	12,154	47,719	35,565
2018	14,138	15,481	2,835	30,402	62,856	32,454
2019	14,061	19,984	2,940	684	37,669	36,985
2020	14,364	17,624	3,467	365	35,820	35,455
2021	13,417	19,378	3,531	0	36,326	36,326
2022	13,488	20,170	3,692	81	37,431	37,350
Average	14,205	18,500	3,167	5,699	41,572	35,873

Table 1 Waste Accepted at City of Cornwall Landfill (for period 2014-2022, as included in City's RFP)

Based on Landfill Full Cost Accounting Analysis Final Report (DFA, Dec. 2019), the estimated remaining capacity of the active landfill is 409,000 tonnes and the expected year of closure was 2032, at the time of writing the report, and was based on an annual disposal of 28,000 tonnes. As of the end of 2022, this available capacity has decreased to approximately 299,423 based on actual tonnages received from 2019 to 2022 shown in the above table. With no diversion of material away from the landfill, using the average total annual amount (no soil) in Table 1, the landfill has approximately eight years left of capacity.

2.1.1 Septage Receiving

A septage receiving station is located on landfill property, which accepts septage into the leachate collection system. The active landfill has a gravity leachate collection system with a flow meter at the discharge to sanitary sewer, which is then sent to the WWTP for treatment. Septage received on the site is measured by weight, rather than by volume, as haulers travel through the Landfill's weigh scales. Recent conversations with the MECP have concluded that this method of septage receiving is not acceptable moving forward and both short and long-term solutions to receive septage at a location outside of the landfill and leachate collection system must be implemented. Septage which is discharged into the LCS (mixes with the Leachate and directed to the WWTP).

This Technical Memorandum is provided as an interim output under our agreement with the City of Cornwall. It is provided to foster discussion in relation to technical matters associated with the project and should not be relied upon in any way.

Table 2 Septage Received at the Cornwall Landfill (2017-2022), as listed in City's RFP

Year	Wet Tonnes Received
2017	1,313
2018	3,109
2019	1,348
2020	254
2021	1,225
2022	616
Average	1,311

As stated previously, since the material is not actually stored at the landfill site, this does not contribute to a reduction in landfill capacity. Rather, this practice will no longer be permitted by the MECP due to the risk of compromising the LCS with debris and an alternate solution must be determined, which will be described later in Section 3.6. The inclusion of Table 2 is only to document current practices at the Cornwall landfill.

2.2 Wastewater Treatment Plant

The City of Cornwall's WWTP, located at 2800 Montreal Road, has been in operation since 1969. In 1988, it was transferred to the City and upgrades have been made since. Some of these upgrades include a secondary biological treatment process that started in 2014 and was completed in 2017. This process upgrade uses ultraviolet disinfection as a mean of cleaning the water.

Throughout the various steps of the WWTP process, the solids are removed from the primary clarifiers and pumped to a thickening process. They are then pumped to the City's two anaerobic digesters (AD). These AD units process these solids which in turn create sludge. The operating volume for each digester is 2,272 m³ making the total volume available for digestion 4,544 m³. This sludge is then sent to the City's two (2) dewatering centrifuges to eliminate some of the water content. The resultant centrate is circulated back to the head of the WWTP. The generated biosolids range between 27% and 29%, averaging 27% total solids (TS) content or more. The biosolids are then sent to the City's landfill for final disposal. Included in Table 3 are the annual amounts of sludge/biosolids received at the City's landfill from 2014 to 2022, with some comparative data from Plant operations data sheets in the years 2020-2022.

Year	Tonnes, RFP	Tonnes, Annual Summary	% TS, Annual Summary
2014	3,044	-	-
2015	3,534	-	-
2016	2,679	-	-
2017	2,780	-	-
2018	2,835	-	-
2019	2,940	-	-
2020	3,467	3,350	28
2021	3,531	3,546	27
2022	3,692	3,665	27

Table 3Summary of Dewatered Biosolids Received at the Cornwall Landfill (2014-2022), as listed in City's RFP and
as supplied from Annual Plant Operations Data Sheets (2020-2022).

This Technical Memorandum is provided as an interim output under our agreement with the City of Cornwall. It is provided to foster discussion in relation to technical matters associated with the project and should not be relied upon in any way.

Average 3,167	3,520	27
---------------	-------	----

As part of the Co-Digestion Feasibility Study (GHD, February 2021), some revised biosolids generation rates were developed based on a re-rated design flow capacity for the WWTP as documented in a separate assignment by WSP in 2019. The average and projected daily digested sludge/biosolid amounts are presented below for reference in Table 4. These values are based on the annual operational data found in the 2019 WSP Plant Re-rating report and expanded to include recent flow data (2020-2022) provided by the City for comparison.

Parameter	2017	2018	2019	2020	2021	2022	Average
Average Day Wastewater Flow (ADF) (m3/d)	52,635	48,495	51,940	45,997	42,315	43,549	47,489
Cake Total Solids (%)	29.61	28.56	29.05	27.80	26.8	27	28.14
Cake Volatile Solids (%)	49.75	50.5	47.42	50.10	49.3	50.1	49.53
Average Daily Biosolids Hauled (kg/d)	13,049	12,650	12,914	14,320	15,160	15,540	13,939
Annual Biosolids Hauled (Tonnes/year) ¹	3,393	3,289	3,358	3,723	3,942	4,040	3,624
Ratio of Daily Biosolids Hauled (kg/d)	0.248	0.261	0.249	0.311	0.36	0.357	0.297
Re-rated Average Day Flow (m3/d) ²	65,318	65,318	65,318	65,318	65,318	65,318	65,318
Projected Daily Biosolids Hauled (kg/d)	16,194	17,038	16,240	20,335	23,401	23,308	19,419
Projected Biosolids Hauled (Tonnes/year) ¹	4,210	4,430	4,222	5,287	6,084	6,060	5,049

Table 4 Average and Projected Biosolids Generation Rates

Notes:

1. Assuming 5 days per week haulage operation.

2. Projected calculations are based on re-rated design capacity average daily flow of 65,318m3/d (WSP 2019).

As shown in Table 4, the annual average hauled biosolids for 2017-2022 is fairly consistent with the data in Table 3, which are actual quantities of material delivered to landfill. However, the projected biosolids based on the re-rated plant flow is much higher in 2020-2022, using a simple ratio of incoming plant flow to biosolids hauled.

While this is a useful exercise for comparison, it must be assumed that the current average day plant flow should be used as the baseline for the expected biosolids generated at the Cornwall WWTP as any increases to this flow will impact both the biosolids stream to be diverted away from landfill, and any solution involving co-digestion of sludge at the WWTP, which will in turn increase the quantity of biosolids stream to be managed.

This Technical Memorandum is provided as an interim output under our agreement with the City of Cornwall. It is provided to foster discussion in relation to technical matters associated with the project and should not be relied upon in any way.

3. Overview of Existing Reports, Studies and Work to Date

The following sections are a summary of the review of reports, studies and work to date that have been supplied by the City to GHD. A list of these references is provided at the end of this TM. The intent of this section is to summarize the following:

- To reference the existing strategies that have been developed to address the landfill capacity remaining;
- Organic material quantity and quality estimates that may be seen by the City, through the implementation of a new organics collection program (as described by the co-digestion feasibility and municipal organic collection and processing feasibility studies); and,
- Context for a holistic solution at the Cornwall WWTP for all three waste streams of concern, and estimated organic material quantities (Lystek THP proposal and concept design for septage receiving station);

A review and commentary of the provided reports is presented in chronological order in the following sections.

3.1 Previous Solid Waste Master Plan

Stantec Consulting Ltd was retained by the City in 2009 to conduct a review of their existing waste management system to identify program areas that could be optimized.

Stantec Consulting Ltd was retained by the City in 2009 to conduct a review of their existing waste management system to find areas that could be improved. The previous Solid Waste Management Master Plan was produced as a result of that review. The study included the review of:

- Existing facility and program performance data and system costs as well as facility capacities and lifespans
- Prior objectives and how they were established.
- Collection contracts (waste and recycling)
- Existing solid waste bylaws
- Updated waste generation projections
- Assessment of existing system performance versus existing performance objective
- Different opportunities that the City could consider to address their missing needs
- Recommendations of waste management system components and how they would increase the waste diversion rates and reduce the landfill consumption rate

Recommendations in the Plan were designed for the City to meet its waste reuse, reduction, diversion targets and objectives and the goal of extending the life of the City's existing landfill which include:

- Diversion Initiatives:
 - Alternative Container Implementation / Provision of Blue Boxes with a Pilot Study
 - Multi-residential Recycling Program with a Pilot Study
 - Public Open Space and Special Event Recycling
 - Assess Depot Programs for Added Diversion
 - Waste Reduction and Re-use Centre Programming
 - Elimination of Multi-Residential Waste Credit
 - Full-Scale Waste Audit and Composition Study
 - Implement Bag Limit / Bag Tag or Clear Bag with Enforcement Program

This Technical Memorandum is provided as an interim output under our agreement with the City of Cornwall. It is provided to foster discussion in relation to technical matters associated with the project and should not be relied upon in any way.

- Materials Recovery Facility (MRF) Optimization
- Organic Waste Collection and Processing Pilot Study & Full Scale Implementation
- Curbside Collection
 - Weekly Recycling Collection
 - Weekly collection of recyclables, in conjunction with weekly collection of organics and biweekly collection of garbage
 - Elimination of Bulky Item Collection with Garbage
 - Bi-weekly Garbage Collection
- Waste Disposal—Short Term
 - Engineering / Operations Assessment—Landfill Operations
 - Charge Fees for Residential Waste Disposal at the Landfill
 - Increase Landfill Tipping Fee
 - Market Place Assessment—WWTP and other Organic Waste Capacity Elsewhere
- Waste Disposal—Long Term
 - Potential development of new landfill
- Administration
 - Increase Waste Management Staffing Levels
 - Adopting Best Practices in Contracting
 - Five Year Plan Review
 - By-Law Amendments to Support Programming

As a result of this master plan, a number of changes to the City's solid waste collection practices were modified and/or improved. Specifically, the recommendation of organic waste collection was adopted and the new collection program will be implemented in January 2025, which will be examined by the Master Plan.

3.2 Landfill Closure and Post Closure Final Report

The City retained DFA Infrastructure International to provide a Landfill Site Closure and Post Closure Care Liability Report, which was issued in December 2019. The purpose of this report was to present the City with liability related to closure and post closure care of the City's active landfill to meet the following objectives:

- Accounting for the post closure care liability in accordance with Public Sector Accounting Board (PSAB) 3270 requirements and its replacement PSAB 3280
- Establishing a reserve fund with an appropriate target balance and levels of contributions to adequately fund closure and post closure care activities at both landfill sites
- Considering the annual reserve fund contributions as part of the full cost of waste disposal service.
- Determining the sufficiency of the existing landfill tipping fees to put towards the reserve fund.

At the time of writing the report, it was assumed that the landfill would close permanently in 2032, with 28,000 tonnes of waste material being disposed every year from 2019 to 2032.

For the City's planning purposes, DFA presented three (3) scenarios for funding liability of post closure care of the landfill:

- Scenario 1: Existing Situation – Active Landfill Site closure at the end of 2032

This Technical Memorandum is provided as an interim output under our agreement with the City of Cornwall. It is provided to foster discussion in relation to technical matters associated with the project and should not be relied upon in any way.

- Scenario 2: Increased Waste Diversion due to the new Organics Program effective 2025 the Active Landfill Site closure will be deferred to end of 2034 based on the amount of waste diversion due to the Organics Program.
- Scenario 3: The City obtains approval to extend the use of the Active Landfill Site by 15 years (to 2047)

The relevance to the current Biosolids, Organics and Septage Master Plan (BOSMP) project is that the Landfill Closure report makes two key assumptions: the quantity of waste being deposited every year, and the amount of time left in the landfill. As described previously in this technical memorandum, it has been shown in Table 1 that the actual reported waste disposed per year is higher, and therefore there is in fact less space remaining in the landfill at the time of writing this technical memorandum. This impacts all three funding scenarios, as the timeline for each has been advanced.

This gives rise to the requirement for a contingency plan, should a biosolids or organics processing solution not be in place to receive the organics generated by the collection program starting in January 2025. As shown previously, these are the largest contributors to disposal at the City's landfill. A contingency plan may include haulage to an independent outside facility, and these external facility options will be considered within the alternatives developed for the BOSMP.

3.3 Co-digestion Feasibility Study

The City undertook the Co-Digestion, Energy Generation, and Biosolids Feasibility Study at Cornwall WWTP in February 2021. The study was delivered by Ontario Clean Water Agency (OCWA) with professional engineering support led by GHD and sub-consultant JLR). The purpose of this study was to assess the potential of maximizing the benefits of existing and possible additional infrastructure at the Cornwall WWTP (and at a potential waste disposal site [WDS]), and providing next steps for:

- Sustainable resource recovery and organic waste diversion
- Renewable energy generation (biogas)
- Carbon management (relating to organic waste, biogas, biosolids) and the associated greenhouse gas (GHG) emissions

The source separated organics (SSO) from the City's official collection program (estimated by this study at 3,000 tonnes per year), as well as other potential feedstock inputs from the industrial, commercial, and institutional sector could be secured through implementing a program and/or agreements. This material could be diverted from landfill and processed in a co-digestion arrangement at the WWTP. It was found in this study that the WWTP currently has capacity to process additional material via anaerobic digestion and generate increased biogas/digestate.

It is known that implementation of a co-digestion arrangement would affect the quantity and quality of digestate and centrate already being produced at the WWTP. Most importantly, there is inherently additional logistical infrastructure that would be needed to assist in diverting waste from landfill and processing it for beneficial uses. This additional infrastructure would generally include a pre-processing facility (reviewed for implementation at the City's WDS) for converting SSO to a suitable slurry (for input to the anaerobic digesters), buffering and storage tanks for slurry, digestate, and centrate, and either a Combined Heat and Power (CHP) unit or Renewable Natural Gas (RNG) unit, along with appropriate modifications to piping/pumping. The extent of these infrastructure requirements will be assessed as part of a conceptual design to be evaluated as part of the Master Plan process.

Three (3) scenarios were reviewed under the co-digestion study, including associated estimated organics material quantities. The scenarios are summarized below in Table 5 for reference.

This Technical Memorandum is provided as an interim output under our agreement with the City of Cornwall. It is provided to foster discussion in relation to technical matters associated with the project and should not be relied upon in any way.

Table 5 Options Evaluated in the Co-Digestion, Energy Generation, and Biosolids Feasibility Study (February 2021)

Scenario	Description	Estimated Quantity of Organic Material for Co-Digestion (tonnes/year)
А	Manage City generated SSO at the City WWTP via co-digestion	3,000
В	Enhanced version of Scenario A by managing additional organic waste including fats, oil, and grease (FOG), IC&I organics, and hauled sewage within the City limits	4,300
С	Enhanced version of Scenario B by maximizing use of existing WWTP AD capacity through management of a relatively substantial fractional increase of additional organic waste (this overall feedstock quantity is not necessarily available , though has been estimated as being generated within neighbouring municipalities requiring collections and agreements.)	19,100

Through review of these scenarios and an evaluation of the Plant's available digester capacity, a key take away was that co-digestion was indeed feasible at the City's WWTP with either the City's SSO on its own under Scenario A, or a combination of SSO, FOG, IC&I organics, and hauled septage as feedstocks in Scenarios B or C through the City's existing digester capacity. As shown in Scenario C, there is also a large dependence on outside material that has not necessarily been quantified or made available at this time, to make this option feasible.

The purpose of including this reference table is to provide context for organic material estimates that may be seen by the City, to help form the basis of the capacity requirements for any organics processing options. Furthermore, the success of any co-digestion solution by the City will require a pre-processing step, to prepare these quantities of material for receiving by the Cornwall WWTP. No additional commentary on the feasibility of co-digestion will be described in this TM, as that discussion will be for the options and alternatives evaluation as part of this Master Plan process.

3.4 Municipal Organic Collection and Processing Feasibility Study

3.4.1 Summary of Report Findings

Tetra Tech Canada Inc. was retained by the City to conduct a feasibility study to collect and process source separated food and organic waste from single family residences in the City. The study involved evaluating management options for residential curb side organic waste, taking into consideration collection and processing approaches. The objective of the feasibility study was to assess options for a residential organic waste diversion program, and options for processing and resource recovery. Previously, Tetra Tech completed a solid waste composition study that further examined the organic fraction within the garbage and leaf and yard streams generated by the City. A one-week organic fraction study was conducted from October 5 to October 9, 2020, and concluded that from the waste characteristics that were observed, approximately 42% of the garbage can be processed using aerobic composting methods and 32% of the residential waste stream can be processed using anaerobic digestion or co-digestion. An assumption of 50% capture of organics from MSW in the residential stream was made for the consideration of any organics processing options. The overall Municipal Organic Collection and Processing Feasibility Study was finalized by Tetra Tech in June 2021, and GHD has received a copy of this report for review and consideration as part of this work.

The main conclusions of the report were as follows:

- That the City move ahead with an organics management program (this is already in in progress).
- That there is evident support for an organics management program from the general public (this will be confirmed through the public interaction component of the Master Plan process).

This Technical Memorandum is provided as an interim output under our agreement with the City of Cornwall. It is provided to foster discussion in relation to technical matters associated with the project and should not be relied upon in any way.

- That the City perform further analysis of the two preferred organics processing options: membranecovered aerobic composting and co-digestion (the findings of the co-digestion feasibility study are summarized previously in Section 3.3; additional investigations will take place as part of the Master Plan process)
- Once the current waste hauling contract is concluded, it is recommended that the City transitions to a "bin-based" organics management program with automated collection trucks.
- Setting an organics tipping fee in the range of \$70 to \$100 per tonne and increasing the landfill tipping fee from its current rate (\$77/tonne), the costs of an SSO program can be covered with a minor increase to the tax levy.

The City will be initiating their curb side organics program in January 2025 in accordance with these recommendations, however further review and re-examination of the options for post-collection management of the organics material is part of the scope of the Master Plan project.

3.4.2 Organics Production Estimates

A core function of the report was to develop estimates on the amount of organic material the City would have to manage as part of their new program, which includes the processing of the material after it is collected. For the purposes of reference and discussion in this technical memorandum, the findings of this report have been summarized for ease of reference and comparison, when establishing the basis of any capacity and design requirements for an organics processing solution within the City.

The estimated quantity of organic material that would be generated by residents, and theoretically collected in the new green bin program is summarized in Table 6, including the backup material and sources used to estimate these quantities.

Approach	Description	Estimated Organic Waste in Residential Curbside Collection in 2020 (tonnes)	Estimated Organic Waste in 2020 assuming 50% Capture ¹ (tonnes)
1. Landfill Data	 Used landfill disposal data for the residential sector. Incorporated the percentage of food waste, yard waste and tissue/towelling from the 2020 waste composition study. Normalized weights based on current population to calculate annual residential waste per capita. Extrapolated data to 2020, based on 2020 population. 	5,200	2,600
2. Household Generated Data	 Used results from the 2014 waste composition study Calculated the amount of organic waste disposed of per home Projected amount of organic waste based on 	5,700	2,850

Table 6 Organic Waste Projections, originally included as "Table 5-1" in June 2021 Study

This Technical Memorandum is provided as an interim output under our agreement with the City of Cornwall. It is provided to foster discussion in relation to technical matters associated with the project and should not be relied upon in any way.

Approach	Description	Estimated Organic Waste in Residential Curbside Collection in 2020 (tonnes)	Estimated Organic Waste in 2020 assuming 50% Capture ¹ (tonnes)
	the number of homes in the City.		
<u>Notes:</u>		1	1

1. A 50% capture rate was assumed as a realistic recovery rate from the waste stream, as this is true for most jurisdictions based on industry experience. This rate may increase as time goes on, as industry best practices are applied and the collection program matures.

Table 7 below summarizes the materials that were targeted in the one-week audit, to make a high-level assessment of the applicability of the organic processing technologies that were considered as part of the study (co-digestion and covered aerobic composting). However, for any detailed technology assessment a more detailed discussion on existing waste composition, and what will be allowable in the collection program, will be required to develop the alternatives to be considered under the Master Plan activities.

 Table 7
 Target Organic Materials, based on October 2020 SFH Waste Audit (included as "Table 5-4" in June 2021 report)

Organic Material	% in Garbage
Avoidable Food Waste ¹	21%
Unavoidable Food Waste ²	12%
Non-backyard Compostable Food Waste ³	1%
Grass Clippings	1%
Leaves, Plants (including pumpkins and tree fruits) - Greens	2%
Leaves and Plants - Browns	0%
Sod	<0.1%
Other Yard Waste	<0.1%
Woody waste <150 mm	0%
Woody waste >150 mm	<0.1%
Soil	1%
Compostable single use items	<0.1%
Soiled Papers and Fibers	5%
Inorganic Materials	58%
Biosolids	-
Notes	l.

Notes:

1. Avoidable food waste is inclusive of food items that could have been eaten in theory, such as bread, whole vegetables, and cereal.

2. Non-avoidable food waste is inclusive of food items that are inedible, even when fresh. Some examples include corn husks, apple cores and avocado peels.

3. Non-backyard compostable food waste is comprised of food waste items that are not compostable, such as bones.

3.4.3 Suggested Actions to Support Master Plan

Although the study presented a good baseline (and is mostly consistent with the Co-Digestion feasibility study) there are a few areas of note regarding the information presented and properly contextualizing them in the Master Plan:

- The four-season household full waste audit was performed in 2014 and may need to be updated independently from the Master Plan for a more recent and accurate assessment of waste characteristics and quantities, and projections for alternatives and technology evaluation; the oneweek waste composition study in October 2020 is only a snapshot in time.
- There was no indication as to what would be permitted in the curb side collection program, such as diapers, pet waste, biodegradable plastics or other materials; this will be part of the review of organics management alternatives for the City's Master Plan.
- Although further analysis of the shortlisted options was recommended, there was preference for covered aerobic composting in the report since a larger percentage of materials more favourable for aerobic composting was observed in the October 2020 waste composition study; however, the City has indicated in numerous meetings and discussions that a holistic, unbiased and "fresh" look at organics processing options should be performed as part of the Master Plan, including the review of previously evaluated technologies.
- Based on 2021 census information, the City of Cornwall population grew 2.7% to 47,845 for the period of 2016 to 2021 (StatsCan); it is unreasonable to expect that these populations were considered at the time of writing the Municipal Organic Collection and Processing Feasibility Study in 2020, but this growth should be considered as part of all organics processing options, and this is discussed later in this TM in Section 5.

This Technical Memorandum is provided as an interim output under our agreement with the City of Cornwall. It is provided to foster discussion in relation to technical matters associated with the project and should not be relied upon in any way.

3.5 Lystek THP Proposal

The City received a proposal from Lystek International in March 2022, to produce renewable biogas and Class-A Canadian Food Inspection Agency (CFIA)-registered fertilizer. The process known as Thermal Hydrolysis Process (THP), would utilise the available biosolids, organics, and septage received at the WWTP in an effort to address the required diversion strategy from the City's landfill.

Based on the City's immediate needs, Lystek proposed a three phased approach to their solution, to deal with biosolids first, then organics to address the new collection program taking effect in 2025, and then finally looking at the potential for a Regional solution, where additional SSO could be incorporated. The proposed plan, including all assumptions about available feedstock to their process is included in **Error! Reference source not found.** and is a direct copy from the proposal for reference. From these assumptions, estimated fertilizer and biogas quantities were estimated, including associated operating costs.

Phase	Feedstock	Timeline	Additional Annual Volume Received	Annual Digestate Volume ¹
Phase 1	Biosolids only	Immediate	N/A	~930 dry tonnes1
Phase 2	Biosolids + Cornwall's Municipal SSO	Approximately 3 years following Phase 1	3,000 tonnes per year at 16% total solids	~1,090 dry tonnes2
Phase 3	Biosolids + Cornwall's Municipal SSO + Regional SSO	3+ years following Phase 2	19,100 tonnes per year at 16% total solids	~1,925 dry tonnes ²

Table 8 Assumptions for Phase Rollout of Lystek Solution from March 2022 (Table 3-1 in Proposal)

Notes:

¹Based on 2020 biosolids volume of 3,350.5 tonnes at 27.8% as provided by P. Carrier Dec. 7, 2021.

²Estimated based on assumed 90% volatile solids in the SSO slurry with 75% destruction achieved in the anaerobic digesters.

It should be noted that inclusion of **Error! Reference source not found.** is in no way an endorsement of the Lystek solution or to short circuit the technical evaluation process, but rather it is to provide context for the organics quantities estimated to be generated by the City. It should also be noted that a 16% biosolids cake dryness is expected from the Plant in **Error! Reference source not found.**, even though dewatering performance can be as high as 27% as observed in practice. We also have actual biosolids quantities from existing Plant operations data to cross reference these estimates. However, since the organics collection program has not yet been put into effect, it is challenging to estimate the quantity of organics material to be expected. Estimating organic quantities will be further examined later in this TM.

3.6 Concept Design for Septage Receiving Station

In the Concept design report for the Septage Receiving Station (WSP, 2023), it was indicated that an average of 5 m³/day of septage was received at the City's landfill, and it was proposed that 10 m³/day be assumed for the basis of design of the septage receiving station at the WWTP, to provide additional flexibility for future quantity increases.

As shown in Table 2, an average of about 1,311 tonnes per day has been recorded by the City. In order to align these two estimates for options and recommendations for managing the septage, the following Table 9 was developed.

This Technical Memorandum is provided as an interim output under our agreement with the City of Cornwall. It is provided to foster discussion in relation to technical matters associated with the project and should not be relied upon in any way.

Table 9 Septage Received at the Cornwall Landfill (2017-2022)

Year	Wet Tonnes Received per year	Equivalent m³ Received ¹	Equivalent m³ per day²
2017	1,313	1,236	4.76
2018	3,109	2,927	11.26
2019	1,348	1,269	4.88
2020	254	239	0.92
2021	1,225	1,153	4.44
2022	616	580	2.23
Average	1,311	1,234	5.00
Notes:			
1. Based on a density of septage of 1,062 kg/m ³ .			
2 Deced on exerction 5 deve nervice of 52 weeks			ak 50 waaka

2. Based on operation 5 days per week, 52 weeks per year.

As part of WSP's recommendations, two (2) options for locating a septage receiving station at the WWTP site were considered. For the purposes of this TM, these layout and equipment orientation options will not be discussed in detail and will be covered by our Master Plan alternatives report and review of all options, as this pre-design work is also ongoing, and alternatives for disposal at the Cornwall WWTP may be further refined as part of the pre-design work.

However, in terms of a design basis, we concur with the assessment that a 10 m³/day receiving station would be able to accept the amount of septage generated by the community, and may provide some additional operational flexibility, or possible additional revenue generation from using any excess capacity. Given that the Cornwall WWTP has an average daily flow capacity of 55 minimal liquid discharge (MLD), incoming septage at 10 m³/d would be equivalent to about 0.02% of the incoming plant flow. Most importantly, these flows are already accepted and treated by the plant with the leachate from the landfill, and it is the logistics of how septage is received by the WWTP that will change for any proposed solution.

It is also our understanding that the actual observed quantities of septage seen at the City landfill have been lower than anticipated at the time of writing of this report. This is due to a combination of factors, such as an increased tipping fee and a reduction in advertising disposal availability.

4. Legislative Considerations

This section reviews relevant policies and regulations that may be pertinent to selection of alternatives for the management and/or processing of biosolids, organic waste and septage. For the purposes of discussion in this first draft of this memorandum, the following pieces of legislation or guidance documents have been included as a minimum to be examined for the basis of design for any of the alternatives. Other considerations can be included for the final draft.

4.1 Ontario Environmental Protection Act

The Ontario Environmental Protection Act (Ontario EPA) is administered by the Ministry of Environment, Conservation, and Parks (MECP) and is Ontario's overarching environmental Act, empowering dozens of Regulations. For AD and RNG facilities, the most relevant impact of the Ontario EPA is the requirement to obtain Environmental Compliant Approvals (ECAs) before developing a project upon MECP review of the

This Technical Memorandum is provided as an interim output under our agreement with the City of Cornwall. It is provided to foster discussion in relation to technical matters associated with the project and should not be relied upon in any way.

proposed works and its expected impact on the environment. Other relevant provisions included under the Ontario EPA are:

- Renewable Energy Approvals
- General Waste Management Regulations (O. 347)
- Air Pollution Local Air Quality (O. Reg 419/05)
- Cleaner Transportation Fuels (O. Reg 663/20)

4.2 Canadian Environmental Protection Act

The primary purpose of the Canadian Environmental Protection Act, 1999 (CEPA) is to contribute to sustainable development through pollution prevention. It provides the legislative basis for a range of federal environmental and health protection programs. These include activities related to:

- The assessment and management of risks from chemicals, polymers and living organisms.
- Programs related to air and water pollution, hazardous waste, air pollutant and greenhouse gas emissions.
- Ocean disposal.
- Environmental emergencies.

4.3 Fertilizers Act

The Fertilizers Act and Regulations (1985) requires that all regulated fertilizer and supplement products must be safe for humans, plants, animals, and the environment. They must also be properly labelled to ensure safe and appropriate use. This Act would apply any material that would be produced through the post-processing of wastewater biosolids or organics.

4.4 Strategy for a Waste Free Ontario (2016)

Introduced during the previous provincial administration, this strategy outlined the circular economy approach adopted in subsequent legislation policies and legislation. Notably, this strategy initiated the reduction of food waste (Action 10) for its economic and climate effects which was confirmed during the following administration. As a result, any solution that is recommended for review under this project will take this into consideration.

As part of the Strategy for a Waste Free Ontario, particular attention was given to building of the circular economy, which is described in the following section.

4.5 Resource Recovery and Circular Economy Act (2016)

The Resource Recovery and Circular Economy Act (RRCEA) is the principal piece of legislation being relied on to codify the Strategy for a Waste-Free Ontario. According to the Act, a "Circular Economy" is an economy in which participants strive to:

- minimize the use of raw materials;
- maximize the useful life of materials and other resources through resource recovery; and
- minimize waste generated at the end-of-life of products and packaging.

"Resource Recovery" means the extraction of useful materials or other resources from things that might otherwise be waste, including through reuse, recycling, reintegration, regeneration, or other activities.

The RRCEA would potentially be the Act under which organic waste diversion targets discussed in the Food and Organic Waste Policy Statement would be made into enforceable Regulations. The Resource Recovery and Circular Economy Act is currently being used to transition several streams of waste to an extended producer responsibility (EPR) approach, including blue box recyclables, which will be transitioning in 2023-2025 across Ontario. This may present challenges and opportunities for organic waste collection, such as new capacity on collection routes for recyclables if operated separately.

This Technical Memorandum is provided as an interim output under our agreement with the City of Cornwall. It is provided to foster discussion in relation to technical matters associated with the project and should not be relied upon in any way.

4.6 Waste Diversion Transition Act

The Waste Diversion Transition Act, 2016, was created to "promote the reduction, reuse and recycling of waste; to provide for the operation of waste diversion programs; and to promote the orderly winding up of waste diversion programs and industry funding organizations in order to allow responsibility for waste to be governed under the Resource Recovery and Circular Economy Act, 2016 or otherwise." This Act, together with the RRCEA, replaces the Waste Diversion Act, 2002.

Diversion programs for organic waste are not covered under this Act.

4.7 Food and Organic Waste Policy Statement (2018)

The Food and Organic Waste Policy Statement (OPPS), supported by the accompanying Framework and Action Plan, was issued pursuant to section 11 of the Resource Recovery and Circular Economy Act. The policy statement sets goals for municipalities to:

- Reduce food and organic waste
- Recover resources from food and organic waste
- Support resource recovery infrastructure
- Promote beneficial use of recovered resources

According to the waste hierarchy approach and the Food and Organic Waste Action Plan, the first measure to addressing waste is reduction – including measures such as public outreach about meal planning and food storage and marketing imperfect produce to consumers and processors. Only after reduction efforts are exhausted is it effective to pursue resource recovery options such as compost and AD. The Food and Organic Waste Action Plan specifically targets municipalities to undertake reduction activities.

The OPPS is currently under review for amendments that were proposed in 2020. The proposed amendments clarify what organic material must be included in municipal collection programs and establishes that effort "should" be made to include items such as compostable plastic bags and compostable coffee pods among other items.

Section 4.2 of the OPPS outlines which municipalities in Southern Ontario will be required to provide collection of food and organic waste for residents as of issuance of the OPPS in 2018. As indicated by the City's RFP, they have put into action a curb side collection program for food and organic waste that will take effect on January 1, 2025.

Section 4.5 of the OPPS notes that "Alternatives to curb side collection or source separation of food and organic waste may be used if it is demonstrated that provincial waste reduction and resource recovery targets can be achieved efficiently and effectively." The glossary section of the OPPS defines 'resource recovery' as "the extraction of useful materials or other resources from things that might otherwise be waste, including through reuse, recycling, reintegration, regeneration, or other activities. This includes the collection, handling, and processing of food and organic waste for beneficial uses. Although energy from waste and alternative fuels are permitted as waste management options, these methods are not considered resource recovery. The recovery of nutrients, such as digestate from anaerobic digestion, is considered resource recovery. The alternatives proposed through the Master Plan process will take these resource recovery stipulations into account for the most cost-effective solution that meets the requirements of the OPPS.

4.8 Full Producer Responsibility

Ontario, via the RRCEA, is currently in the process of transitioning its blue box programs to full EPR. Under EPR, producers of recyclable waste will be responsible for collecting and managing their packaging and single-use products once they have been used by consumers. This transition is planned for 2023 to 2025. While this change does not directly impact organic waste management, the transition to EPR will affect municipal waste collection contracts as well as existing municipally owned waste management infrastructure. The effects of transitioning to EPR should be considered in the development of an organic waste management strategy as there may be synergies and efficiencies to consider between the two

This Technical Memorandum is provided as an interim output under our agreement with the City of Cornwall. It is provided to foster discussion in relation to technical matters associated with the project and should not be relied upon in any way.

processes. It is unknown at this time when the City will begin the transition to EPR, as the organics collection program is not scheduled to commence until January 1, 2025. However, the transition to EPR from an existing blue bin recyclables collection program is January 1, 2025. As a result, these timelines should be taken into consideration when evaluating options for the pre-processing of organics material and management of any residuals.

4.9 Ontario Compost Framework

The Ontario Compost Framework, under the Ontario EPA and Nutrient Management Act, provides quality standards for the three categories of compost; AA, A, and B; with standards for metals, pathogens, foreign matter, and maturity.

The framework should be taken into account when considering compost technologies as an organics or biosolids processing option, either by the City or by a third-party processor.

4.10 Nutrient Management Act

One of the ways that AD digestate can be approved for land application is designation as a Non-Agricultural Source Material (NASM), a designation created from 2009-2011 to describe materials derived from non-agricultural sources such as wastewater biosolids, SSO, and industrial biosolids. NASM must provide nutrients, as defined by O. Reg. 267/03 under the Ontario Nutrient Management Act, meaning that their application must improve crop growth. The Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA) issues approvals to farmers to apply NASM. NASM is tested multiple times before it can be land-applied to ensure sufficiently low metals, foreign objects, pathogens, and odour as well as minimum content of organic material, alkalinity, and nutrient content. NASM is considered a waste until it reaches the farm where it will be applied, so anyone handling the NASM must have the required Environmental Compliance Approvals as a Waste Management System with the Ministry of Environment, Conservation, and Parks pursuant to the Ontario Environmental Protection Act.

4.11 Ontario Climate Change Strategy

In November 2015, Ontario released a Climate Change Strategy to set the long-term vision for meeting greenhouse gas pollution reduction targets. Ontario's goals were to reduce GHGs from 1990 emissions levels of 15 per cent in 2020, 37 per cent in 2030 and 80 per cent in 2050. The Climate Change Strategy was essentially replaced by the "Preserving and Protecting our Environment for Future Generations: A Made-in-Ontario Environment Plan" in 2018. Targets were still consistent, with some updates on progress. Overall, the goals are still the same: a commitment to waste reduction, clean energy and fuels, reduction of GHGs, and pursuing innovative solutions and technologies to achieve these goals.

The Cornwall Biosolids, Organics and Master Plan will approach alternatives with this in mind, including the diversion of waste to resource recovery, the generation of renewable energy and evaluating the environmental impact of any implemented solutions. This will also be examined as part of the Climate Lens evaluation, which is part of the scope of the project and will be covered by a separate technical memorandum.

5. Proposed Basis of Capacity Requirements

The intent of this section is to summarize and provide the rationale for the proposed basis of capacity requirements for proposed alternatives to be examined as part of the Master Planning process to deal with the biosolids, organics and septage streams that are to be managed by the City. The capacity requirements were developed based on the existing data and documentation that were reviewed during the development of this TM. As this is the first draft of this memorandum, additional documentation, data and reports can be integrated to further evaluate the City's needs and contribute to these capacity requirements.

This Technical Memorandum is provided as an interim output under our agreement with the City of Cornwall. It is provided to foster discussion in relation to technical matters associated with the project and should not be relied upon in any way.

5.1 Septage

As described in Sections 2.1.1 and Section 3.5, on average about 5 m³/day of septage has been seen at the City's existing landfill. It should be assumed that this amount will be seen moving forward.

5.2 Biosolids

As described in Section 2.1, 2.2, 3.1 and 3.2, an average range of 3,000 – 4,000 tonnes per year of biosolids is expected to be deposited at the City's landfill, should current wastewater operations practices continue. Higher rates of biosolids generation will be expected with any option that integrates food waste or organics at the City's existing digesters, as described in Section 3.2, but this value will need to be confirmed through options evaluation as part of the Master Plan process.

It should be assumed at this stage, that the immediate need for the City will be to divert from landfill the ongoing biosolids production rate of at least 4,000 tonnes per year, at about 27% TS, with an upper limit to be dependent on the evaluation of alternatives that involve consolidating organic waste at the Cornwall WWTP.

5.3 Organics

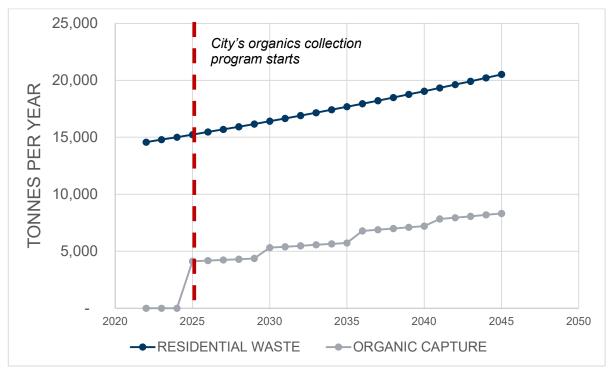
As described in Section 3.2 and 3.3, estimated organics quantities to be seen through the City's upcoming curb side collection program range from 3,000 – 4,000 tonnes per year. However, this does not take into consideration population growth, improvements in capture as the organics program matures, and increased public education and outreach about the program so that it is more widely adopted. To put previous estimates into perspective, we have developed another method using population growth and estimates around increased organics capture.

This organics production estimate uses the assumptions listed in Table 10.

Item	Value	Source	
Population in Cornwall in 2021	47,845	Canadian Census, 2021	
Population Growth, year over year	2%	Estimated based on similar jurisdictions, and the increase in Cornwall from 2016-2021	
Mixed Solid Waste Per Capita	300 kg Based on TOTAL residenti (single family and multi-res and associated population and 2021; also confirmed b waste audit		
Percentage of Organic Material in Residential Mixed Solid Waste	54%	From 2014 Waste Audit, and confirmed by typical industry experience	
Organic Fraction Capture Rates	2025: 50% 2030: 60% (ramp-up in anticipation of landfill closure) 2036: 70% 2041: 75%	This is based on typical industry experience; years where the capture rates increase have been selected for discussion purposes and to perform this estimate.	

 Table 10
 Assumptions for Organics Production Estimate

The estimated organic waste generated based on the assumptions in Table 10 is shown below in Figure 1.





This estimate would indicate that within the first five years of operation by 2030, the City can expect up to 5,000 tonnes per year, and 8,000 tonnes per year by 2045. This is greater than previous estimates; however, when looking at a long-term solution it may be worth considering a larger range of operation to increase operational flexibility, and potential revenue streams from excess capacity for the solution that is eventually selected by the City. Furthermore, the City's Official Plan from 2014 was referenced to develop these projections, but the population number in our estimation was too low because of immigration and post COVID-19 relocations to the City, and therefore we recommend using a higher population growth estimate as identified in Table 10.

It is our understanding that the City intends to offer SSO collections to multi residential and IC&I properties, which would increase overall tonnages. However, these initiatives still must be approved by council. As a result, it is recommended that any sizing of an organics management solution should consider 4,000 tonnes per year as a minimum to satisfy near-term needs, with the maximum to be discussed and confirmed with the City during the course of alternatives development, and expected reasonable increases to be inserted into any haulage contract.

6. Next Steps

GHD proposes the following steps to be undertaken to finalize this TM:

- 1. Discuss the need for an IC&I waste audit to determine the impact on the remaining capacity of the City's existing landfill, as well as characterize any new source material for solutions involving organic waste on top of the residential waste that has already been documented and will be collected by the upcoming curb side program.
- 2. Discuss population growth rates as described in Section 5.3, as it is a core assumption for Organic waste generation.

- 3. Discuss the approach and basis for organic waste volumes and characteristics as described in Section 5.3, to finalize a capacity for the management of organic waste stream generated by the City.
- 4. Discuss and document what materials will be permitted in curb side organics collection program, as this will impact proposed alternatives for managing the organics waste stream (including waste processing technologies, suitability for co-digestion, etc.)
- 5. Discuss a possible update to waste characterization study from 2014 and the one-week household organics waste study in 2020, although time constraints may make this challenging.
- 6. Begin development of a Long List of alternative options for consideration for biosolids, organics and septage management that will feed into Master Plan.

Regards

Andrew Smale

Technical Director – Future Energy, Waste and Wastewater

List of References

- 1. "City of Cornwall Landfill Closure & Post Closure Care Liability Final Report", DFA Infrastructure International Inc., December 2019
- 2. "City of Cornwall Landfill Full Cost Accounting Analysis Financial Sustainability Final Report", DFA Infrastructure International Inc., December 2019
- 3. "Co-Digestion, Energy Generation, and Biosolids Feasibility Study for the City of Cornwall", GHD, February 2021.
- 4. "The Corporation of The City of Cornwall Municipal Organic Collection and Processing Feasibility Study", Tetra Tech, June 2021
- 5. "Lystek THP: Delivering Cornwall's Transition to a Sustainable Future", Lystek International, March 2022.
- 6. "City of Cornwall Septage Receiving Station Preliminary Design Draft Report", WSP, May 2023.

Appendix B Long List Review of Available Technologies and Evaluation



→ City of Cornwall **Master Plan**

Workshop #1 – Review **Options Long List**

Biosolids, Organics and Septage





- **Team Introductions**
- **Project Background** -
- **Purpose of Workshop and Goals for** Workshop
- **Structure of Workshop**
- **Review of Long List of Options** -
- **Evaluation Criteria for Short List** _
 - **Open Discussion**
- **Other Business**
- **Closing Remarks and Next Steps**

Strategies for Consolidation of Options

Project Status

3

- Notice of Biosolids, Organics and Septage Master Plan Project published July 2023 •
- TM1 Basis of Capacity issued for review July 2023, comments received, final draft issued next • week
 - Capacities in this TM will be used as basis for evaluation of solutions and technologies for the City ulletbased on feedback received
- Option evaluation phase "Long list" begins with this workshop •

Project Objectives

4

– The main goals for Biosolids, Organics and Septage Master Plan project include:

- Establishing a long-term planning framework for the management of biosolids from the WWTP, • organics from a new green bin collection program (2025), and septage that is currently being transported to the landfill and conveyed with leachate via the sanitary collection system to the WWTP.
- Clearly identifying projects to be "fast tracked" to get them underway to address one or all of these \bullet waste streams before the Master Planning stage is completed; and,
- Laying the groundwork to allow any identified next stage EA processes to proceed, having provided • proposed preferred alternatives that will be carried forward.

Purpose and Goals for this Workshop

- To discuss possible options for managing septage, biosolids and organics outputs from the City
- To have an open conversation about prior work, information, and other details that will assist in creating the short list from the long list
- Key Goals for Workshop #1:
 - To review **available** options for the City as it pertains to managing septage, biosolids, and organics waste streams – high-level feasibility will be discussed
 - To discuss and develop a potential strategy for project implementation (including project) combination/consolidation)
 - To develop a matrix of Long list options incorporating feedback from this workshop
 - To finalize evaluation criteria to use in Short List and detailed analysis
 - Documentation of all discussions (minutes) which will form basis of Long List discussion in Master • Plan report (will include as an Appendix)

Structure of Workshop

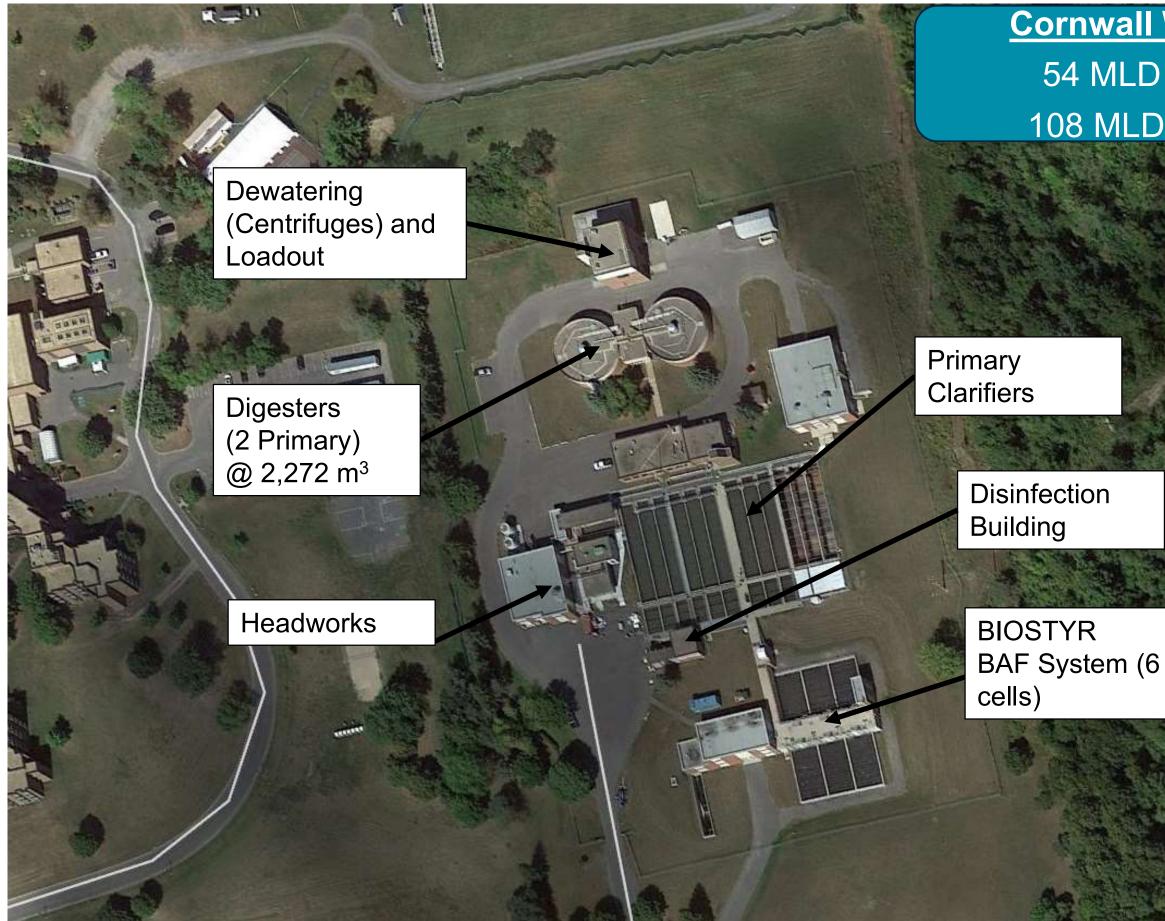
- This is a collaborative working discussion
- There is a lot of information to cover, so we have broken this down into the following main components to keep discussion focused:
 - **Options for Septage** 1.
 - 2. **Options for Biosolids**
 - 3. **Options for Organics**
 - Strategies for Project Consolidation 4.
 - 5. Evaluation Criteria (baseline to get discussion started)

- Review Long List of Options



Basis of Capacity

- We need a frame of reference for reviewing options
- Reviewed existing documentation, Plant and waste production data, and the following was agreed to as part of TM1:
 - Septage maintain current capacity/service level as a minimum (importing on average 5 m³/day) \bullet
 - Biosolids estimated at 4,000 tonnes/year at 27% TS (average) \bullet
 - Organics 4,000 wt/year to 8,000 wt/year maximum
- Important note: many solutions will depend on scale, so it is important to keep these amounts in mind.



Cornwall WWTP 54 MLD ADF 108 MLD Peak

s reserved.

Review of Long List Options

General approach, will be looking at the following main categories of options:

- Septage (keeping it simple) 1.
- Biosolids (immediate need to divert from Landfill) 2.
- 3. Organics (short-term and long-term solutions)

Septage

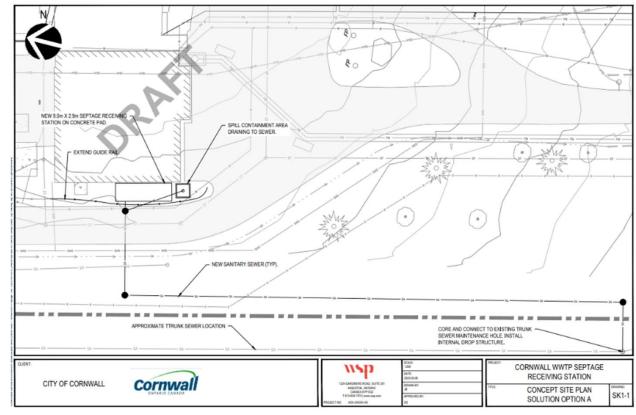
→ Receiving station at Cornwall WWTP

Septage Receiving – Current Practice

- Septage is currently deposited at City landfill in leachate collection system that eventually ends up at the Cornwall WWTP
- MECP have indicated to the City that this method of septage receiving is not acceptable moving forward, so an alternate solution must be developed

Proposed Septage Receiving Station

- WSP's Concept Design Report (May 2023) included recommendation of two options (A and B) for locating a septage receiving station at the WWTP, with input at **Headworks**
- Past data shows 5 m³/day inputs; proposed that 10 m³/day be assumed for the basis of design to provide additional flexibility for future quantity increases
- City has indicated that they want to maintain <u>current</u> level of service, but not necessarily provide additional capacity
- Industry best practices show that septage is typically ____ received right at WWTP (headworks or primaries)
- Option A currently preferred and is being revised
- Receiving equipment itself largest impact on CAPEX



Option "A" - Estimated Cost \$1,498,337.50 (WSP, May 2023)

Biosolids

Land Application
 Composting Off-site
 Thermal Hydrolysis
 Sludge Drying
 Post-Drying/Enhanced Thermal Treatment

Land Application of Biosolids



- restrictions for land and crops, and characteristics of material
- This is material "right out of the Plant", and and quantity management (storage)

Advantages

Can be used on agricultural land or to restore vegetative cover of disturbed sites

Maintain or improve soil fertility, enhances soil structure, improves soil moisture retention and permeability, reduces the potential for wind and water erosion

Some nutrient value, but other technologies can enhance...

Cornwall BOSMP – Workshop #1 I © 2023 GHD. All rights reserved.

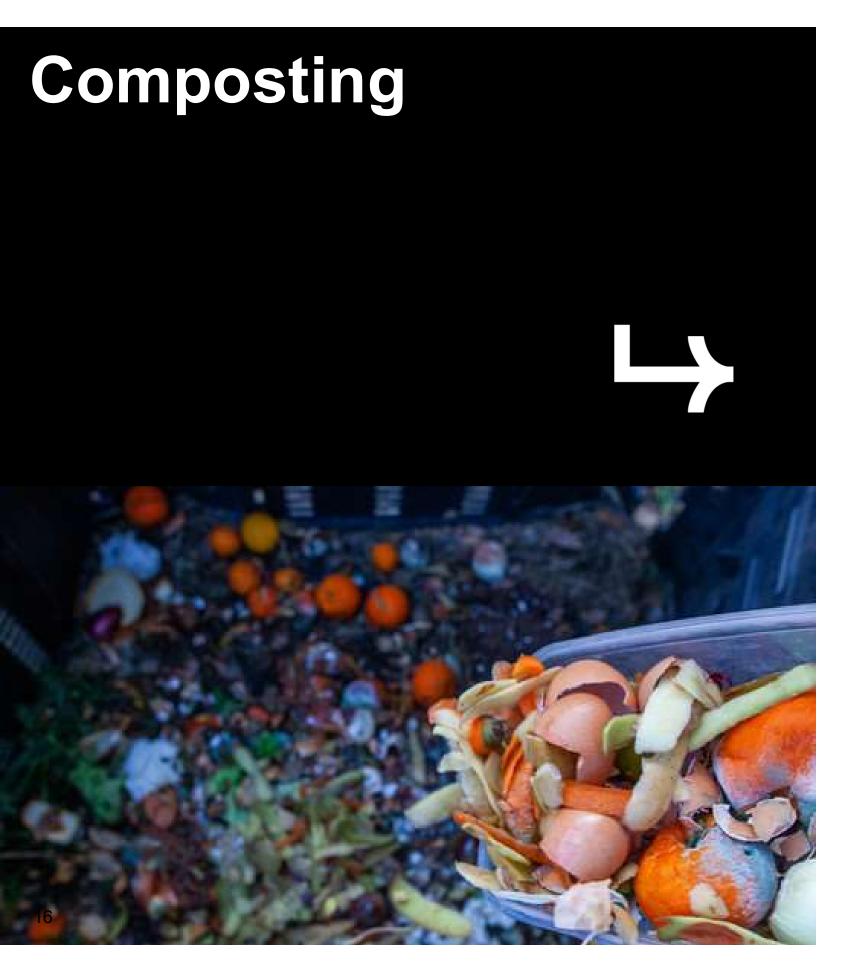
Two options for application: liquid or solid form

Class A = No pathogens, strict limits on metals

Class B = Some pathogens detected, but can still be land applied with special permitting and

carries some risk in terms of material quality

	Disadvantages
	Cannot apply during winter and will need a storge facility for off seasons, or when generating excess (+odour control if solids)
6	Need to manage logistics to and from sites, marketing of materials, and general management of multiple takers of material
	so this will limit revenue for the products, liquid or dry.



- an additive or amendment
- solutions for organics alternatives
- ability to market the final product

Cornwall BOSMP – Workshop $\#_1$ I © 2023 GHD. All rights reserved.

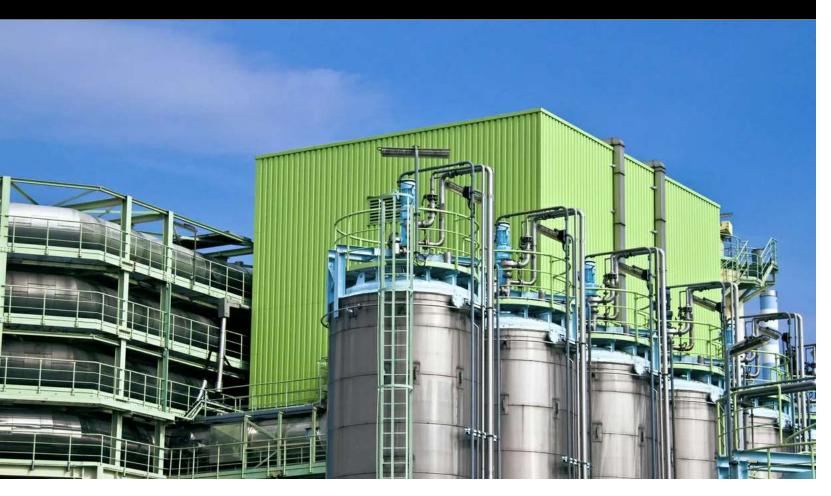
Potential off-site composting and postprocessing dewatered biosolids using it as

Will discuss during 3rd party merchant

Some have indicated they can take some quantities of biosolids, but it impacts their

If constructing a City-owned composting facility, can potentially co-locate or coprocess material with organic food waste

Thermal Hydrolysis



What is purpose of Thermal Hydrolysis?

- (Class A) given it is a heat-treatment process that will ensure pathogen kill
- amendments, and other agricultural uses
- Enhanced biogas generation also improves the energy balance
- - Lystek "post-dewatering"
 - CAMBI "pre-digestion"
- elements

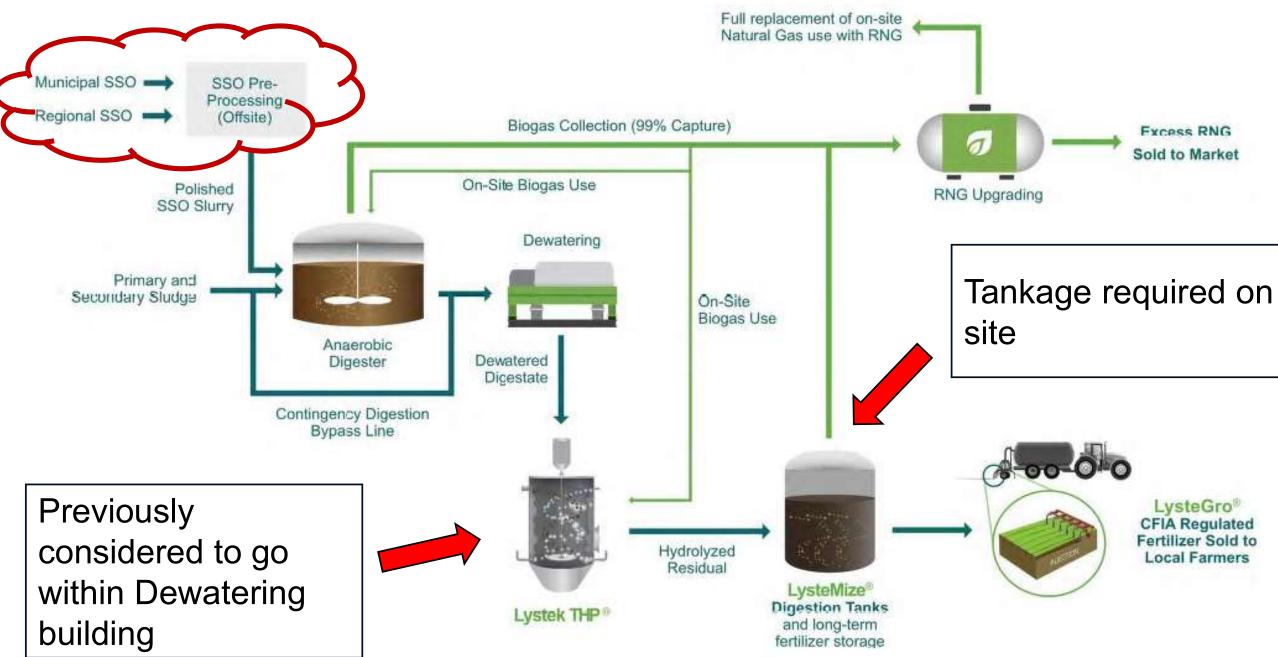
Cornwall BOSMP – Workshop #1 I © 2023 GHD. All rights reserved.

Typically used in "process intensification" applications, to get more out of existing digesters, enhance biogas production, and generally produce a better biosolid product This opens avenues for land application, soil

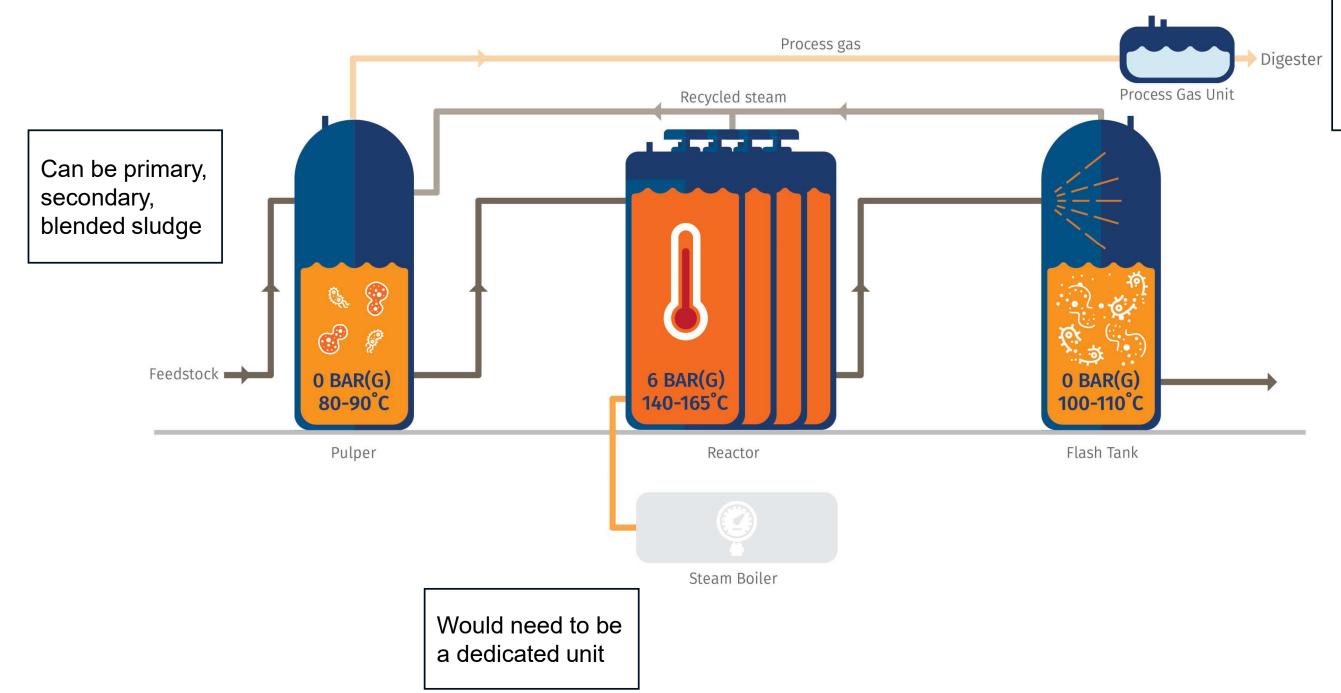
There are two main competitors in this space:

Each will require unique process integration

Thermal Hydrolysis – Lystek



Thermal Hydrolysis – CAMBI



Cornwall BOSMP – Workshop #1 I © 2023 GHD. All rights reserved.

To your **existing Digesters** within Plant

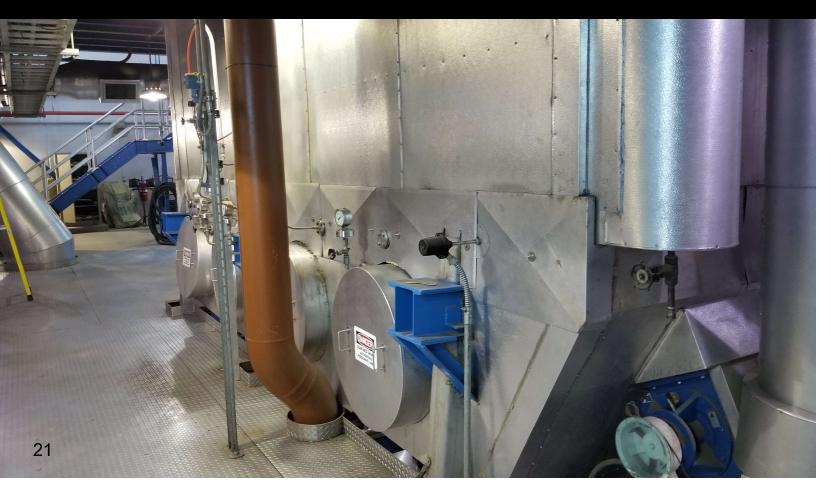
CAMBI vs. Lystek Process

_			
	CAMBI	Ly	vstek
	 High temperature (150oC), high pressure (~90 psi) 	-	"low" temperature (ab pressure
	 Temperatures maintained by steam (additional operation) 	-	Temperatures maintai
	energy inputs) Some biogas claimed at pulping step 	-	Requires "dilution" of (16-18%)
	 Primarily aimed at process intensification, not necessarily about end product 	_	Requires chemical ad nutrient content (KOH
	 Relies on digestion process onwards for quality of biosolids 	-	Some additional bioga post-treatment step
	 No <u>additional</u> storage of end product on site – still storing dewatered cake 	-	Storage of material or Will provide collaborate
	 Licensed Stationary Engineer required for operation (high temperatures and pressures) 		logistics of end materi

pout 70oC), atmospheric

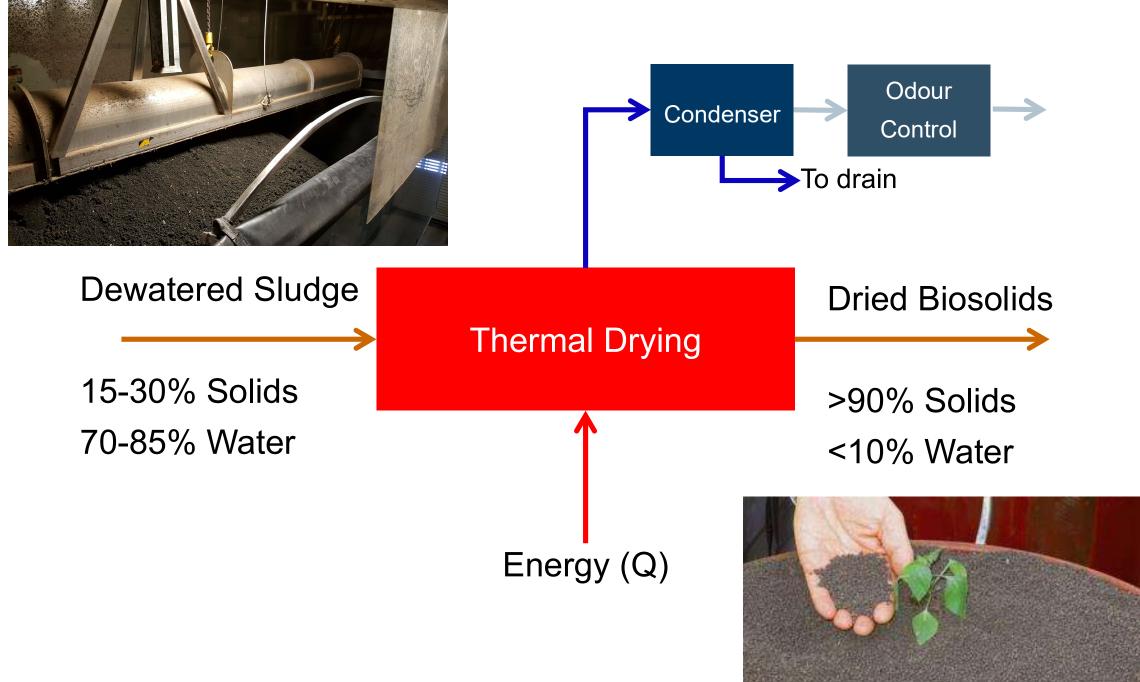
- ined by steam (additional cake material (to about
- ddition to further enhance H)
- as can be claimed from
- n site ation for marketing and rial

Sludge Drying and Advanced Thermal Treatment



- Sludge Drying Basics & refresher
- Types of typical dryers:
 - Drum dryer
 - Belt dryer
 - Fluidized Bed dryer
 - Paddle dryer
 - Screw dryer
- Innovative Thermal Treatment
 - Biodryer
- Advanced Thermal Treatment
 - Sludge Pyrolysis & Gasification
 - Incineration

Overview of Thermal Drying



Heat Transfer Principles



Heat is conducted through metal to the solids touching the surface



Water evaporation

Heat transfer at surface



Heat transport fluid

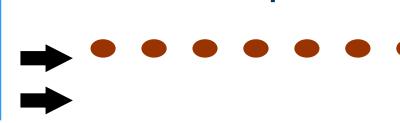
Direct (Convection):

Heat is transferred to the particles directly by the hot gas



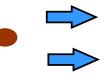
Heated Air

Water evaporation



): the





Some general notes about drying...

- Capital costs are often expensive
- **Energy will be your biggest cost** (need HHV fuel to evaporate large quantities of water) —
- Permitting for drying can be less onerous than incineration or other advanced heat treatment technologies
- **Closed system** Potential for energy reclamation through waste heat or steam (most manufacturers) will provide a complete package)
- Safety is <u>always</u> a concern (presence of dust in handling and storage of final product)
- Operations staff and local knowledge/information sharing is limited in Ontario and Canada
- Depending on technology, footprint can vary widely (e.g. paddle dryer vs. drum dryer)
- Can create a very flexible finished product that is easier to handle, and may be more appealing in Canadian climate (less volume to store, can be packaged, easier to move around)
- Not all dryers create uniform "pellets"
- Odour varies (bad for drums, not bad for fluidized bed) but every manufacturer can address. —

Drum Dryer



- Sludge heated by contact with hot air (500oC)
- Exhaust treatment required odour can be a problem
- Creates a uniform pellet, 2-4 mm, ~92% solids Oils sometimes added to reduce dust (for
- finished product)
- Harder pellets less friable (dust), less odour (typically)
- Needs consistent feed to be effective (i.e. 24/7 operation)
- More cost-effective for larger operations (>25) dtpd)
- Desired technology when goal is to produce a high quality fertilizer product
- No air recycle

Belt Dryer

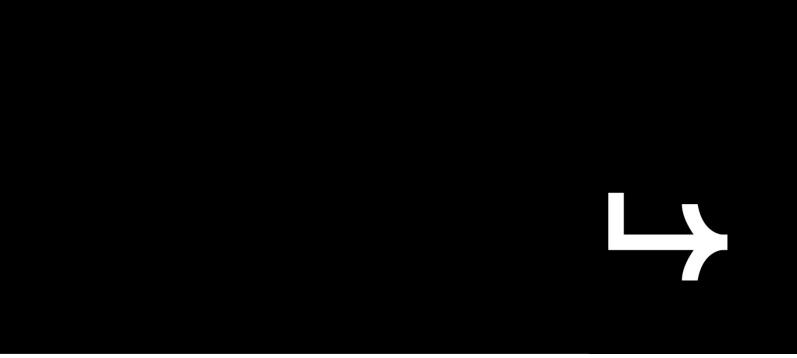


- Sludge dried by direct 1750 C
- "Low and Slow" (compared to traditional convection oven)
- Sludge applied to a belt ("spaghetti") which conveys through dryer
- Irregular product produced
- Typical for smaller sized facilities (< 25 dtpd)
- Many worldwide installations and therefore experience
- Several operate unattended
 One of the most flexible dryers for waste
- One of the most flexi heat recovery

Cornwall BOSMP – Workshop #1 I © 2023 GHD. All rights reserved.

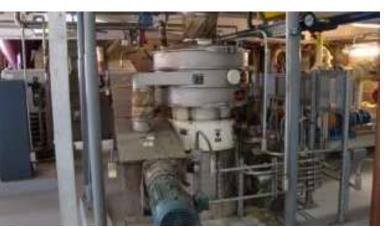
- Sludge dried by direct contact with hot air at 80-

Paddle & Screw Dryers





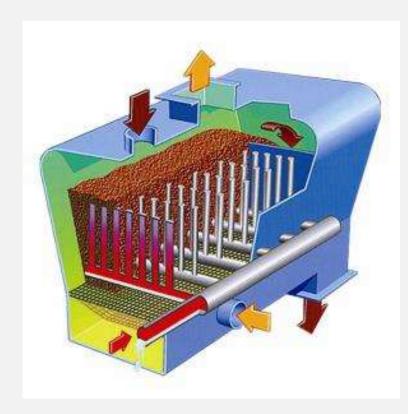
Screw Dryer



Dryer

- Very similar technologies "Indirect"
- Batch or continuous operation most new systems are continuous
- Heat transferred to sludge from oil, steam or hot water through walls/augers
- Dryer heated to about 175oC-230oC, sludge temps >90oC
- Irregular product, 92 99% solids
- Screening can be added to improve quality of end product
- Can be used a partial dryer, 30-40% (prior to incineration)
- Could be considered for small to medium sized facilities (< 50 dtpd)

Fluidized Bed Dryer



- Hybrid process combines indirect/direct heating of material
- furnace
- Lower operating temps than rotary drum (105co-gen facilities
- One unit starts at about 10,000 dt/year
- process itself)
- Irregular product produced
- Limited North American experience
- One US facility (Chicago) in operation and another (Victoria, BC) under construction

Can be heated with thermal oil coils or a hot air

125oC); can potentially run on waste heat from

No RTO needed (recycled air is "treated" within

Thermally Dried Biosolids Products

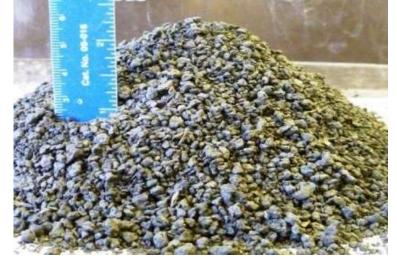


Vertical Tray (Seghers) – these dryers no longer made



Rotary Drum Dryer





Paddle Dryer

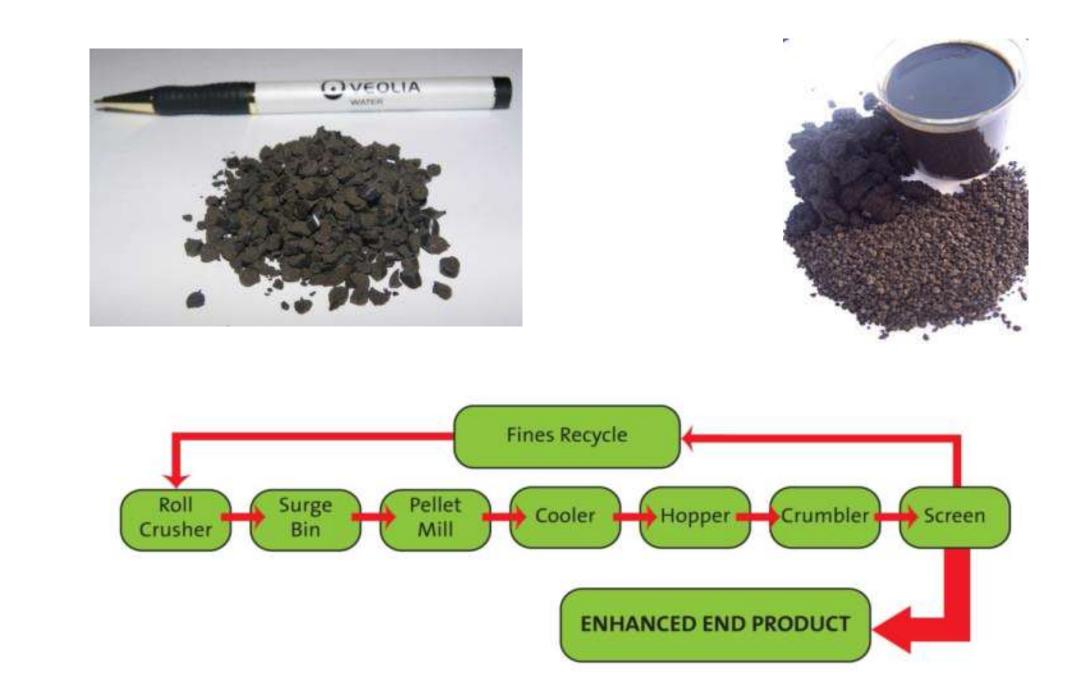


Page 29

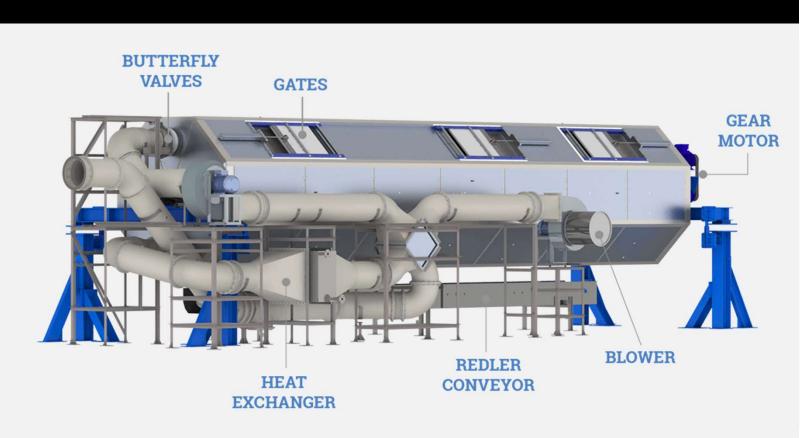
Belt Dryer

Fluid Bed Drye)

Pelletization / Further Processing



Innovative approach -Biodryer



- Uses similar reaction to in-vessel composting
- Very versatile in terms of feedstocks!
 - food waste
- Can be energy independent based on heat generated during biological breakdown and into drying process
- Single unit can handle about 1,000 wet
- Batch process needs 24/7 supervision
- Back-end is pyrolysis output is biochar
- MASSIVE footprint
- BioforceTech is current "name brand" of this tech
- units)

Cornwall BOSMP – Workshop #1 I © 2023 GHD. All rights reserved.

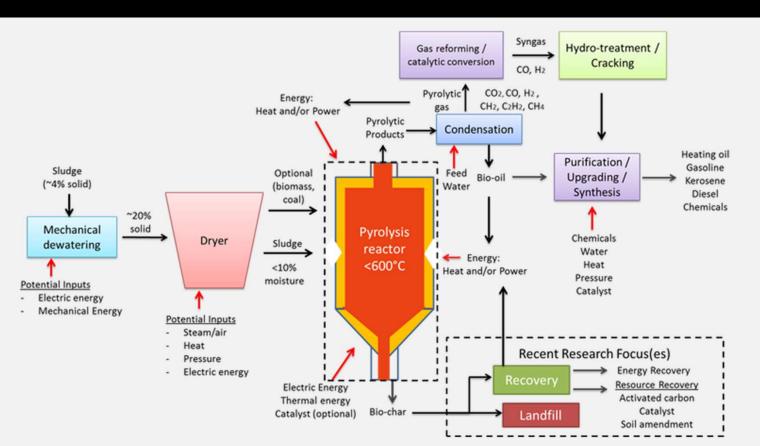
Can potentially combine biosolids & organic

pyrolysis step, can provide same energy back

tonnes/year of Biosolids at ~20% TS content

– First installation in Silicon Valley, CA (6 biodryer

Post-Drying - Pyrolysis + Gasification



https://www.sludgeprocessing.com/features/sludge-to-energy-recovery-methods-an-overview/

- Sludge is **required** to be dried first which adds footprint
- Biggest advantage today are early research about PFAS destruction - "future proof"
- Not as high temperature as incinerators (400-800oC)
- Gasifiers produce more greenhouse gas emissions of carbon dioxide (CO2) and NOx than pyrolysis-only systems
- Limited installations and North American experience, but they are happening

Advantages

Syngas can help offset fossil fuel usag within process and energy consumption maximum GHG emissions reductions

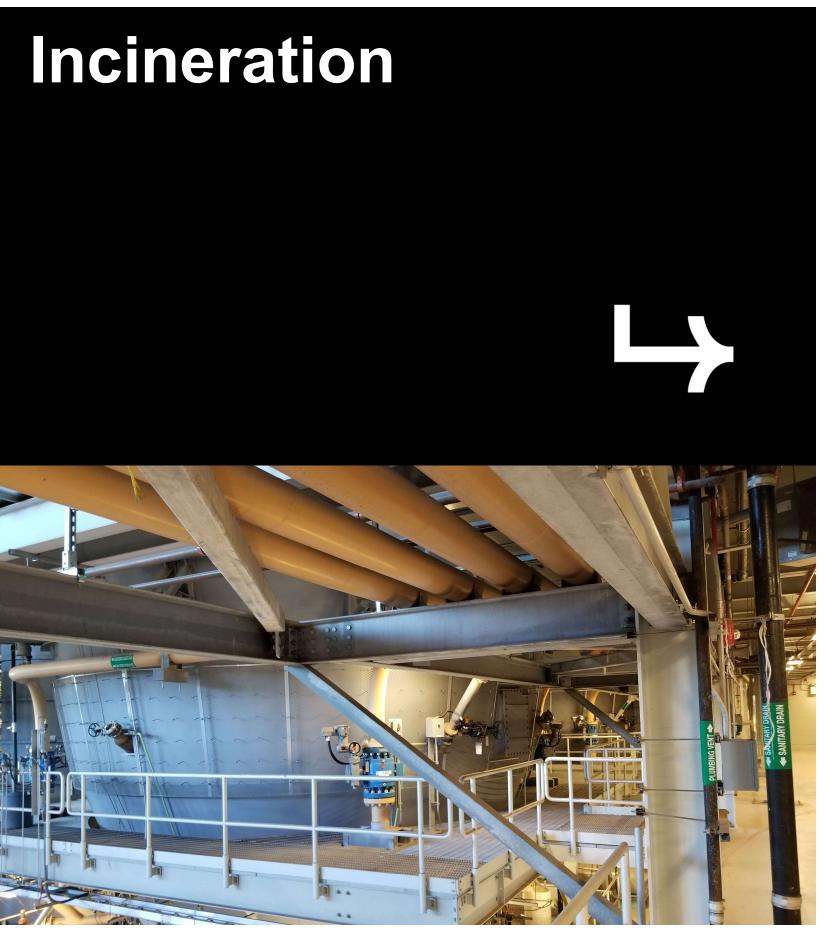
Potential for added PFAS removal compared to Pyrolysis only

Produces more syngas at a higher cal value than only Pyrolysis systems - ca then upgrade to RNG

Some carbon content in biochar produ

Can accept a wide range of inputs (po for combining biosolids, + organic/pate

	Disadvantages		
ge on for	Residue (ash) requires some stabilization for proper disposal – "tar" has been a problem		
	Gasification step can have high OPEX		
lorific an	A pre-treatment would be required for converting the syngas to a quality similar to biogas if comingled with other sources for combined use.		
uced	Limited data, but concentration of metals in char can be an issue		
otential Workshop	o #1 Ⅰ © 2023 GHD. All rights reserved.		



- Fluidized bed incinerators are most common around the world (we have three plants in southern Ontario: London, Peel Region, Durham Region)
- the burn
- Energy reclamation via waste heat (steam via WHB)
- Can self-sustain as long as they remain online
- Tech becomes feasible at ~ 45 tonnes/day
- 99% volume reduction but it is material destined for landfill (no beneficial use)
- Licensed Stationary Engineer required for operation

Cornwall BOSMP – Workshop #1 I © 2023 GHD. All rights reserved.

Typically oriented around biosolids incineration

 Involves feed of >26% TS solids to a brick-lined furnace heated to >800oC, this is co-mingled with fluidized sand to ensure contact and control

– High CAPEX and OPEX (esp. for air scrubbers)

Organics

Covered Aerobic Composting
 Stand-alone Pre-Processing and AD (wet or dry)
 Co-Digestion at WWTP
 Third-Party Merchant Processing

Covered Aerobic Composting



- Composting time typically 2 8 weeks
- land availability
 - Small to large facility (1,000 100,000 tpy)
- a higher level of odour control, particularly if negative aeration is used.
- aeration piping.

Advantages	Disadvantages
Pile configurations and height result in reduced space requirements	Slightly higher capital cost for forced- aeration equipment
Use of negative aeration can help avoid odour problems	Over-aeration can remove moisture
Smaller surface area relative to windrow, reduces impacts of cold weather and rain infiltration	Feedstock preprocessing requires a higher degree of care; feedstocks must be well mixed and properly sized and moistened
Significantly shorter active composting times than passively aerated systems	More operator skill required to manage aeration systems
More process control is achieved as the compost piles are built on aeration infrastructure and the piles are covered to reduce odours and leachate generation.	Aeration systems generally require three- phase electrical supply

Cornwall BOSMP – Workshop #1 I © 2023 GHD. All rights reserved.

Size is often dependent on site-specific requirements and

Aerated Static Pile (ASP) composting offers less exposed pile surface, requires less agitation, and generally allows for

Covered ASP systems that use tarps containing a semipermeable membrane are also available. These systems typically use positive aeration, and depending upon the installation, in-ground aeration trenches or aboveground

Organics Pre-Processing and AD (Wet)



- ۲ and amount of waste produced.
- piping (liquid material)
- Organic waste would be digested through anaerobic ۲ processes in a controlled environment.
- The by-products would be biogas and digestate •
- Generally speaking, these facilities become feasible at about 50,000 wet tonnes/year

	Advantages
	uction of energy for either icity or heating
Good	for source separated organic waste
	e stream is more pumpable d) compared to dry AD

Cornwall BOSMP – Workshop #1 I © 2023 GHD. All rights reserved.

Dimensions of the facility depend on the chosen AD size

Generally low footprint due to vertical tanks, flexibility with

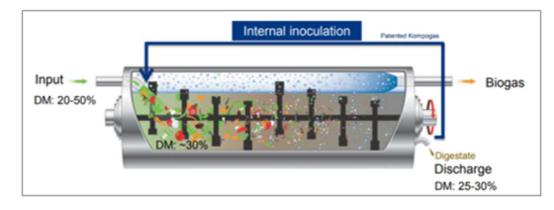
Disadvantages
Might not be economically suitable for the amount of waste generated within community
Cost is higher compared to other technologies
Will not take high solids materials (such as L&YW)
Requires more mechanical equipment compared to dry AD

Organics Pre-Processing and AD – Plug Flow/Dry



Surrey Biofuel (Surrey, BC)

- Larger footprint compared to wet AD •
- Batch based process
- **Requires HIGH SOLIDS inputs**
- Have to manage contaminants removal downstream, often in separate composting process
- Similar valuable by-products as wet AD, digestate and biogas
- Potential for similar biogas production to wet AD, but less proven in Canada



Advantages

Relies on water content of waste for recycling - no new inputs needed

Able to accept high solids material (up to 40% TS)

Can accommodate organic and L&YD waste blends

	Disadvantages		
	Only suitable for high-solids waste		
)	Less flexible on pre-mixing/separation steps		
	Material not pumpable, will require loaders		

Proposed location (from co-digestion study)

Grid: NAD 1983 UTM Zone 18N



38

Site Boundary

FOOTPRINTS AND INDICATIVE PLACEMENT



I © 2023 GHD. All rights reserved.

Organics Co-Digestion at WWTP



- infrastructure at the WWTP site
- to accept material
- High capital CAPEX & OPEX ullet
- Need CLEANED material (see previous slides)
- By-products: enriched biosolids, plus enhanced biogas production

Advantages

Lower throughput facility may be economically viable due to shared infrastructure (Stand-alone AD would require a higher throughput to make the economics more favorable)

Can manage biosolids and organics in tandem, producing nutrient enriched material

Increased biogas production and energy production - can look at upgrading and selling, or using within WWTP site

Low footprint due to shared solids management

Would require receiving station/light screening

	Disadvantages		
	Possibility of operational issues due to contamination		
n	New incoming material could alter the quantity and quality of the digestate and centrate currently being produced at the WWTP – sidestream treatment		
	Modifications to existing infrastructure would be needed for piping and pumping purposes		

Third-Party (Merchant) Capacity

Contacted 4 merchant sites in July 2023:

- **GFL/Moose Creek**
 - Compost based technology
 - Based on our estimated quantities of SSO, they are more than happy to service the City
 - · Have capacity to take separated SSO and L&YW streams, if that is the way the City wants to go

Convertus (Ottawa)

- Compost based technology
- Based on their available free capacity, they are happy to continue discussions on this with the City
- They do not mind co-mingled food waste (SSO) and L&YW streams, or separated streams
- Also told that they are considering adding AD to this site, for additional capacity/Biogas & RNG generation.

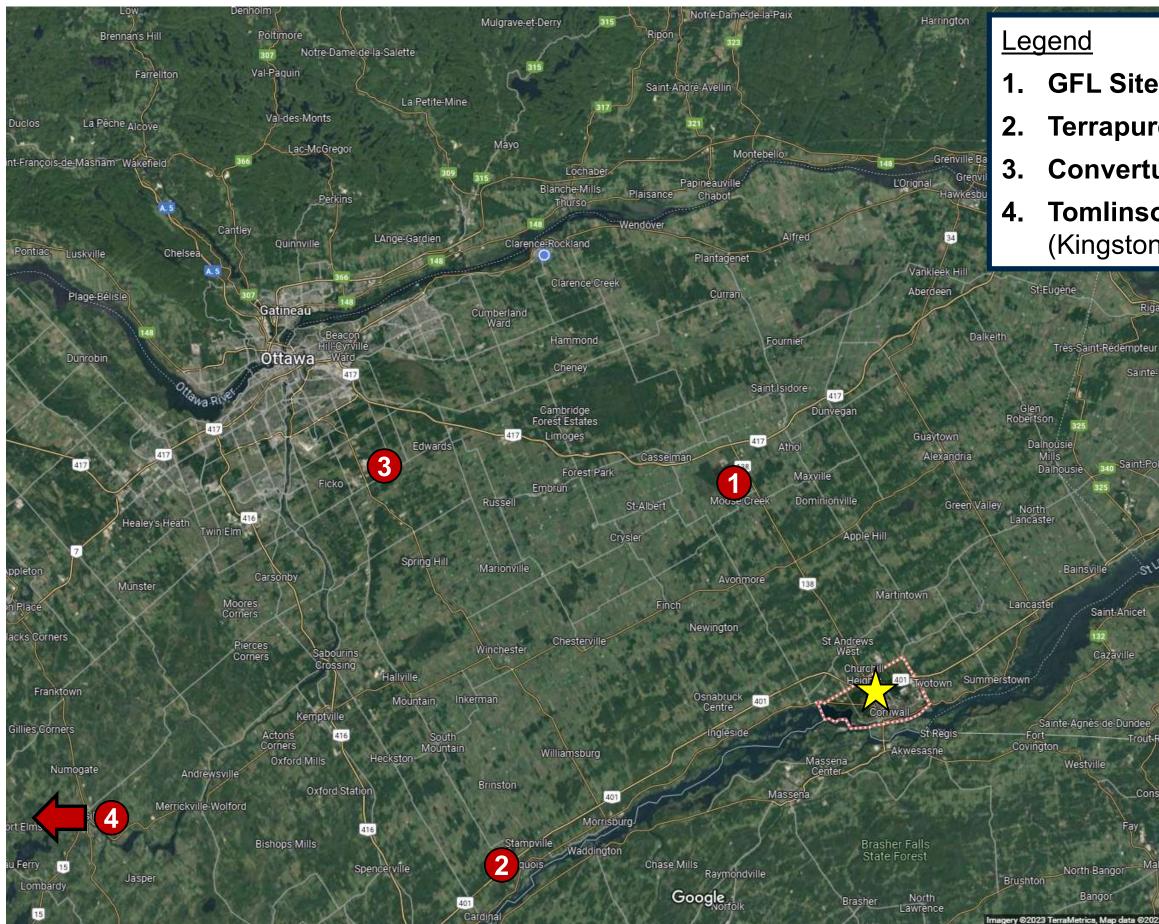
Third High/Terrapure/GFL (Iroquois)

• Based on conversation with GFL about Moose Creek, they are looking into this facility for us. The site has changed hands in the last few years (Terrapure to GFL), and they are going to investigate internally and get back to us.

Tomlinson (Kingston, ON)

- Similar to GFL and Convertus, they are happy to speak to the City about details
- No issues in terms of capacity and feedstock
- Farthest from Site, 160 km from the City

Refer to next slide for relative locations...



1. GFL Site – 40 km Terrapure/GFL Site - 60 km Convertus Site – 90 km Tomlinson Site – 160 km (Kingston, not shown)

Bâtisseurs Park ce RNer STLAW Baie-de

Saint-Stanislas-de-Kostka Tatehurst

Godmanchester 138 Sain

Huntingdon

11 Burke

Hinchinbrooke

Constable

Sainte-Marthe

Chateaugay

Churubusco

Franklin

Filen

Saint-Antoine-Abb

Brainardsvil

Third-Party (Merchant) Capacity – cont'd

- All merchants contacted confirmed that a new transfer station within the City of Cornwall limits would be essential, but they could handle haulage from this new transfer station.
- In terms of a financial analysis, we will be approaching them after long list stage for some budgetary _ numbers
- **Snapshot of current market:** -
 - Some recent bid closings in GTA have been aggressively priced
 - Some of these facilities are "done" paying for CAPEX, now just O&M and upgrades therefore more of a margin to play with

Strategies for Consolidation of Options

- Can any of these be combined for an overall packaged solution?
- Will they need to be tendered individually, or as package(s)? —
- Important criteria for consideration for combining projects:
 - Will it impact execution and coordination?
 - Impacts to existing facilities? •
 - Will it add overall cost? (CAPEX or OPEX)
 - Will it add complexity to existing processes? •
 - Will it add schedule/time? \bullet

Strategies for Consolidation of Options (cont'd)

For preliminary discussion – this will be updated for final report to show this has been considered

Waste Stream >	Septage	Biosolids
Will consolidating impact execution and coordination?	Yes – if dependent on other solutions, timing/execution/Plant coordination will be impacted	Yes – if dependent on other solutions, timing/execution/Plant coordination will be impacted
Impacts to existing facilities?	Yes, to WWTP	Yes, to WWTP
Will consolidating require additional cost? (CAPEX or OPEX)	No – this is a stand-alone process without dependencies. If combined, increased costs are mostly front end (Division 1)	Depends on solution provided – if materials can be combined for treatment solution, maybe not
Will consolidating add complexity to existing processes?	Maybe – this will be added to head of Plant and will be new equipment to operate, but still stands alone	Depends on solution provided – if materials can be combined for treatment solution, maybe not. End product management may require additional infrastructure.
Will consolidating add schedule/time?	Yes – this is ideally a stand-alone process, dependencies are access to Plant only, and can be delivered quicker, alone	If Biosolids/Organics solution – maybe not, will depend on selected technology. Biosolids solutions are proven and more readily available, quantifiable.
Candidate for Consolidation?	Not recommended – this is a simple project that can be taken on independently – consolidating would only complicate execution	Needs more investigation. At this stage, combining Organics/Biosolids not recommended
44		Cornwall BOSMP – W

Organics

Yes – if dependent on other solutions, timing/execution/Plant coordination will be impacted

Possibly – depending on what technology option is selected. If "stand alone", none

Depends on solution provided – if materials can be combined for treatment solution, maybe not

Depends on solution provided – if materials can be combined for treatment solution, maybe not. End product management may require additional infrastructure.

If Biosolids/Organics solution – maybe not, will depend on selected technology. **Organics solution will require more** lead time to fully address.

Needs more investigation. At this stage, combining Organics/Biosolids not recommended

Workshop #1 I © 2023 GHD. All rights reserved.

Evaluation Criteria (draft from Proposal)

- Feedstock Compatibility with proposed alternatives (volume and quality)
- **Overall Schedule for Project and Technology Implementation** ____
- Process and Technical Risk ____
- Site location and footprint estimates, required integration with existing sites —
- Access to site servicing (electrical, natural gas, potable water, sewer) ____
- Codes, Standards and Regulations (including reasonable estimate on future changes)
- Legislative and regulatory requirements (facility, transportation, emissions, and end product uses) -----
- Net reduction in greenhouse gas (GHG) emissions, and any associated impacts ____
- Net energy production, and productive uses and/or disposal options for end-products, by-products, and waste _____
- Alignment with Term of Council Priorities and Strategic Initiatives —
- Inherent health, safety and environmental risks and co-benefits, if any ____
- Community Impact (Odour/Noise/Truck traffic) _____
- Addressing PFAS in end product _____
- North American/Canadian installations and experience _____
- Financial Viability/Impacts: ____
 - Capital and O&M Costs •
 - Lifecycle Cost (cost per tonne) and NPV •
 - Biogas/digestate generation and revenues
- Potential for external funding for implementation and/or operation 45

Evaluation Criteria (cont'd)

- These are NOT FINAL these are for discussion
- What are main priorities for the City and stakeholders?
- What are the "hurdle" criteria? (non-starters)
- We can use some of these to document a matrix of priorities for long list reduction

Other Business/Open Discussion



Comments and Open Discussion

-

Closing Remarks and Next Steps



- Issue minutes of discussion for comment
- Finalize priority evaluation criteria
- Develop short list based on feedback
- be finalized today)

Cornwall BOSMP – Workshop #1 I © 2023 GHD. All rights reserved.

 Short list to be discussed at next workshop end of September 2023 (date for next workshop to



*** Thank You**





Meeting minutes

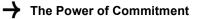
24 August 2023

Project name	Cornwall Biosolids, Organics and Septage Master Plan	From	GHD
Subject	Workshop #1 – Review of Long List of Options for the Management of Septage, Biosolids and Organics	Tel / email address	genevieve.lheureux@ghd.com andrew.smale@ghd.com
Date / Time	August 24 th , 2023, 1 - 4pm	Project no.	12604640
Attendees inc. company	City of Cornwall: - Stephen Romano (SR) - Dave Kuhn (DK) - Patrick Carrière (PC) - Michael Fawthrop (MF) GHD: - Andrew Smale (AS) - Geneviève L'Heureux (GL) - Michael Cant (MC) - Tanya Bogoslowski (TB) JL Richards: - Ted Portmann (TP)	Apologies inc. company	Dan Lauzon (City) Brian Hein (JL Richards) Susan Shi (JL Richards)
Copy to	File	Location	Virtual (MS Teams)
Objective	Objective Long List of Technologies and Alternatives Review		

These minutes are intended to be a record of the group discussion. They should be reviewed with the accompanying slides (attached).

Minutes	Action	To be actioned by
Team Introductions	am Introductions All team members introduced themselves	
Agenda and Workshop Goals	AS: Workshop overview and encouraged everyone to provide feedback along the way.	
	Looking at different options/technologies at a high level to create a short list of options from the long list.	
Basis of Capacity (Frame of Reference) TM1	AS: Septage: 5 m³/day (City wants to maintain current capacity/service level as a minimum) Biosolids: 4,000 tonnes/year at 27%TS (average) Organics: 4,000 - 8,000 wet tonnes/year	
Septage	AS: The City needs a new solution for their septage	DL : To send new revised WSP septage design

This document is in draft form. The contents, including any opinions, conclusions or recommendations contained in, or which may be implied from, this draft document must not be relied upon. GHD reserves the right, at any time, without notice, to modify or retract any part or all of the draft document. To the maximum extent permitted by law, GHD disclaims any responsibility or liability arising from or in connection with this draft document.



1

Minutos	Action	To be actioned by
Minutes		-
	City confirms that a more streamlined version of Option A is likely the preferred solution. The City and WSP is looking to	once received (in progress by WSP)
	refine it, they want to maintain current service but not manage	prograde by thery
	increased volumes. Receiving equipment is quite expensive	
	and the bulk of the capital cost; looking at ways to reduce	
	capital.	
	SR:	
	We went back to WSP and asked them to simplify the design	
	to lower the cost. Approximately \$600,000 (estimated based	
	on current modifications). There would be no storage tank nor	
	live monitoring tank. Only a container (sea can?) solution with	
	rock trap and flow meter. It would connect to the truck sewer line. Dan is working with WSP to identify the supplier of the	
	receiving equipment.	
	AS:	
	GHD agrees with this plan for septage management, we will	
	suggest a version of this approach in the master plan.	
	PC:	
	Depending on what option is chosen for the other sources	
	(biosolids & organic) the solution to be implemented at the WWTP and location could change.	
	If we go with the Lystek solution for example, we could dump	
	septage directly into the digesters and that could save project	
	costs. We wouldn't have to dig up to the lateral trunk going to	
	the main trunk to connect to the pumping station. Potentially reducing problems with the process, example of loads of	
	extremely toxic solutions being treated prior the entering the	
	WWTP process.	
	SR:	
	If there are toxic loads of septage, are there any concerns for	
	the Lystek system?	
	Suggest developing a spec for receiving material. This will deter people from not respecting/following specs/rules of	
	what is acceptable to the City. GHD can speak with Lystek	
	directly of what can be accepted within process.	
	SR:	
	Suggest we proactively manage registrations for septage	
	drop-off and take measures to reduce potential impacts from the septage coming in.	
	the septage confing in.	
	DK:	
	A lot less septage received to date this year compared to last.	
	It's not guaranteed that we will be getting previous years	
	amount of septage going forward as clients have found	
	alternative solutions. Doesn't think we need to advance the septage solution so soon; explore other options with	
	consolidation first.	
	AS:	
	If the City has time and is not rushed, no urgent demand for	
	septage management and there is no pressure in getting this	
	resolved urgently, we have flexibility in terms of schedule.	

Minutoc	Action	To be actioned by
Minutes		To be actioned by
	This will be discussed later in workshop for consolidation of activities.	
	SR:	
	Agreed	
Biosolids	Land Application:	
	PC:	
	Cornwall WWTP may be a Class C because we're using	
	centrifuges at WWTP.	
	AS:	
	We will have to address current classification of biosolids if	
	land application is chosen solution. <i>Editor's note: there is</i>	
	only Class A and B in Ontario. In Quebec, there is a separate designation for biosolids that have been dewatered in a	
	centrifuge.	
	PC: If we are Class B or C, can we modify?	
	AS:	
	Depends on what final destination of material is (crops for	
	food vs. crops for animal feed) but yes, it is possible to	
	modify/improve the Class. For example, the big difference is	
	ensuring pathogen kill in the digested material – this is to get a Class A biosolid.	
	Climate for land spreading, storage of solid material, and available outlets for spreading all pose challenges in Canada	
	due to the Weather.	
	Composting:	
	No comments	
	Thermal Hydrolysis:	
	AS:	
	- Lystek:	
	Has stated that local agricultural sector is eager for this	
	material. Big challenge is to dilute material (from say 27% TS	
	to 16-17% TS) for use within the process.	
	General concept is to "add on" to back end of dewatering	
	step.	
	- <u>Cambi:</u>	
	Given temperature requirements, will needs separate steam	
	boiler	
	Can integrate with existing digesters (upstream)	
	Needs a licensed stationary engineer (to manage high	
	temperature and high pressure process)	
	PC:	
	Depending on which direction we take, if co-digestion of organics is chosen, we will need to consider Cambi as an	
	option.	
	SR:	
	Financially is it comparable for capital cost?	

Minutes	Action	To be actioned by
	AS:	To be detioned by
	Still need to do infrastructure, tanks, connections, lots of auxiliary equipment, easy answer is yes it can be comparable, where you take from one you need to add somewhere else. It all has to be integrated into the existing plant and ensure minimum impact to ongoing operations.	
	PC: Cambi doesn't provide additional storage, compared to Lystek. Still need separate storage because of a new product.	
	TP : Cambi can't be land applied over winter, so storage beyond	
	now is similar to land application option, it would be of higher Class A grade though.	
	PC: Cambi – does biosolids act or CFIA apply? AS:	
	We can confirm. The quick answer here is that any product we make we would want to be a CFIA (including any additional process additions to get there) as it will be easier for the City to get interest in the product, manage and work with the material.	
	<u>Thermal Drying:</u>	
	 Belt Dryer: will need post-processing to generate pellets Dryers are generally very odorous! And not all allow air re-use within process. 	
	<u>Drum Dryer:</u> - Highest heating dryers	
	- "automatically" will create a uniform pellet	
	Belt Dryers:	
	 Needs a pelletization process for uniform pellets "Low and slow" – like a typical oven at home 	
	 <u>Paddle & Screw Dryers:</u> Indirect/conductive technologies, often more suitable to small scale 	
	 <u>Fluidized Bed:</u> Considered "experimental" – not many installations in North America, but good for large scale plants and high biosolids quantity applications. 	
	 Post-drying and pyrolysis + gasification: This REQUIRES a sludge drying step to operate Current discourse in the industry is that this is the solution to manage PFAS, long-term Not many functional installations in North America (yet) 	
	Incineration: - Expensive just for the equipment	

Minutes	Action	To be actioned by
	Specialized process for O&M	To be actioned by
	 Suitable for large scale applications, regional biosolids management solutions 	
	 Only a few in Canada, 3 plants in Ontario (London, Pickering (Duffin Creek), Mississauga (GE Booth) 	
	SR : Interested in narrowing things down going forward, a lot of it will come down to end product and a business case for us, and ensuring we are selecting a technology that is proven, reliable and not a new operational burden	
	Biochar/Ash to Landfill: SR: Alternative daily cover for landfill is being used at the Cornwall Landfill, using tarps instead. So we don't see a benefit using biochar	
	AS : We want to make sure end product is useful for destination and that the City has secure outlets to bring this material	
Organics	Aerated Static Pile Composting:	
	- No comments from group	
	AD Wet: AS:	
	Regardless of what approach is taken, need to pre-process organic food waste somewhere else, can't do it at WWTP because there is not enough room for this equipment, and it will be a process impact to bring trucks there. If City is going to process the organics on their own, they will need a pre- processing site. Previous study identified land at landfill for this purpose (refer to slides)	
	Also need to add infrastructure to handle additional nutrient loading to WWTP – this is typically a nitrogen management/sidestream treatment system like Annamox	
	PC:	
	"Anammox" Technology was looked at for side-stream ammonia nitrogen removal in centrate at WWTP as an option with co-digestion	
Third Party Merchant	AS:	
Capacity	All companies were interested in managing City's organics, were not as forthcoming about biosolids	
	Only requirement was that city will need transfer station and they will pick it up from there	
	 MC: There are options out there, composting systems are available right now operated by Convertus and GFL, but looking at AD for future, processing technology may change over time. Recent Durham organics contract pricing: 	

Minutes	Action	To be actioned by
	 \$103/tonne for hauling and processing (very low 	To be detioned by
	compared to other contracts)	
	 Seeing drop in price to process material, capacity to process has surpassed available organics out there. 	
	 Many processes are in "O&M mode" as they are done paying for capital 	
	- Anticipate that processing costs will go up in next 5 years as the market catches up, capacity is reduced	
	AS:	
	Based on movement in the market, and schedule for project, it is worth keeping this option high on the list. Will also have to consider looking at managing organics and biosolids as one stream	
	MC:	
	Regulatory framework in Ontario allows biosolids in composting now – this may be an option for the City (combine streams and send to one place)	
	AS:	
	AS. Can revisit my discussions with GFL, Convertus et al – get	
	some informal commitment if we can send them both streams of material.	
Consolidation of Options	SR:	
	Definitely not at the stage to make firm decisions, the presented options are interesting food for thought.	
	Timing: organics collection mandated Jan 1, 2025. If we need transfer station regardless, should we be looking at an interim sort of thing and putting RFP out if we decided to build?	
	AS:	
	Transfer station to bring materiel elsewhere is definitely required in the interim if we go down 3 rd party route, but this allows the City some time to find a solution.	
	CD.	
	SR : Transportation GHG, where does the municipality draw the line outside community limits?	
	MC:	
	The City has 16 months until organic program starts, so not a lot of time. Potential RFP can be issued for processing capacity, can ask industry if there is interest in developing a pre-processing facility somewhere else that you could then send the slurry to your WWTP (or deal with it all at the site, and no co-digestion). York region recently did this for their organics solution. It is entirely a private sector driven solution/site.	
	AS:	
	Need to look at near term and long term solutions	
	Need to recommend something now and while that is being implemented, look at long term solutions – especially for organics, which is more challenging in the near term (no infrastructure in place yet)	

Minutes	Action	To be actioned by
winnutes		To be actioned by
	Previously, the City was intending on combining biosolids and organics management through co-digestion	
	Some solutions are more time sensitive than others (refer to table in slide 44)	
	- Short term – can implement septage	
	 Medium term – can implement biosolids ONLY solution 	
	- Short term/Long term - organics, poses a more complex challenge	
	DK:	
	L&Y waste combined with organics, peaked interest, was Convertus interested in combined? Could Convertus take the biosolids in the short term, while we do in house development of options for biosolids?	
	MC:	
	If you mix L&Y waste with organics, co-digestion is not possible at WWTP. However, dry AD and 3 rd party will likely still take it.	
	DK:	
	We don't want to send mixed messages to the public about collection when the program starts, so we have to be clear about what is acceptable at curb and will suit our processing needs best.	
	MC:	
	Need to have decision on L&Y waste before communicating with public	
Evaluation Criteria	AS:	
	Need to decide on "hurdle criteria" for evaluation. What are the absolute showstoppers?	
	PFAS – Is it critical, do you want to address it?	
	SR:	
	Overall we need to be risk averse, be mindful of end use (both operations and a usable end product), knowing the technology works, we need to be sure of that.	
	Climate action plan was council endorsed, reducing GHG emissions, we have targets to meet, align with council endorsement, and with Canada as net-zero country by 2050.	
	Without funding, the previous co-digestion project was a non-starter.	
	If technology payback period is too long then it will pose a significant challenge as well.	
	MF:	
	Wr. Want to be tried, tested and true, risk adverse, don't have the ability to be the first of anything, or early anything technology.	
	Business case to support whatever option we select is critical – we need to show it makes sense for the City.	
	SR:	
	Short term, landfill filling up is a critical item, \$125 per tonne for biosolids	

Minutes	Action	To be actioned by
	If we look outside the City and it costs less for us, we save	To be abticfied by
	money and landfill space	
	DK:	
	At \$125, we're losing money	
	PC:	
	Hydrolysis technology will give WWTP capacity, added value	
	for process redundancy, process intensification.	
	City is looking into re-lining the digesters, dewatering cleaning	
	and removing existing liner, new coating and back in service – this is a 1 year process. Solids loading will be put on 1	
	digester, on verge of capacity, hydrolysis may help to mitigate	
	that risk.	
	AS:	
	Cambi will give more comfort level during this maintenance,	
	get more capacity out of the same tankage. As stated	
	previously, it is typically implemented in process intensification applications.	
	TP:	
Other Business/Open Discussion	Option to temporarily engage third party is a good solution for near term. If we need transfer station for Jan 2025, that is a	
Discussion	tight schedule.	
	DK:	
	Amendment required to ECA for transfer station?	
	PC:	
	What is involved in transfer Station, similar to SSO receiving	
	or?	
	DK:	
	Transfer station, some sort of pad and covered each day and	
	have a leachate collection system that ties in at a manhole on existing landfill.	
	Loader in 52' truck temporary solution	
	Near term solution transfer station, on site treatment package	
	is essential and a factor for it, "rough and ready" package	
	system can be implemented, while perhaps a more	
	permanent solution is developed in parallel.	
	DK.	
	DK:	
	 Ministry discussion to see what they say about leachate streams. 	
	- Prioritise hurdle criteria	
	 We need an interim discussion after this meeting to 	
	discuss "priority criteria" and get this list shorter	
	- Timing of organics collection the more real it becomes,	
	after September meeting, short solution needed for	
	transfer station, look at transfer station and source it for design	
	 RFP for taking material 2024? 	
	 City to be ready in 2025 	

Minutes	Action	To be actioned by
	SR:	
	Keeping biosolids on site, and then sending organics to competitive processing market out there is that where you're thinking?	
	AS:	
	Any mechanical solution gives the City a lot of freedom and flexibility, but we will get back to third party merchant to see about biosolids, because it would be great for the City, and to simplify City's decision and send everything to one place.	
	Realistically, implementing anything at the WWTP or elsewhere will need ramp up time.	
	Time is an issue so any solutions and recommendations need to be time-sensitive and schedule realistic.	
Next Meetings	Interim meeting to follow up on Workshop #1, discuss criteria – September 14 th (smaller group)	
	Workshop #2 - Thursday, September 28 th 1pm – 4pm (This was confirmed by all at meeting)	

Attachments: Workshop #1 Slides

This confirms and records GHD's interpretation of the discussions which occurred and our understanding reached during this meeting. Unless notified in writing within 7 days of the date issued, we will assume that this recorded interpretation or description is complete and accurate.

NOTE: If the information in this report does not agree with your record of this meeting or if there are any omissions, will you kindly advise this office immediately, otherwise we shall assume its contents to be correct.

Distribution: All Present/Absent

City of Cornwall Biosolids, Organics and Septage Master Plan

Workshop #2 – Review Long List Scoring

GHD



- Revisit/Answer Remaining Questions from Workshop #1
- Purpose and Goals of Workshop #2
- Review of Long List of Options (Lists only)
- Review Scoring Criteria and Weightings from Previous Meeting
- Review Draft Scoring (3 sets of scoring)
- Review Specifics of Evaluation Matrix
- Other Business
- Closing Remarks and Next Steps

Purpose and Goals for this Workshop

- To continue discussion of options for managing septage, biosolids and organics outputs from the City
- Once again, this is an OPEN DISCUSSION feel free to chime in
- Key Goals for Workshop #2:

3

- To revisit list of options for the three streams and answer any outstanding questions
- To review scoring and criteria that were reviewed at meeting of Sept. 14th
- To review DRAFT scoring of long list of options, and settle on short list
- Issue draft scoring matrix to City AFTER meeting for further comment
- Documentation of all discussions (minutes) which will form basis of Long List discussion in Master Plan report (will include as an Appendix)

Long List of Options -Septage



- Receiving at Headworks
- Receiving at Digesters

Long List of Options -Biosolids



- Land Application As Solid
- Land Application As Liquid
- Composting Off-site (Solid Only) City operated site
- Thermal Hydrolysis Lystek
- Thermal Hydrolysis Cambi
- Drum dryer
- Belt dryer
- Fluidized Bed dryer
- Paddle dryer
- Screw dryer
- Bio-Dryer
- Sludge Pyrolysis & Gasification
- Incineration

Long List of Options -Organics



- Covered Aerobic Composting (ASP) City operated, synergy with Biosolids
- Pre-Processing and AD Wet System
- Pre-Processing and AD Dry (Plug flow) System
- Co-Digestion at Cornwall WWTP
- Third-Party (off-site) Merchant Capacity

Scoring and Weighting Criteria

7

EVALUATION CATEGORY	EVALUATION CRITERIA	Weighting of Main Category	Weighting of Subcategory
			3.00%
HG Mitigation	Does it eliminate or mitigate GHG	5%	1.50%
	emissions? (Scope 1, 2 and 3)		0.50%
	Capital costs		15.00%
in a stat lass and a	Operating and maintenance costs	0500	5.00%
nancial Impacts	Funding Opportunities	25%	2.00%
	Energy costs		3.00%
	Is it adaptable over time to new,		
	different or larger inputs?		2.86%
	Is it adaptable to changes in gov't		
	legislation and regulation changes?		2.86%
	Is it adaptable to changes in codes,	Γ	
Process Resiliency	design standards, and other?	20%	2.86%
rocess Resiliency	Is it adaptable to changing climate	20%	
	conditions?		2.86%
	Energy autonomy		2.86%
	Beneficial Use Material Generated		2.86%
	Reliability of future market for the	Γ	
	material generated		2.86%
	Council values		1.67%
ditional Value	Local municipalities	5%	1.67%
	Current assets reuse		1.67%
	Technology maturity		2.67%
novation	Process Risk	8%	2.67%
	People and process innovation		2.67%
	Complexity of operations		5.00%
perations & Maintenance	Proprietary Process, Parts, and after-	15%	
perations & maintenance	market service	1576	5.00%
	Complexity of maintenance		5.00%
	Capacity Suitable for City of Cornwall?		4.00%
nplementation	Implementation hurdles	12%	2.66%
npiementation	Footprint	12.70	2.66%
	Impact to existing WWTP operations		2.66%
	Community acceptance		3.33%
locial	Hauling / truck traffic and noise	10%	3.33%
	Odour potential		3.33%
		100%	100

Key Drivers – do we need to adjust?

Assumed a 50% passing score is required (we can discuss adjusting today)

Draft Scoring Results

Stream	Option	Final Weighted Score	Pass or Fail?
Septage	Receiving at Headworks	61.8%	PASS
Septage	Receiving at Digesters	47.1%	FAIL
	Land Application - As Solid	48.8%	FAIL
	Land Application - As Liquid	44.3%	FAIL
	Composting Off-site (Solid Only)	60.2%	PASS
	Thermal Hydrolysis - Lystek	74.1%	PASS
	Thermal Hydrolysis - Cambi	70.8%	PASS
	Drum dryer	47.2%	FAIL
Biosolids	Belt dryer	53.8%	PASS
	Fluidized Bed dryer	47.9%	FAIL
	Paddle dryer	63.9%	PASS
	Screw dryer	62.9%	PASS
	Bio-Dryer	48.5%	FAIL
	Sludge Pyrolysis & Gasification	47.0%	FAIL
	Incineration	38.0%	FAIL
	Covered Aerobic Composting (ASP)	59.9%	PASS
	Pre-Processing and AD - Wet System	48.1%	FAIL
Organics	Pre-Processing and AD - Dry (Plug flow) System	48.3%	FAIL
	Co-Digestion at Cornwall WWTP	47.7%	FAIL
	Third-Party (off-site) Merchant Capacity	78.9%	PASS

Draft Scoring Results (cont'd)

- **Septage solution:** Recommend moving forward with original plan at Headworks (reduced scope)
- Biosolids:
 - Composting (new site can integrate with Organics)
 - THP Lystek
 - THP CAMBI
 - Belt dryer (?)
 - Paddle dryer
 - Screw dryer
- Organics:

9

- Composting (new site can integrate with Biosolids)
- Merchant capacity (already getting interest based on initial discussions)

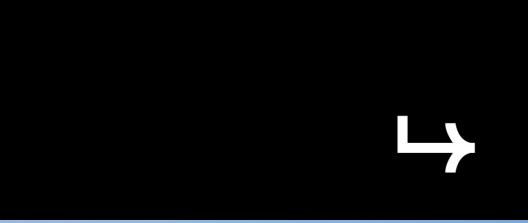
Key Take Away Points from Initial Screening

- Suitability to Cornwall (already made an adjustment here on criteria)
- Technology maturity and process risk this is not having the impact it should on results
- Finished product how secure is the market for this material?
- Effort from City/Administrative who is managing distribution to users, and land application?
- Operations and after market support

10

 Co-digestion is actually two solutions in one – require pre-processing, which has crossover with many issues from WetAD (like size for Cornwall)

Approach for Short List





- Recommend keeping same criteria and weighting, but open to suggestions here
- Approach vendors for site-specific budgetary quotations (have already received some for merchant capacity)
- Develop some concept sketches for use in Master Plan report
- Develop NPV costing (including capital and O&M)

Other Business/Open Discussion



- Convertus and GFL interest in this project
- Comments and Open Discussion

Closing Remarks and Next Steps



- Review matrix for further comment prior to finalization of short list
- Consensus on developed short list and begin detailed analysis (previous slide)
- Complete Master Plan Report (draft), including all of above
- Schedule PIC (goal)

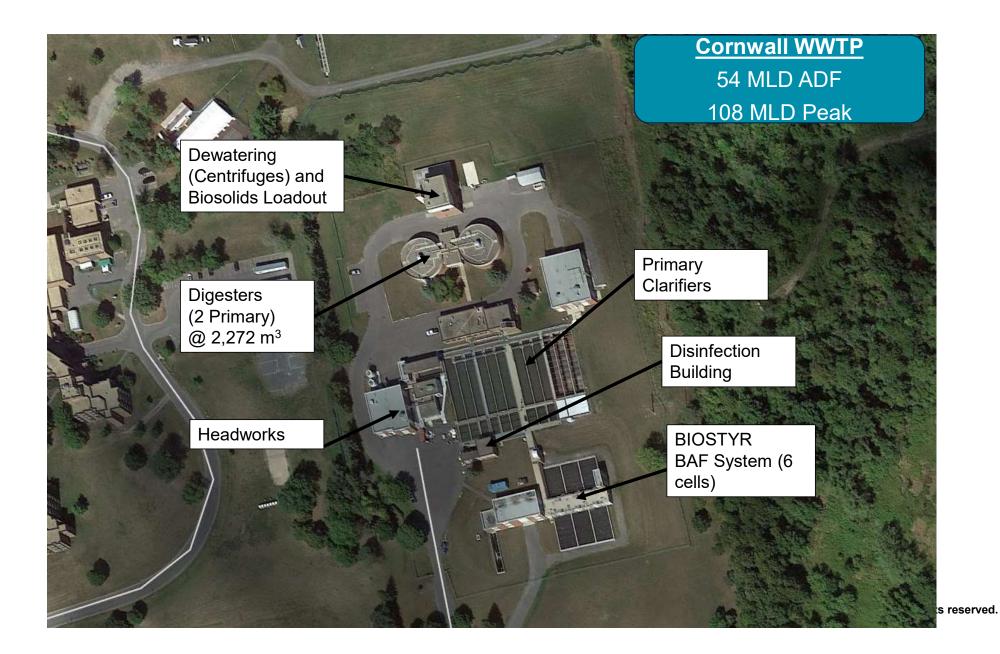


***** Thank You

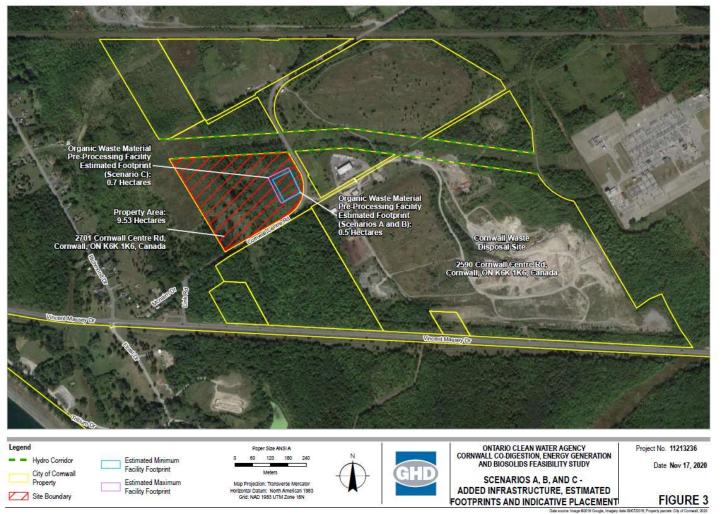


Quick Reference Graphics

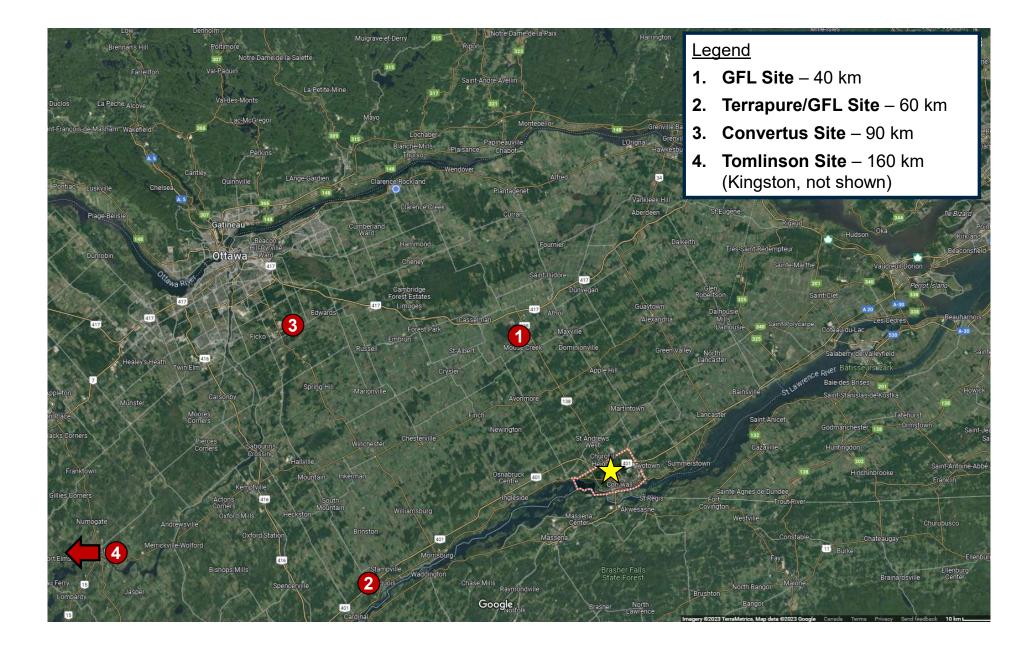
➔ To be used during discussion as needed



Proposed location (from co-digestion study)



I © 2023 GHD. All rights reserved.



Cornwall Biosolids, Organics, and Septage Master Plan SUMMARY OF LONG LIST OPTIONS SCORING - ALL STREAMS

		PASSING SCORE>>	50%
Stream	Option	Final Weighted Score	Pass or Fail?
Septage	Receiving at Headworks	61.8%	PASS
Septage	Receiving at Digesters	47.1%	FAIL
	Land Application - As Solid	48.8%	FAIL
	Land Application - As Liquid	44.3%	FAIL
	Composting Off-site (Solid Only)	60.2%	PASS
	Thermal Hydrolysis - Lystek	74.1%	PASS
	Thermal Hydrolysis - Cambi	70.8%	PASS
	Drum dryer	47.2%	FAIL
Biosolids	Belt dryer	53.8%	PASS
	Fluidized Bed dryer	47.9%	FAIL
	Paddle dryer	63.9%	PASS
	Screw dryer	62.9%	PASS
	Bio-Dryer	48.5%	FAIL
	Sludge Pyrolysis & Gasification	47.0%	FAIL
	Incineration	38.0%	FAIL
	Covered Aerobic Composting (ASP)	59.9%	PASS
	Pre-Processing and AD - Wet System	48.1%	FAIL
Organics	Pre-Processing and AD - Dry (Plug flow) System	48.3%	FAIL
	Co-Digestion at Cornwall WWTP	47.7%	FAIL
	Third-Party (off-site) Merchant Capacity	78.9%	PASS

Septage	1
Biosolids	6
Organics	2
TOTAL PHASE 2 EVAL	9

Cornwall Biosolids, Organics, and Septage Master Plan - Long List of Alternatives for Evaluation - LIST A - SEPTAGE

EVALUATION	EVALUATION	PERFORMANCE	RATIN	IG (0=WORST TO 10	=BEST)	UNIT(S) OF				Weighting of	30 Weighting of	30	1. Receipt at Head of Plant	t	30 2. Rece	eipt at Digesters Directly (ne	w station)
CATEGORY	CRITERIA	MEASURE	0	5	10	MEASURE	QUALITATIVE	QUANTITATIVE	METHOD OF MEASURE	Main Category		Score		Veighted Score	Score	Reasoning	Veighted Score
		Scope 1 reduction (direct)	Significantly lower than alternatives	Comparable to alternatives	Significantly greater than alternatives	Relative score	x		Relative to existing process		3.0%	5	No impact	1.5%	5		1.5%
GHG Mitigation	Does it eliminate or mitigate GHG emissions?	Scope 2 reduction (indirect, such as purchase of fuel)	Significantly lower than alternatives	Comparable to alternatives	Significantly greater than alternatives	Relative score	x		Relative to existing process	5%	1.5%	5		0.8%	E		0.8%
		Scope 3 reduction (up and downstream of	Significantly lower than alternatives	Comparable to alternatives	Significantly greater than	Relative score	x		Relative to existing process	-		5			5		
	Capital costs	value chain) Estimated total capital costs	Significantly greater cost than alternatives	Comparable cost to alternatives	alternatives Significantly lower cost than alternatives	2023\$		x	Simplified quantitative assessment based on existing costing data and information in literature		0.50%	5	Capital costs known, approx \$1M	0.3%	5	May require additional costs to integrate a facility adjacent to digesters. But would be comparable.	0.3%
Financial Immosta	Operating and maintenance costs	Additional staffing, utility costs, operational savings	Significantly greater cost than alternatives	Comparable cost to alternatives	Significantly lower cost than alternatives	2023\$ per year		x	Simplified quantitative assessment based on existing costing data and information in literature	25%	5.0%	5	Would be comparable - same tasks, comparable power consumption	2.5%	5	Would be comparable - same tasks, comparable power consumption	2.5%
Financial Impacts	Funding Opportunities	Does this solution open the City up to opportunity to external funding?	Significantly lower than alternatives	Comparable to alternatives	Significantly greater than alternatives	Relative score	x		Qualitative/Professional Judgement	25%	2.0%	5	No funding would be opened up - this is standard practice, would be considered ops upgrades.	1.0%	5	No funding would be opened up - this is standard practice, would be considered ops upgrades.	1.0%
	Energy costs	Does it reduce baseline energy costs?	Significantly greater than alternatives	Comparable to alternatives	Significantly Lower than Alternatives	Approx % change		x	Simplified quantitative assessment based on existing costing data and information in literature		3.0%	5	Energy costs would be comparable.	1.5%	5	Energy costs would be comparable.	1.5%
	Is it adaptable over time to new, different or larger inputs?	Future infrastructure needs (i.e. new tanks, pipeline capacity, process additions)	Not adaptable	Comparable to alternatives	Most adaptable, flexible	Relative score	x		Qualitative/Professional Judgement		2.9%	9	Can receive "anything" can protect more of plant be receiving at the start.	2.6%	3	Some adaptability - but limited to what Digesters will accept.	0.9%
	Is it adaptable to changes in gov't legislation and regulation changes?	Changes in regulations (such as for PFAS in biosolids)		Comparable to alternatives	Most adaptable, flexible	Relative score	x		Qualitative/Professional Judgement		2.9%	5	Comparable - given that this is standard practice in WWT, low risk of high impact from reg changes.	1.4%	5	Comparable - given that this is standard practice in WWT, low risk of high impact from reg changes.	1.4%
	Is it adaptable to changes in codes, design standards, and other?	This is relevant to heat treatment, high pressure and high temperature processes	Not adaptable	Comparable to alternatives	Most adaptable, flexible	Relative score	x		Qualitative/Professional Judgement		2.9%	9	Standard industry	2.6%	3	Receipt direct at digesters not typical practice. Risk of impact from design standard changes not certain.	0.9%
Process Resiliency	Is it adaptable to changing climate conditions?	Future weather patterns are expected to change in terms of higher temps, more rain, different types of wind. Will technology be impacted?	Not adaptable	Comparable to alternatives	Most adaptable, flexible	Relative score	x		Qualitative/Professional Judgement	20%	2.9%	5	Comparable still importing liquid material on top of incoming sewage	1.4%	5	Comparable still importing liquid material on top of incoming sewage	1.4%
	Energy autonomy	Does it reduce reliance on external energy sources?	Significantly lower than alternatives	Comparable to alternatives	Significantly greater than alternatives	Relative score	x		Qualitative/Professional Judgement		2.9%	5	No autonomy	1.4%	5	No autonomy	1.4%
	Beneficial Use Material Generated	Does it generate a useful product that has such as compost, fertilizer, soil amendments, or waste that must be further managed?	No beneficial	Comparable to alternatives	Large quantities or varied beneficial byproducts	Relative score	×		Qualitative/Professional Judgement		2.9%	5	No beneficial use material generated (will depend on post digestion, which is independent of this solution)	1.4%	5	No beneficial use material generated (will depend on post digestion, which is independent of this solution)	1.4%
	Reliability of future market for the material generated	Is there a future market for the energy/resources produced?	Significantly lower than alternatives		Significantly greater than alternatives	Relative score	x		Qualitative/Professional Judgement		2.9%	5	See previous - nothing is generated	1.4%	5	See previous - nothing is generated	1.4%
	Council values	Does it align with Council values and the City's Climate Action Plan?			Significantly greater than alternatives	Relative score	x		Qualitative/Professional Judgement		1.7%	5	Key objective of solution is to find alternate destination for septage. Each alternative meets this goal.	0.8%	5	Key objective of solution is to find alternate destination for septage. Each alternative meets this goal.	0.8%
Additional Value	Local municipalities	Does it have the potential to strengthen partnerships with local municipalities?			Significantly greater than alternatives	Relative score	x		Qualitative/Professional Judgement	5%	1.7%	5	No interest in adding to septage program - therefore both alternatives the same.	0.8%	5	No interest in adding to septage program - therefore both alternatives the same.	0.8%

Cornwall Biosolids, Organics, and Septage Master Plan - Long List of Alternatives for Evaluation - LIST A - SEPTAGE

ALUATION		PERFORMANCE	DATIN	G (0=WORST TO 40	=BEST)	UNIT(S) OF			Weighting of	Weighting of	30	1. Receipt at Head of Pl	ant	30 2 Rece	eipt at Digesters Directly (I	new station)
	EVALUATION CRITERIA	MEASURE	RATIN 0	IG (0=WORST TO 10	10	UNIT(S) OF MEASURE	QUALITATIVE QUANTITAT	VE METHOD OF MEASURE	Weighting of Main Category	Subcategory	Score	1. Receipt at Head of Pla Reasoning	ant Weighted Score	2. Rece Score		Weighted Sci
	ONTERIA	İ						Qualitative/Professional	main outogory	ousoutogory	00010	litodooning	Weighted Coole	00010	litodooning	i violgnioù co
		Does it allow for utilization of City's			Significantly			Judgement								
	Current assets reuse	existing assets? Does	Significantly lower	Comparable to	Significantly greater than	Relative score	x					New equipment will be			New equipment will be	
	Current assets reuse	the footprint impact	than alternatives	alternatives	alternatives		^					required for importing,			required for importing,	
		future planning?										may differ slightly			may differ slightly	
		i ataro planing.							-	1.7%	5	between alternatives.	0.8%	5	between alternatives.	0.8%
		Technology maturity						Reference Technology								
		level scale, considering	Cinnificantly laway	Commencelate	Significantly			Readiness Level (TRL),							Although not tyipcal to	
	Technology maturity	similar climates,	Significantly lower than alternatives		greater than	Relative score	x	https://en.wikipedia.org/wiki/Te chnology_readiness_level	*			Vory common practice			deposit septage direct in digesters, operations-	
		experience in Canada,	Inan allematives	allematives	alternatives			childiogy_readiliess_level				Very common practice for a receiving station			wise it can technically be	
		North America, etc.								2.7%	9	at head of WWTP.	2.4%	4	done.	1.19
	-								-	2.1 /0	0		2.170	•	Some risk with	1.17
															depositing septage	
ovation		Would the City be the		Comparable to	Significantly lower			Qualitative/Professional	8%						direct into digesters.	
	Process Risk	"first of its" kind or take		alternatives	than alternatives	Relative score	x	Judgement				Very common practice			This may have an	
		on any process risk?	alternatives									for a receiving station			impact on downstream	
										2.7%	8	at head of WWTP.	2.1%	2	proceses.	0.5%
		Does the City have the						Qualitative/Professional								
			Significantly lower	Comparable to	Significantly			Judgement; discussions with								
	People and process innovation	place to support this	than alternatives		greater than	Relative score	x	City staff				Both alternatives will be			Both alternatives will be	
		innovative technology?			alternatives					0 =0/	_	on equal footing with		-	on equal footing with ops	
		3,								2.7%	5	ops staff.	1.3%	5	staff.	1.3%
		Impact to operations,	Technically	Modorotokudifficult	Ecov to concert			Qualitative/Professional				Will be new			Although not tyipcal to	
	Complexity of exerctions	safety, usability,	complex and	Moderately difficult	Easy to operate- minimal to no new	Polotivo coorc		Judgement; discussions with				equipment/infrastructur			deposit septage direct in digesters, operations-	
	Complexity of operations	requires new staff,	difficult to operate-			Relative score	X	City staff				e and require some			wise it can technically be	
		training, flexibility	much training needed	training	training required					5.0%	6	training.	3.0%	4	done.	2.0%
			lieeueu						-	5.070	0	u an ing.	5.070	7	done.	2.07
		Is the process	More proprietary									Any receiving			Any receiving equipment	
	Proprietary Process, Parts, and	proprietary? How easy		Comparable to	No proprietary							equipment will be the			will be the same	
erations & Maintenance	after-market service	is it to get parts or	obtain after-	alternatives	parts, easier to	Relative score	x		15%			same between options;			between options; will	
		service?	market service		obtain service				1070			will have good after-			have good after-market	
										5.0%	5	market support.	2.5%	5	support.	2.5%
	-		Taskalas					Qualitative/Professional	-					-		
		Impact to	Technically	Maria and a large life and the				Judgement; discussions with				Any receiving			Any receiving equipment	:
	Complexity of maintenance	maintenance, safety,	complex and	Moderately difficult	Easy to maintain-	Deletive ecore		City staff				equipment will be the			will be the same	
	Complexity of maintenance	usability, requires new	difficult to maintain-much	to maintain-some training	minimal to no new	Relative score	×					same between options;			between options; will	
		staff, training, flexibility	training needed	uraining	training required							will have good after-			have good after-market	
			training needed							5.0%	5	market support.	2.5%	5	support.	2.5%
		Is the minimum						Qualitative/Professional								
	Capacity Suitable for City of	capacity suitable to	Capacity too	Comparable to	Capacity suits the	Relative score	×	Judgement				Can be implemented			Can be implemented for	
	Cornwall?	accept material from	large/not suitable	alternatives	City's output						Q	for exact septage input			exact septage input	
		the City?							_	4.0%	9	requirements.	3.6%	9	requirements.	3.6%
		General ease of						Qualitative/Professional								
		implementation,	Much more	Comparable to	Much less difficult			Judgement				Implementation should				
	Implementation hurdles	permitting, new site,	difficult than	alternatives	than alternatives	Relative score	x					be relatively simple.			Will need tie in points at	
		constructability,	alternatives	alternatives								Design already			Digesters; this has not	
		schedule, supply chain								2.7%	9	complete.	2.4%	3	been investigated vet.	0.8%
			1	1	1	1	<u> </u>	Qualitative/Professional			v	Footprint comparable;		~	Do not yet have a design	
lementation		Relative footprint of	Much larger					Judgement	12%			already have a design			at Digesters, and may	
	Footprint	process at WWTP, or	footprint than	Comparable to	Smaller footprint	Relative score	x					at Headworks; will			cause a slight impact on	
	1	whole new site?	alternatives	alternatives								remain "out of the way"			operatsion traffic	
										2.7%	8	for truck traffic	2.1%	3	through this area.	0.8%
		How will this affect						Qualitative/Professional								
		ongoing operations at						Judgement								
	Impact to existing WWTP	Cornwall WWTP? Will	Much larger	Comparable to	Much less impact							Will have impact			Do not yet have a design	
	operations	it be difficult to	impact than	alternatives	than alternatives	Relative score	x					through construction,			at Digesters, and may	
	'	integrate or require	alternatives									but once complete, this			cause a slight impact on	
		significant shutdowns?								0.70	-	will be an independent		-	operatsion traffic	
								Quelitetive (Drafa ani anal	-	2.7%	8	process.	2.1%	3	through this area.	0.8%
								Qualitative/Professional				May have an issue			May have an issue	
		Anticipated public	Much less them	Composable to	Much menter			Judgement				May have an issue			May have an issue	
	Community acceptance	acceptance of	Much less than	Comparable to	Much greater	Relative score	x					regardless - but "visibility" still sticks to			regardless - but "visibility" still sticks to	
		technology, viewscape	alternatives	alternatives	than alternatives							WWTP site, and can			WWTP site, and can be	
										3.0%	5	be well integrated.	1.5%	5	well integrated.	1.5%
	-							Qualitative/Professional		0.070	5	be wen integrated.	1.370	5	weir miegrateu.	1.37
cial		Potential change in	Much greater than	Comparable to	Much less than			Judgement	10%							
	Hauling / truck traffic and noise	traffic and noise at site		alternatives	alternatives	Relative score	x	loudgement								
		and in nearby areas	anomativos	anomativos	altornatives					3.3%	5	Same number of trucks	1.7%	5	Same number of trucks	1.7%
		Anticipated potential						Qualitative/Professional	-	0.070	0		1.770	5		1.770
		for odours or	More odour		Less odour			Judgement				Depending on			Depending on receiving	
				No change		Relative score	X									
	Odour potential	opportunity to reduce	potential	i to change	potential							receiving area, odours			area, odours can be	

Cornwall Biosolids, O	rganics,	and Septage I	Master Plan	- Long Li	st of A	Alternatives	for Evaluation	- LIST B	- BIOSOLII	DS

EVALUATION	EVALUATION			an - Long List of A			20	30 1. Land Application - As Soli	30 d 2. Land Application - As Liquid	30 3. Composting Off-site (Solid Only)	30 4. Thermal Hydrolysis - Lystek	30 5. Thermal Hydrolysis - Cambi	30 6. Drum dryer	30 7. Belt drver	30 8. Fluidized Bed dryer	30 9. Paddle drver	30 10. Screw drver	30 11. Bio-Dryer	30 12. Sludge Pyrolysis & Gasification	30 13. Incineration
CATEGORY	CRITERIA	PERFORMANCE MEASURE Scope 1 reduction (direct)	Significantly lower Comparable to alternatives	Significantly greater than alternatives	X	Relative to existing process	Main Category Subcategory	Score Heastoning to No change to baseline WWTP; Need to move trucks from site to point(s) of use. This will vary depending on	dmind score score Helaconina Weishted score baseline WWTP; Need to move trucks from site to compositing facility - but more trucks,	Score Reason Weinted Core Score Reason Weinted Score No change to baseline WWTP Need to move trucks from site to new	Score Reasoning Weighted	d Score Score Reasoning Weighted Score	Score Reasonna Weichted Score Score Reasonna Weichted Score Some had racialmation on off- ges, bot not much.	Score Reasoning Weighted Scon	Score Reasoning Weichted Score Designed to capture wade heat, fully	Score Reusoning Weighted Score Score Reusoning Score and	Score Reasoning Weighted Score Reasoning Weighted Score Reasoning Weighted Score Reasoning Rectain Rec	e Score Reasonina Weidhted Sco Air emissions similar to Pyrolysis based on	re Score Reasonino Weidited Score Air emissions not as hamful as inclineration. Can poterially make up purchase	Score Reasoring Weighted Score Albough air scrubber and ways to manage, this has biggest impact on air quality of ai
GHG Mitigation	Does it eliminate or mitigal GHG emissions?	Scope 2 reduction	Significantly lower Comparable to than alternatives	Significantly greater than Relative score alternatives	x	Relative to existing process	5%	4 takers. No change to 5 Baseline WWTP Additional truck	1.2% 2 since louid 0.6% Need additonal fuel for pasteurization of liquid digestate (to	4 compositing facility. 1.2%	5 from WWTP. 1 Need additional fuel	1.5% 5 from WWTP. 1.5%	4 Enclosed system 1.2% Will need oil or steam as heating 3 medium 0.5%	4 Enclosed system 1.2% Will need oil or steam as heating	6 enclosed sustem. 1.8%	4 Enclosed system 1.2% Will need oil or steam as heating 3 meslum 0.5%	4 Enclosed system 1.2% Will need of or steam as heating 3 medium 0.5%	6 Iterature 1.8% Energy input still required (unless coupled with Pyrolysis,	6 of fael with someas. 1.8% Can potentially make up	2 alternatives. 0.6% Boiler required - will need NG. Also, will need tuel of to manage temperature
		Scope 3 reduction (up and downstream of value chain)	Significantly lower Comparable to alternatives	Significantly greater than Relative score alternatives	x	Relative to existing process	0.50%	5 Baseline WWIP Additional truck traffic to haul away composit to points of 4 use.	0.8% 3 use as fertilizer) 0.5% Additional truck 0.2% 3 traffic (since issued) 0.2%	5 Baseline WWTP 0.8% Additional truck traffic to haul away compost to points of 4 use. 0.2%	3 for heating. 0 Will have trucks moving material 3 offsite (liquid) 0	0.5% 3 for heating, 0.5% Will have trucks moving material 0.2% 3 offsite (logid) 0.2%	3 medum 0.5% Will need gas for 3 heating medum 0.2%	3 medium 0.5% Will need oil or steam as heating 3 medium 0.2%	3 heating 0.5% Will need gas for 3 heating medium 0.2%	Will need oil or steam as heating	Will need oil or steam as heating	6 See BioForostech) 0.9% Brand new facility constructed, will have associated env/1 3 impacts. 0.2%	6 purchase of fuel with syngas. 0.9% Brand new facility constructed; will have 3 associated envill impacts. 0.2%	1 in furnace. 0.2% Massive construction project large operational 1 impact. 0.1%
	Capital costs	Estimated total capital costs	Significantly greater cost than alternatives		x	Simplified quantitative assessment based on existing costing data and information in literature	15.0%	Some additional costs for offsite storage in offseason, depending on takers 5	0.2% 3 traffic (since layed) 0.2% Some additional costs for patterization of CPA retilizer, storage tankage on or off 5.5% 5 site 7.5%	New site required. \$12-15M for composing facility for dewatered 7 biosolida. 10.5%	CAPEX and OPEX via proposal with City. In the \$11M range, "all in". Including potential 8 revenue sharino. 12	2.2% 3 official (10,aid) 0.2% Big/try/hptr-cost to integrate with existing WWTP, but doable and worth investigating in detail for site- 2.0% 7 seeclific scelina, 10.5%	Capital costs in \$15M range, equipment conty. Also need building and backuts for cellets. 4.5%	Capital cost in S8M range, plus building, politikar and 5 keadout for cellets. 7.5%	Capital costs companable to drum dryver (in \$15M 3 ranzer bida). 4.5%	3 medium 0.2% Capital cost for equipment in \$10M petietzer, plus building extension (comparable to \$6000) 10.5%	3 medium 0.2% Capital cost for equipment in \$10M range, pita pellettar, pita building extension (comparable to acadea) 10.5%	Capital cost similar to a drum dryer (\$15M + building and aux 4 systems) 6,0%	Comparable to bolt dryves and other mid-aize drying technologies, However, STILL HED ADRYING STEP balonehand, which aliase averal LAPEX 6.0%	Most expensive to purchase - including all audiary 1 souteme. 1.5%
	Operating and maintenanc costs	Additional staffing, utility costs, operational savings	Significantly greater cost than alternatives	to Significantly lower cost than 2023\$ per year alternatives	x	Simplified quantitative assessment based on existing costing data and information is literature	26%	Assuming that City will NOT be applying directly, and just maneging outgoing material. May have significant administrative	Assuming that City will NOT be applying directly, and just managing outgoing material. May have significant administrative	Will need new staff for composing site; will have to manage	Plant OBM costs potentially covered by shared revenue on sale of high	Plant O&M costs potentially covered by shared revenue on sale of high	Operating costs can be expensive, due to fuel costs (gas).	Operating costs slightly cheaper due to lisis heat requirement, but still more building space required on a per-	Operating costs can be expensive, due to fuel costs (gas).	Operational costs include oil and/or gas for steam for heating medium Comparable to		Depending on package vendor, this can vary. It is comparable to	OBM not well understood; only 1 suly functional facility	Most expensive to operate. From a fuel (energy), complexity and statling
	Funding Opportunities	Does this solution open the City up to opportunity to external funding?	Significantly lower Comparable to alternatives	Significantly greater than Relative score alternatives	x	Qualitative/Professional Judgement	5.0%	3 requirements.	1.5% 3 real/ements. 1.5%	6 takens of composit. 3.0%	8 quality CFIA ferilizer 4 Some chance of external funding for added energy production (biogas), and CFIA ferilizer	4.0% 8 ouality CFIA ferilizer 4.0% Some chance of external funding for added energy production (telogua), and CFIA ferilizer	4 Commerce survision 2.0% External funding may be challening to obtained - this is standard WWTP practice, but beneficial use of peltets: may factor	5 unit basis. 2.5% External funding may be challening to obtained - this is standard WWTP practice, but beneficial use of peletes may factor	4 Commerce svalem 2.0% External funding may be challening to obtained - this is standard WWTP practice, but beneficial use of pelitets may factor	7 screw 3.5% Cherral Turking may be chaltering to obtained - this is standard WWTP practice, but beneficial use of pellets may factor	Operational costs include oil and/or gealing metium. Comparaties to addle 3.5% External funding may be challening to obtained - this is submitted why the beneficial use of petitismer, factor	3 Proheis 1.5% Will depend on pyrolysis component. If no energy, utilikaly (just generating sold	3 In USA, Not comparable (vet) 1.5%	1 persective. 0.5% Unikely to get funding for a new incimerator. This is standard WVTP
	Energy costs	Does it reduce baseline energy costs?	Significantly Comparable to alternatives	Significantly Approx % Lower than change	x	Simplified quantitative assessment based on existing costing data and information in literature	2.0%	1 Unlikelv.	0.2% 1 Unlikelv. 0.2% Baseline WWTP, plus additional heating for	2 community benefit. 0.4% Baseline WWTP stays the same. New energy inputs required on new	7 may factor in. 1 Added energy for heating. Lower temperatures than	1.4% 7 may factor in. 1.4% Needs higher operating temperatures for successful process. Higher energy	5 in. 1.0%	5 in. 1.0%	5 in. 1.0% Gas consumption similar to drum, some recovery of	5 In. 1.0%	5 in. 1.0% Comparable to paddle - some inefficiencies due to	6 material 1.2%	6 svnas production. 1.2%	1 aractice 0.2%
	Is it adaptable over time to different or larger inputs?	Future infrastructure news, pipeline capacity, process additions)	Not adaptable Comparable to alternatives	Most adaptable, floxible Relative score	x	Qualitative/Professional	3.0%	5 Baseline WWTP. No. Would have to plan program exclusive around	1.5% 4 easteurization. 1.2% No. Would have to plan program	4 site. 1.2% Yes - as noted in organics screening review, this new site	5 CABMI. 1 If co-digestion is implemented, this	1.5% 4 index 1.2% 1.5% If c-depation is implemented, this can be integrated into system (will need confirmation from CAMBI due to different unit	4 heating) 1.2% Would be designed for biosolids. Due to size of system, not really expandable	5 heating reg/ment) 1.5% Would be designed for biosolids feedstock. Small	4 waste heat. 1.2% Would be designed for biosolids. Due to size of system, not	5 conductive heating, 1.5% Would be designed for biosolids feedstock. Small	5 conductive heating, 1.5% Would be designed for biosolids feedstock. Small	5 drvino applications. 1.5% Biodrying could technically accept solid	6 svmaas.production. 1.8%	3 steam boiler 0.9%
							2.9%	exclusively around biosolids - esp. for distribution to 1 apricultural sector.	exclasively around biosofide - sep, for distribution to 0.3% 1 aericultural sector. 0.3%	can potentially open up to organics loads 8 as well 2.3%	can be integrated into system with no problems (confirmed 8 with previous study) 2 Since dependent on direction invisibilities	2.3% 6 processes) 1.7%	aced organic to really operation withouth planning for 3 it (more CAPEX) 0.9%	6 excended. 1.7%	aced or grownic his really expendiable withouth planning for 3 it (more CAPEX) 0.9%	and modular enough that it could be 6 excended 1.7%	6 expanded 1.7%	wastki/organics as well, as it behaves similar to 7 in-vessel comostina 2.0%	As of loday, seems pretly flexible for organics and/or 6 blosolids 1.7%	accept biosolds, and pretly stringent on cake dryness for 1 best certormance. 0.3%
	Is it adaptable to changes gov't legislation and regula changes?	n Changes in regulations (such as for PFAS in biosolids)	Not adaptable Comparable to alternatives	Most adaptable, Relative score flexible	x	Qualitative/Professional Judgement	2.9%	Since it depends on WWTP output, changes can be made at WWTP as 5 necessary.	Since it depends on WWTP output, changes can be mode at WWTP as 1.4% 5 necessary. 1.4%	WWTP output and compost regulatorising generally speaking will have to adjust at 5 the source. 1.4%	digestion, legislative changes can be incorproated. However, does not necessarily address PFAS (viti still be in 5 end material) 1	digestion, legislative digestion, legislative incorporated However, does not necessarily address PFAS (will still be in 1.4% 5 end materiali 1.4%	Some early Ilterature is showing that diving can partially address 6 PFAS 1.7% Generally speaking	Some early Iterature is showing that drying can partially address 6 PFAS 1.7% Generally speaking	Some early Berature is showing that dying can partially address 6 PFAS 1.7% Generally speaking	Some early Iterature is showing that drying can partially address 6 PFAS 1.7% Generally speaking	Some early Iterature is showing that drying can partially address 6 OPP26 1756 Generally speaking design codes are known and incin	Adaptable - biodrying can be accompanied by a Pyrolytic step to 7 address PFAS 2.0%	Unknown - would not count on no risk to gor't sigilation (not as well documented a process as Incineration). However, has potential to 3 "future proof" against PFAS 0.9%	Yes - sep. with regard to emissions monitoring and air scrubbing, these can be 8 added/modified. 2.3% Generally speaking
	Is it adaptable to changes codes, design standards, i other?	This is relevant to heat treatment, high pressure and high temperature processes Future weather	Not adaptable Comparable to alternatives	Most adaptable, Relative score flexible	x	Qualitative/Professional Judgement	2.9%	5 Not impacted	Some impact, depending on 1.4% 4 pasteurization step 1.1%	Will depend on composit regulations - most sities are adaptable in this 5 recard. 1.4%	Dependent on digestion - as a process, this can be 7 accomodated 2	Dependent on digestion - as a process, this can be 2.0% 7 accomposited 2.0%	Generary Spatianty design codes are known and incin technologi is stable, but process modifications can be 6 expensive 1.7%	design codes are known and incin technology is stable, but process modifications can be 6 excensive. 1.7%	design codes are known and incin technologi stabio, but process modifications can be 6 excensive. 1.7%	design codes are known and incin technology is stable, but process modifications can be 6 extensive. 1.7%	design codes are known and incin technology is stable, but process modifications can be 6 extensive. 1.7%	Unincem - would not count on no risk to gov't legislation (not as well documented a process 3 as incineration) 0.9%	Unknown - would not count on no risk to gov't legislation (n/n as well documented a crocosa as incimentation) 0.9%	design codes are known and incin technology is stable, but process modifications can be 6 expensive. 1.7%
Process Resiliency	Is it adaptable to changing climate conditions?	patterns are expected	Not adaptable Comparable to alternatives	Most adaptable, flexible	x	Qualitative/Professional Judgement	20%	Will depend on weather for application and long term storage of 5 material.	Will depend on weather for application and long term storage of 1.4% 5 material 1.4%	Will depend on weather for application and long term storage of 5 material. 1.4%	Will depend on weather for 6 application. 1	Will depend on weather for 1.7% 6 application. 1.7%	Not impacted by 9 climate changes 2.6%	Not impacted by 9 climate changes 2.6%	Not impacted by 9 climate changes 2.6%	Not impacted by 9 climate changes 2.6%	Not impacted by 9 climate changes 2.6%	Not impacted by climate 9 changes 2.6% Again - if generating	9 Not impacted by climate 9 changes 2.6%	Not impacted by 9 climate changes 2.6%
	Energy autonomy	Does it reduce reliance on external energy sources?	Significantly lower Comparable to alternatives	Significantly greater than Relative score alternatives	x	Qualitative/Professional Judgement	2.9%	1 No energy autonomy.	0.3% 1 No energy autonomy 0.3%	1 No enerov autonomy 0.3%	Not fully autonomous - but can generate 7 additional bicoas. 2 Beneficial, CFIA	Not fully autonomous - but can generate additional biooss. 2.0% Beneficial, CFIA	No - need oil or gas 1 (steam to coerate. 0.3%	No - need oil or gas (steam) to operate. Some heat recovery 2 cossible. 0.6%	No - need oil or gas (steam) to operate. Some heat recovery 2 oossible. 0.6%	No - need oil or gas 1 (steam) to coerate. 0.3%	No - need oil or gas 1 (steam) to coerate. 0.3%	Again - If generating syngas via pyrolysis step, mybe. May be able to recover waste heat energy, with added 8 cacital 2.3%.	Good possibility for energy autonomy given syngas 9 orodiaction. 2.6%	Some energy savings via process 5 steam bolier 1.4%
	Beneficial Use Material Generated	Does it generate a useful product that has such as compost, fertilizer, soil amendments, or waste that must be further manaver?	No beneficial Comparable to alternatives	Large quaritiles or varied beneficial byproducts	x	Qualitative/Professional Judgement		Based on past project experience, not many takers of "pure" biosolids	Based on past project experience, not many takers of "pure" biosolida material, especially	Has potential to be in demand in	certified fertilizer can be produced. This is in demand by agricultural community. Will have many	bennikula, C-VA centified divilized training of the second divilized This is in demand by community, Will have many destinations, 2.8% Beneficial, CFIA	Generates peliets that can act as ferifizer. Peliets generally moter, appealing than char, 8 cutretty. 2.3%	Generates pellets that can act as fertilizer. Pellets generally more appealing than char, 8 currently, 2.3%	Generates pelets that can act as fertitizer. Pelets generatly more appealing than char,	Generates pellets that can act as fortilizer, Pellets generally motier, appealing than char, 8 controlly. 2.3%	Generates pellets that can act as fertilizer. Pellets generally more appealing than char, 8 currently. 2.3%	Generates a biochar,	Syngaa, biochar - market for biochar not well understood	Only ash - and although some use is being appliced, this is not ouseranteed. 0.3%
	Reliability of future market the material generated	is there a future market for the energy/resources produced?	Significantly lower Comparable to alternatives	Significantly greater than Relative score alternatives	x	Qualitative/Professional Judgement	- 29%	2 material. Based on past project experience, not many takes of "pure" biosolids	0.6% 1 Insid form 0.3% Based on past project experience, not many lakers of "pure" biccolids material, especially	8 anticultural sector. 2.3% If customers signed up long term in agricultural sector, there is good secutly here (experence in WM	occidinations, 2 Beneficial, CFIA certified ferilizar can be produced. This is in demand by agricultural community. Will have many	certified fortilizer can be produced. This is in demand by agricultural community. Will have many	Market for biosolids pellets is well understood. Contingency plans can be put into place to manage	Market for biosolids pellots is well understood. Contingency plans can be put into place to manage	8 currently. 2.3% Market for biosolids pellets is well understood. Contingency plans can be put into place to manage	Market for biosoilds pellets is well understood. Contingency plans can be put into place to manage	Market for biosolids pellets is well understood. Contingency plans can be put into place to manage	7 similar to perchrists. 2.0%. Comparable to pyrolysis - cannot comment on stability of	7 vet 2.0%	It will always be landfileollagoons - this is 100% in control of City (but not necessarily environmental)
	Council values	Does it align with Council values and the City's Climate Action Plan?	Significantly lower Comparable to alternatives	Significantly greater than Relative score alternatives	x	Qualitative/Professional Judgement	29%	2 material. Land application alone not seen in the same light as	0.6% 1 Isaid form 0.3% Land application alone not seen in the same light as 0.5% 3 previous (IPFAS) 0.5%	8 sector) 2.3% Generally aligns with CAP, but there will be more truck traffic going to compost 6 boation. 1.0%	Generally aligns with CAP - biogas and beneficial use fortilizer, (still truck k	2.8% 9 destinations. 2.6% Generally aligns with CAP - biogas and beneficial use fertilizer, (still ruck k	8 cutlets. 2.3% Generally aligns with CAP; but does have air emissions implications. Also consumption of	B oxflets. 2.3% Generally aligns with CAP, but does have air emissions	8 cullets. 2.3% Generally aligns with CAP, but does have alir emissions	8 cullets. 2.3% Generally aligns with CAP, but does have air entisions	8 outlets. 2.3% Generally aligns with CAP, but does have air emissions	5 bioshar market (vet) 1.4%. Generally aligns with CAP, but does have air emissions implications. Electricity more than	5 probably risky 1.4% Generally algrs with CAP, but does have air emissions implications. Electricity more	8 fitenolity 2.3% Would argue that an incinerator is not in line with CAP, does have negative visibilitystigma, Would be a floogh
Additional Value	Local municipalities	Does it have the potential to strengthen partnerships with local municipalities?	Significantly lower Comparable to alternatives	Significantly greater than alternatives	x	Qualitative/Professional Judgement	5%	3 previous (PFAS) No. This would be a City- ownedioperated	No. This would be a City- owned/operated	6 location. 1.0% Yes - can potentially be a destination for other	8 traffic though) 1 Would only want to design to handle	1.3% 8 traffic though) 1.3% Would only want to design to handle	6 tossil fuels. 1.0% Comparble to other drying technologies - your don't want to oversite (more capital), you want to	6 implications. 1.0% Comparise to other drying tachnologies - you don't want to oversize (more capital), you want to	6 inglications 1.0% Compartie to other drying actinologies - you don't want to oversize (more capital), you want to	6 impleations 1.0% Compatible to other drying technologies - you don't want to overstap (more capital), you want to	6 implications 1.0% Comparise to other drying technologies - you don't want to oversitian (more capital), you want to	7 pas 1.2% Depending on size of facility, may find interest from neighboring districts - esp. for mixed inputs	7 than gas 1.2% Depending on size of facility, may find interest from	2 self 0.3% Excellent potential for biocolids management partnerships with
	Current assets reuse	Does it allow for utilization of City's existing assets? Does the footprint impact future planning?	Significantly lower Comparable to alternatives	Significantly greater than Relative score alternatives	x	Qualitative/Professional Judgement	1.08	1 solution. Basically just generating a biosolid as is now. Perhaps some enhacements to	Can re-see some (generating topad product, can potentialy re-see	8 organicsbesolds. 1.3%	5 Unix own biologies, 0 Atready have a draft design in proposal from Lystek- this	Vers 5 Levis own biocess 0.8% Yes - atthough would need to do a bit more on front end compared to lystek,	5 extrand later. 0.8%	5 excand later, 0.8%	5 extrand later. 0.8%	B Examplater U.0.5%	5 external later. 0.6 %	/ (Docends Data watco) 1.2%	6 neidteoring districts 3,0%	8 neoffborring districts 1.3%
		Technology maturity		Similante		Reference Technology Readiness Level (TRL), https://en.wkipedia.org/wki/Te chnology_readiness_level	1.7%	load out required but in general, no major 9 changes.	1.5% 3 pasteurization) 0.5%	2 required. 0.3%	8 tankage. 1	still can utilize existing 1.3% 7 infrastructure 1.2%	1 Brand new facility 0.2%	1 Brand new facility 0.2%	1 Brand new facility 0.2% Technology is well understood - some North American	expand dewatering building to make this 3 work 0.5%	expand dewatering building to make this 3 work 0.5%	1 Brand new facility 0.2%	1 Brand new facility 0.2%	1 Brand new facility 0.2%
	Technology maturity	in Canada, North Americaetc.	Significantly lower Comparable to than alternatives alternatives	Significantly greater than Relative score alternatives	×	https://en.wikipedia.org/wiki/To chnology_readiness_level	2.7%	Technology is well understood - North American 9 experience as well.	2.4% 9 excellence as well 2.4%	Technology is well understood - North American 9 experience as well. 2.4%	Technology is well understood - North American 9 experience as well. 2	Technology is well understood - North American 2.4% 9 exterience as well, 2.4%	Technology is well understood. North American 9 experience as well. 2.4% Minimal process risk, this can be	Technology is well understood - North Amarican 9 experience as well. 2.4% Minimal process risk, this can be	North American exportence as well, but mosity global installations. 1.9% Minimal process risk, this can be	Technologi is well understool - North American 9 excertence as well 2.4% Minimal process risk, this can be	Technology is well understool - North American 9 excerience as well 2.4% Minimal process risk, this can be	Orly one facility in operation in US (Silicon 2 Valley, CA) 0.5%	in USA. Athoogh others are being constructed/commissioning - 2 not enough data. 0.5%	Technology is well understood - good Canadian 9 experience as well. 2.4%
Innovation	Process Risk	Would the City be the 'Tirst of its' kind or take on any process risk?		Significantly lower than Relative score alternatives	×	Qualitative/Professional Judgement	8%	Process risk only from incoming material. Since City has full control of biosolids, should be 9 none.	Process risk only from incoming material. Since City has full control of biosolids, should be 2.4% 9 rone. 2.4%	Process risk only from incoming material: Since City has full control of biosolids, should be 9 none. 2.4%	No process risk. Many installations - well understood in 9 WW industry. 2	No process risk. Many installations - well understood in 9 WW industry. 2.4%	agaranteed by vendor based on their own experience. City will have to guarantee 8 incoming cake. 2.1%	suaranteed by guaranteed by vendor based on their own experience. City will have to guarantee 8 incorring cake. 2.1%	suaranteed by yearanteed by vendor based on their own experience. City will have to guarantee 8 incoming cake. 2.1%	suarantee by guarantee by vendor based on their own experience. City will have to guarantee 8 incoming cake. 2.1%	ins, this call be guaranteed by vendor based on their own experience. City will have to guarantee 8 incoming cake. 2.1%	Would consider 2 process risk to be high 0.5%	Would consider process risk 2 to be high 0.5%	Technology is well understood - good Canadian 9 experience as well. 2.4%
	People and process innov	Does the City have the people and process in place to support this innovative technology?	Significantly lower Comparable to than alternatives	Significantly greater than alternatives	x	Judgement; discussions with City staff	2.7%	Should be no impact to existing WWTP ops. However, need staff to manage takers of material - 7 application looistics	Some impact due to pasteurization step. need staff to manage takens of material - 1.9% 6 aceletation locatics 1.6%	Will need a new staff complement for composting site, as well as margement 5 of off takers. 1.3%	New on site process 9 - but reasonable 2	Will need stationary operator due to high 2.4% 7 temp and pressure. 1.9%	Comparable to all drying technologies. 5 City will need staff. 1.3%	Comparable to all drying technologies. 5 City will need staff. 1.3%	Comparable to all drying technologies. 5 City will need staff. 1.3%	Comparable to all dying technologies. 5 City will need staff. 1.3%	Comparable to all drying technologies. 5 Citv will need staff. 1.3%	This is a new technology - will need 2 seeclalized staff 0.5%	This is a new technology - 2 will need seculated statt 0.5%	This is a new technology - will need specialized staff (stationary 3 coerator) 0.8%
	Complexity of operations	Impact to operations, safety, usability, requires new staff, training, flexibility	Technically complex and difficult to operate- to operate-some training needed	It Easy to operate- minimal to no new Relative score training required	x	UsantanverHotessional Judgement; discussions with City staff	5.0%	Should be no impact to existing WWTP ops. HOWEVER, need to manage takers of material, which is impact to City staffino.	Some impact due to pasteurization step. Also need to manage takers of 5 material 2.5%	Logistics mostly - very simple site to operate 4.0%	Technology and Ops well understood in NA. Will be new to City though. 4	Technology and Ops well understood in NA. Will be new to Give though 4.0%	Technology and Ops well understood in NA. Dryer technology carries operational risk, in 5 terms of H&B. 2.5%	Technology and Ops well understood in NA. Dryer technology carries operational risk, in 5 terms of H&S. 2.5%	Technology and Ops well understood in NA. Dryer technology carries operational risk, in 5 terms of M&S. 2.5%	Technology and Ops well understood in NA, Dryer technology carries operational risk, in 5 terms of HSS, 2.5%	Technology and Ops well understood in NA. Dryer technology carries operational risk, in 5 terms of HSS. 2.5%	From what documentation is available, this is a "burkley" process 5 coxided by mfr 2.5%.	From what documentation is available, this is a "turkey" 5 2.5%	Although some local experience can help (Ontario), this is a new moness 1.5%
Operations & Maintena	Proprietary Process, Parts after-market service	and proprietary? How easy is it to get parts or service?	More proprietary parts; difficult to obtain after- alternatives	No proprietary parts, easier to obtain service	x		15%		No impact to	Will be new to City, but compositing industry is mature. Will have after		Technology vendors well represented in	Technology vendors well represented in 8 Canada and USA 4.0%	Technology vendors well represented in 8 USA. 4.0%	Technology vendors well represented in 8 USA 4.0%	Technology vendors well represented in 8 USA 4.0%	Technology vendors represented in USA, but not as popular	Bioforcetech is biggest name - based in USA, bit no trunch after- 3 market expelience (yet) 1.5%	Not enough known at this time about after market service - only one vendor in Canada (CHAR 3 Technologies) 1.5%	3 new process 1.5% Based on GTA experience good support from known Incinerator package vendors, but they 7 area il n USA Brand new facility -
	Complexity of maintenance	Impact to	Technically complex and Moderately diffi- difficult to to maintain-som maintain-much training	It Easy to maintain- minimal to no new Relative score training required	x	Qualitative/Professional Judgement; discussions with City staff	5.0%	No impact to 9 baseline WWTP ops No impact to	4.5% 9 baseline WWTP ops 4.5% No impact to	8 market support. 4.0% New technology for City, but it is well understood by	New technology vehicles well represented in Canada and USA. 4 New technology for City, but it is well understood by	4.0% 8 Canada and USA 4.0% New technology for City, tut it is well understood by	8 Canada and USA. 4.0% New technology for City, but it is well understood by	8 USA. 4.0% New technology for City, but it is well understood by	8 USA 4.0% New technology for Oity, but it is well understood by	8 USA 4.0% New technology for City, but it is well understood by	6 as paddle dryers 3.0% New technology for City, but it is well understood by	3 market expeirence (yet) 1.5% Still a new technology - will need additional 3 staff, skill set 1.5%	3 Technologies) 1.5% Still a new technology - will	7 are all in USA. 3.5% Brand new facility - will add complexity to typical maintenance
	Capacity Suitable for City Corrwall?	f capacity suitable to accept material from	training needed Capacity too large/not suitable Comparable to alternatives		x	Qualitative/Professional Judgement	5.0%	9 baseline WWTP cos Yes, the program is only as good as the output material that 8 is produced.	4.5% 9 baseline WWTP cos 4.5% Yes, the program is only as good as the output makrial that 3.2% 8 is conduced 3.2%	5 industry 2.5% Well suffed to	5 industry. 2 Well suited to	2.5% 5 industry. 2.5% Well suited to	5 industry. 2.5% System too large for Commail feed inputs. Not 1 recommended. 0.4%	5 industry. 2.5% Capacity is -*on the edge", it can be made to work 1.2%	5 industry. 2.5% System too large for Cornwall feed inputs. Not 1 recommended. 0.4%	5 industry 2.5% Cornwall biosolids output is a good 8 match. 3.2%	5 industry 2.5% Cornwall biosolids output is a good 8 match. 3.2%	Suitable/modular for	3 need additional staff, skill set 1.5% Could make this work based on pre-packaged systems. Will also december on drving	3 practices 1.5% Incineration too big for City's annual biosolids output 0.4%
	Implementation hurdles	General ease of			x	Qualitative/Professional Judgement	4.0%	May receive serious restance from local communities, approvals	May receive serious restance from local communities, approvals	9 Conwall application. 3.6% Permitting for compost site will be	9 Cornwall acolication. 3 Will be a challenge within existing buildings, but can be	9 Cornwall acelcation. 3.6% Will be a challenge within existing buildings, but can be	1 recommended. 0.4% Permitting is biggest chalenge (ECA Air), large footpristo 3 WWTP site. 0.8%	Permitting is biggest challenge (ECA Air), large footprint on WWTP site. Esp. if	1 recommended. 0.4% Permitting is biggest challenge (ECA Ar), large footprinton 3 WWTP site. 0.8%	Dryers generally well understood. Some permitting hurdies, but likely	Dryers generally well understood. Some permitting hurdids, but likely	8 Corrwal's material 3.2% Will require a new site. Permitting may be a challenge given no Ontario plants in	7 technologu used 2.8% May be able to get on WWTP site. Permitting may be a challenge given no Chatario	Permitting is biggest challenge (ECA Air), large footprint on
Implementation	Footprint	Relative footprint of process at WWTP, or whole new site?		Smaller footprint Relative score	x	Qualitative/Professional Judgement	12%	1 processes. No change in plant 9 footorint.	0.3% 1 processes. 0.3% Some change in footprint due to perstructure. 1.9%	5 a challense. 1.3% Whole new site 1 required. 0.3%	8 done. 2 Can be adapted to suit WWTP constraints within existing 8 processes/buildings. 2	2.1% 8 done, 2.1% Can be adapted to suit WWTP constraints within existing 2.1% 8 processes/builting, 2.1%	2 WWIP site. 0.8% Comparable footprint to fluid bed dryer, including aux. 2 svitems. 0.5%	4 multiple units. 1.1% Footprint likely larger than other options, esp. If multiple units required. 0.8%	Comparable footprint to drum dryer, including aux.	7 isst ECA air. 1.9% Reasonable footprint, can integrate at WWTP 8 site. 2.1%	7 kst ECA air. 1.9% Ressonable footprint, can integrate at WWTP 8 site. 2.1%	3 operation 0.8% Large footprint, would take up significant 5 contion of WVTP site. 1.3%	A plants in operation 1.1% Footprint is reasonable for protypisklyngas - but also 4 need seace for skube diver 1.1%	4 WWTP site 1.1% Potential for massive Footprint, 2 including new stack, 0.5%
	Impact to existing WWTP operations	How will this affect ongoing operations at Cornwall WWTP? Will it be difficult to integrate or require significant shubdowns?	Much larger Comparable to alternatives	Much less impact than alternatives	x	Qualitative/Professional Judgement		Continue operating WWTP as normal, producing biosolids. This is a program for	Some change in bodprint due to	No impact to ongoing WVTP op - this will be new	Altrough construction vice throw if the an impact, a will interrute way within	2.1% 8 process/builtons 2.1% B process/builtons 2.1% ARbody umpact 2.1% Interpret	2 swamm. 0.57% Atthough a large new process, it will be "stand atome" until brough online. Faitly acay to integrate by comparison (Cale	3 recuired. 0.8% Affocult a large 0.8% new process, it will be "stand alone" until brough online. Fairly easy to integrate by comparison (Cake inputs). Large	2 svakme. 0.5% Attraction a large new process, it will until brough contine. Failly easy to integrate by composition (Cake imputs). Large	8 sto. 2.1% Abrough a target new process, it will be tabled abrow until trough online. Fairly easy to integrate by comparison (Cake	 a solo Although a large new process, it will be "stand alone" until trough orifine. Failty easy to integrate by comparison (Cake 	Although a large new process, it, will be "Stand alone" until brough critics. Farity easy to integrate by comparison (Cake	Athough a large new process, it will be 'stand alone' until trough online. Fairly easy in minipate by	2 Including interview status, 0.05% Although a large new process, it will be "stand alone" until brough online. Fairly easy to integrate by comparison (Cake
	Community acceptance		Much less than Comparable to alternatives alternatives	Much greater than alternatives	x	Qualitative/Professional Judgement	2.7%	9 after it leaves site. Unlikely that this will be accepted by	2.4% 7 Bodgind Sal B 19% antievotion 19% biologinal flow and biologinal flow and biologin	9 Store 2.4% Difficult to say - new composting site has some negative connotations. But can be managed as a long term solution in benefit to the City	8 existina svisem 2 Beneficial use	Beneficial use	4 mods) 1.1% Since a drying process, and will require large expansion of plant,	Since a drying process, and will require large expansion of part.	Since a drying process, and will require large expansion of plant,	 b (IRODE) 1.5% May be fine - this could be "hidden" within WWTP process, as it isn't bio equipment. But 	Angle Section 1.279 May be fire - this could be "hidden" within WWTP	5 insulta) 1.3%. Public may be more accepting due to it addressing PFAS, but it is still a "wey" process	 correarison (Lake Index) 1.3% Public may be more accepting due to it addressing PLAS, but it is 	Based on experience, new
Social	Hauling / truck traffic and r	Potential change in traffic and noise at site and in nearby	Much greater than Comparable to alternatives	Much less than alternatives Relative score	x	Qualitative/Professional Judgement	10%	Added truck traffic. Depends on destination sites as	0.3% 1 factor 0.3% Lots of truck traffic since liquid product May have to store on multiple sites	(esp. for organics integration) 2.0%	ferilizer will be a 8 "good news story" 2	2.7% 8 "oood news story" 2.7% Increase in truck	Truck traffic LEAVING alle with be indicated with be	2 with locals. 0.7%	may not go over well with locals. 0.7%	still a dysr, with 6 associated risks. 2.0% Truck traffic LEAVING site will be reduced -this is a	6 bioesuioment 2.0% Truck traffic LEAVING site will be reduced - this is a	Wat has air envisions 5 imelications Will have outgoing traffic for blochar, portuge incoming traffic from shared flocoids	still a "twor" process that has 5 ail emissions intellications 1.7% Will have outgoing traffic for blockar, perhaps incoming traffic for attacked blockds	Incinetators do NU I over real with O.3% Depending on shared bloocids program, may see added wuck traffic. If adm managed on sh. NO cutguing P site, NO cutguing 2.7%
		Anticipated potential	More oday			Qualitative/Professional Judgement		2 wel.	0.7% 1 (away from WWTP) 0.3%	Added truck traffic in area of new 5 compost sile. 1.7%	Increase in truck traffic leaving site 6 due to louid product. 2	Increase in truck traffic leaving site 2.0% 6 due to lead product. 2.0%	Historically, odour	B direct of this is a direct of this is a direct or other and this is a direct or other. 2,7% Dyna ysystem can be contained. Storage of palets can be dorous, but	B control attention reduced this is a diried product. 2.7% Dying system can be contained. Storage of polets can be obtrous, but contained.	B direct and will be reduced - this is a direct producet. 10 - 2.7% Drying system can be contained. Storage of pelleta can be odorous, but	B define the second and the bar reduced - his is a defined product 2.7% Drying system can be contained. Storage of pellets can be odorous, but	from shared biosolds 5 scooram 1.7%.	traffe for shared bisolids 5 program 1.7%	B truck traffic. 2.7%
	Odour potential	for odours or opportunity to reduce odours	More odour No change potential	Less odour potential Relative score	x 26 4		3.3% 100% 100%	Odour potential is Nigh for sold material, depending on application 1 process.	Odsur potential for site application is high, but it depends on application 0.3% 2 0 0 49% 44%	Odour may be a problem. But can be 3 managed. 1.0% 60%	No increase in odsur beyond 8 WWTP baseline. 2 7	No increase in odour beyond 2.7% 8 WWTP baseline. 2.7% 74% 71%	6 with RTD. 2.0%	contained of precision in the contained of the contained	an be dorous, but conbined Tylocally need dedicated 7 system. 2.3% 48%	8 svstem. 2.7% 8 svstem. 64% 64%	anthe dorous, but contained. Tylocally ned doctated 8 system. 2.7% 63%	Odours can be managed - system is 8 enclosed. 2.7% 48%	Octours can be managed - system is enclosed. 2.7% 47%	9 No adour. 3.0% 38%

Cornwall Biosolids, Organics, and Septage Master Plan - Long List of Alternatives for Evaluation - LIST B - BIOSOLIDS

	EVALUATION	PERFORMANCE	RATI	NG (0=WORST TO 1	0=BEST)	UNIT(S) OF	QUALITATIVE	QUANTITATIVE	METHOD OF MEASURE	Weighting of Main Category	Neighting of		vered Aerobic Composti	ng (ASP)		rocessing and AD - Wet Sys	tem	3. Pre-Processi	ing and AD - Dry (Plu	g flow) System	30 4.	Co-Digestion at Cornwall W	WTP	5. Third-F	Party (off-site) Merchant Cap	pacity
ATEGORY	CRITERIA	MEASURE	0	5	10	MEASURE	GOALINATIE	GOALT		Main Category	Subcategory	Score	Reasoning	Weighted Score	Score	Reasoning Weig	hted Score	Score	Reasoning	Weighted Score	Score	Reasoning Potential for biogas	Weighted Score	Score	Reasoning Weigl	ighted Score
					Significantly																	generation, to offset		1		
		Scope 1 reduction (direct)	Significantly lower than alternatives	Comparable to	greater than	Relative score	x		Relative to existing process				Need to move trucks from site to			Potential for biogas			Potential for biogas			energy costs. However, still need to move		1	Need to move material from	
		(unect)	than alternatives	alternatives	alternatives								new composting			generation, to offset			generation, to offset			material from pre-		1	transfer station to	
					_						3.0%	4	facility.	1.2%	7	energy costs.	2.1%	7	energy costs.	2.1%	6	processing site. Potential for biogas	1.8%	5	point of use.	1.5%
		Scope 2 reduction			Significantly																	generation, to offset		1	Energy costs borne	
IG Mitigation	Does it eliminate or mitigate GHG emissions?	(indirect, such as	Significantly lower than alternatives	Comparable to	greater than	Relative score	x		Relative to existing process	5%			Truck will drop off			Potential for biogas			Potential for biogas			energy costs. However, still need to move		1	by Vendor - but City may have to take	
	Gino cimisalona:	purchase of fuel)	triair aiterriauves	alternatives	alternatives								organics at new			generation, to offset			generation, to offset			material from pre-		1	into account in GHG	
											1.5%	6	compost site.	0.9%	7	energy costs.	1.1%	7	energy costs.	1.1%	6	processing site.	0.9%	5	balance.	0.8%
					0																	Potential for biogas generation, to offset		1	Energy costs borne	
		Scope 3 reduction (up and downstream of	Significantly lower		Significantly greater than	Relative score	x		Relative to existing process				Additional truck									energy costs. However,		1	by Vendor - but City	
		value chain)	than alternatives	alternatives	alternatives								traffic to haul away compost to points of			Potential for biogas generation, to offset			Potential for biogas generation, to offset			still need to move material from pre-		1	may have to take into account in GHG	
											0.50%	4	use.	0.2%	7	energy costs.	0.4%	7	energy costs.	0.4%	6	processing site.	0.3%	5	balance.	0.3%
																Capital costs are extensive. Note that								(
		Estimated total capita	Significantly	Comparable cost to	Significantly lower	r			Simplified quantitative assessment based on existing				New site required.			current output from			Capital costs					(
	Capital costs	costs	greater cost than alternatives	alternatives	cost than alternatives	2023\$		x	costing data and information in				\$12-15M for composting facility			Cornwall cannot justify expenditure			comparable to Wet AD, but capacity			Capital costs IN TOTAL would be comparable to		(
			anomativoo		allornalitos				literature				for dewatered			based on costing			requirements too			Wet AD. You will need		(Would be offloaded	
					_				Simplified quantitative	-	15.0%	7	biosolids. Will need new staff	10.5%	2	models.	3.0%	2	high.	3.0%	2	\$500K per year, NOT	3.0%	8	to Vendor WouldI be offloaded	12.0%
	Operating and maintenance	Additional staffing,	Significantly	Comparable cost to	Significantly lower cost than				assessment based on existing				for composting site;									INCLUDING pre-		(to Vendor, assume	
	costs	utility costs, operation savings	alternatives	alternatives	alternatives	2023\$ per year		×	costing data and information in		5.0%	c	will have to manage	2.0%	2	\$100-150/tonne - will	1.0%	2	\$100-150/tonne - will	1.00/	2	processing, at \$100-	1.0%		\$150/tonne "all in"	4.0%
anaial Impacta									literature	25%	5.0%	0	takers of compost.	3.0%	2	require new city staff	1.0%	2	require new city staff	1.0%	2	150/tonne Some funding	1.0%	°	(no capex)	4.0%
ancial Impacts										23%												opportunities due to		(Would depend on	
		Does this solution ope the City up to	significantly lower	Comparable to	Significantly				Qualitative/Professional				Unlikely that funding									landfill diversion, and generation of biogas.		(agreements with 3rd party, esp. with	
	Funding Opportunities	opportunity to external			greater than alternatives	Relative score	x		Judgement				could be obtained,			Some funding			Some funding			However, this is not a		1	regard to energy	
		funding?											but worth looking into due to potential			opportunities due to landfill diversion, and			opportunities due to landfill diversion, and			guaranteed success given past project		1	generation and environmental	
											2.0%	2	community benefit.	0.4%	8	generation of biogas.	1.6%	8	generation of biogas.	1.6%	8	experience.	1.6%	6	credits	1.2%
			Cippific anth (Significantly				Simplified quantitative							Potential for offset, but for vertical			Potential for offset, but for vertical			Some potential synergies		1	Energy costs would	
	Energy costs	Does it reduce baselin energy costs?	greater than	Comparable to alternatives	Lower than	Approx %		x	assessment based on existing costing data and information in							process energy can			process energy can			with WWTP, but still have			be bundled in with	
		energy costs?	alternatives	alternatives	Alternatives	change			literature		0.001		New energy inputs	4.00%		get expensive	1.00%		get expensive	1.00/	-	to consider pre-	4.5%		unit pricing per	0.70/
											3.0%	4	required on new site.	1.2%	4	(heating, electricity)	1.2%	4	(heating, electricity)	1.2%	5	processing.	1.5%	9	tonne.	2.7%
		Future infrastructure											Yes - as noted in											1		
	Is it adaptable over time to new,	needs (i.e. new tanks,	Not adaptable	Comparable to	Most adaptable,	Relative score	x		Qualitative/Professional				biosolids screening review, this new site			Not as adaptable - system would be			Inherent flexibility in a			Comparable to Wet AD, but also more risk		1		
	different or larger inputs?	pipeline capacity, process additions)	not adaptable	alternatives	flexible		, î		Judgement				can potentially open			designed from day 1			plug flow system -			because of incorporating		1	3rd party provides	
		process additions)									2.9%	•	up to biosolids loads	2.3%	4	to handle the City's	1.1%	7	can handle bulky	2.0%	2	material at WWTP	0.9%	1 0	best flexibility (but will	2.6%
					_					1 -	2.9%	0	as well.	2.3%	4	curbside program All organics	1.170	/	All organics	2.0%	3	(digesters).	0.9%	9	depend on contract)	2.0%
	Is it adaptable to changes in	Changes in regulation	s													processing is			processing is					1		
	gov't legislation and regulation	(such as for PFAS in	Not adaptable	Comparable to alternatives	Most adaptable, flexible	Relative score	x		Qualitative/Professional Judgement				Will have to adjust at the source			succeptible to changes in			succeptible to changes in			All organics processing is		1	Changes are the	
	changes?	biosolids)											(collections			legislation around			legislation around			succeptible to changes in		1	responsibility of the	
					-					-	2.9%	5	programs) Will depend on	1.4%	5	PFAS Comparable to other	1.4%	5	PFAS Comparable to other	1.4%	5	legislation around PFAS	1.4%	9	Vendor	2.6%
	Is it adaptable to changes in	This is relevant to hea treatment, high		Comparable to	Most adaptable				Qualitative/Professional				Will depend on compost regulations -			Comparable to other alternatives.			Comparable to other alternatives.			Comparable to other		1		
	codes, design standards, and other?	pressure and high	Not adaptable	Comparable to alternatives	Most adaptable, flexible	Relative score	x		Judgement				most sites are adaptable in this			Generally speaking, industrial process			Generally speaking, industrial process			alternatives. Generally speaking, industrial		1	Changes are the responsibility of the	
	ouler?	temperature processe	s								2.9%	5	regard.	1.4%	5	design.	1.4%	5	design.	1.4%	5	process design.	1.4%	9	Vendor	2.6%
		Future weather																						1		
		to change in terms of											Will depend on											1		
cess Resiliency	Is it adaptable to changing climate conditions?	higher temps, more	Not adaptable	Comparable to alternatives	Most adaptable, flexible	Relative score	x		Qualitative/Professional Judgement	20%			weather for											1		
,		rain, different types of wind. Will technology		anomanoo	lionabio				ougomon				application and long term storage of			No impact from			No impact from					1	No impact from	
		be impacted?									2.9%	5	material.	1.4%	9	Climate	2.6%	9	Climate	2.6%	9	No impact from Climate	2.6%	9	Climate	2.6%
		Does it reduce relianc			Significantly														Some energy from biogas, but not full			Some energy from		1		
	Energy autonomy	on external energy	Significantly lower than alternatives	r Comparable to alternatives	greater than	Relative score	x		Qualitative/Professional Judgement							Some energy from			autonomy (slightly			biogas, but not full		1		
		sources?	than alternatives	alternatives	alternatives				Judgement		2.0%		No energy	0.3%	7	biogas, but not full	2.0%	c	less gas with Dry AD)	1.7%	7	autonomy. Must also consider both sites.	2.0%	1 -	Depends on vendor	1.4%
		Does it generate a			-					1 -	2.9%		autonomy.	0.376	1	autonomy.	2.070	0	AD)	1.7 /0	,	consider bour sites.	2.076		process	1.4 /0
		useful product that ha	s		Large quantities																			1		
	Beneficial Use Material	such as compost, fertilizer, soil	No beneficial	Comparable to	or varied	Relative score	x		Qualitative/Professional													Compost feedstock		1	Will depend on	
	Generated	amendments, or wast	e byproducts	alternatives	beneficial byproducts				Judgement				Has potential to be in									generated.MAY have		1	vendor process	
		that must be further managed?									2.9%	8	demand in agricultural sector.	2.3%	8	Compost feedstock generated.	2.3%	8	Compost feedstock generated.	2.3%	6	issue if co-mingling with biosolids.	1.7%	5	(assume no biogas, could be compost)	1.4%
										1 -		-	If customers signed		-				3					1		
		Is there a future mark			Significantly								up long term in agricultural sector,											1		
	Reliability of future market for th material generated	he for the energy/resources	Significantly lower than alternatives	Comparable to	greater than	Relative score	x		Qualitative/Professional Judgement				there is good			Good security from			Good security from			Compost feedstock		1		
	material generated	produced?	than alternatives	alternatives	alternatives				Judgement				security here (experence in WM			Ag sector if long term contract is set			Ag sector if long term contract is set			generated.MAY have issue if co-mingling with		1	Vendor responsible	
											2.9%	8	sector)	2.3%	8	up.	2.3%	5	up.	1.4%	6	biosolids.	1.7%	9	for final product	2.6%
									Qualitative/Professional				0												Yes, it achieves	
		Does it align with Council values and the	e Significantly lower	Comparable to	Significantly				Judgement				Generally aligns with CAP, but there will			Landfill diversion and			Landfill diversion and			Landfill diversion and		1	diversion goal. But perhaps some	
	Council values	City's Climate Action	than alternatives	alternatives	greater than alternatives	Relative score	x						be more truck traffic			energy generation -			energy generation -			energy generation - yes.		(issues with	
		Plan?			allornalitoo						1.7%	6	going to compost location.	1.0%	8	yes. Truck traffic - not so much	1.3%	8	yes. Truck traffic - not so much	1.3%	8	Truck traffic - not so much	1.3%	6	"offloading responsibility"	1.0%
									Qualitative/Professional		1.7 %	0	iooddon.	1.070	0	not do muon	1.370	0	not bo muon	1.570	0		1.070		Tooponoionity	1.070
									Judgement													Not advised - would have		1		
		Does it have the			Significantly																	to set up pre-processing exclusively for WWTP,		1		
ditional Value	Local municipalities	potential to strengther partnerships with local	Significantly lower than alternatives	alternatives	greater than	Relative score	x			5%												because increasing		(
		municipalities?			alternatives								Yes - can potentially be a destination for			Excellent			Excellent			outsdie feedstock means that it approaches Wet			Vendor is	
													other			opportunities here to			opportunities here to			AD solution (will need			independent; we	
									Qualitative/Professional		1.7%	8	organics/biosolids.	1.3%	9	add more feedstock	1.5%	9	add more feedstock	1.5%	5	more digesters)	0.8%	1	cannot influence.	0.2%
		Does it allow for utilization of City's			Significantly				Judgement																	
		existing assets? Does	Significantly lower than alternatives	Comparable to	greater than	Relative score	x															Can use some assets on			Potentially using part	
	Current assets reuse	the footprint impact	triair aiterriauves	alternatives	alternatives								New site for									site within WWTP, but will		(of landfill site for	
	Current assets reuse								D.(1.7%	2	composting required	0.3%	1	new site.	0.2%	1	new site.	0.2%	5	still need pre-processing.		7	transfer station.	1.2%
	Current assets reuse	future planning?		1					Reference Technology Readiness Level (TRL),							Although technology			Although technology					l.		
	Current assets reuse	Technology maturity					1	1	https://en.wikipedia.org/wiki/Tec				Technology is well			is new to north			is new to north			All second to the state of the second			1	
		Technology maturity level scale, considerin	 Significantity lower 	Comparable to	Significantly greater than	Relative score		¥														Although technology is		l i		
	Current assets reuse	Technology maturity level scale, considerin similar climates, experience in Canada	 Significantly lower than alternatives 	Comparable to alternatives	Significantly greater than alternatives	Relative score		x	hnology_readiness_level				understood - North			america, good			america, good			new to north america,		ļ		
		Technology maturity level scale, considerin similar climates,	 Significantly lower than alternatives 	Comparable to alternatives	greater than	Relative score		x			2.7%	9	understood - North American experience as well.	2.4%	7	america, good understanding in Europe.	1.9%	7		1.9%	7	new to north america, good understanding in Europe.	1.9%	9	Offloaded to Vendor	2.4%
		Technology maturity level scale, considerin similar climates, experience in Canada North America, etc.	than alternatives	Comparable to alternatives	greater than	Relative score		x		-	2.7%	9	understood - North American experience as well. Process risk only	2.4%	7	understanding in Europe.	1.9%	7	america, good understanding in Europe.	1.9%	7	new to north america, good understanding in	1.9%	9	Offloaded to Vendor	2.4%
nution	Technology maturity	Technology maturity level scale, considerin similar climates, experience in Canada North America, etc.	Significantly lower	Comparable to alternatives	greater than	r		x		_	2.7%	9	understood - North American experience as well.	2.4%	7	understanding in	1.9%	7	america, good understanding in	1.9%	7	new to north america, good understanding in	1.9%	9	Offloaded to Vendor	2.4%
ovation		Technology maturity level scale, considerin similar climates, experience in Canada North America, etc.	Significantly lower significantly e greater than	alternatives	greater than alternatives	Relative score	x	x	hnology_readiness_level	8%	2.7%	9	understood - North American experience as well. Process risk only from incoming	2.4%	7	understanding in Europe.	1.9%	7	america, good understanding in Europe. Although technology	1.9%	7	new to north america, good understanding in		9	Offloaded to Vendor	2.4%

Cornwall Biosolids, Organics, and Septage Master Plan - Long List of Alternatives for Evaluation - LIST B - BIOSOLIDS

LUATION	EVALUATION	PERFORMANCE	RATI	G (0=WORST TO 1	0=BEST)	UNIT(S) OF		IVE METHOD OF MEASURE	Weighting of	Weighting of	1. Cov	ered Aerobic Composti	ng (ASP)	2. Pre	Processing and AD - Wet	t System	3. Pre-Proces	sing and AD - Dry (Plug	flow) System	4	I. Co-Digestion at Cornwall W	WTP	5. Third-	Party (off-site) Merchan	nt Capacity
EGORY	CRITERIA	PERFORMANCE MEASURE	0	5	10	UNIT(S) OF MEASURE	QUALITATIVE QUANTITAT	IVE METHOD OF MEASURE	Weighting of Main Category	Weighting of Subcategory	Score		Weighted Score	Score	Reasoning \		Score	Reasoning V	Veighted Score	Score		Weighted Score	Score		Weighted Sco
	People and process innovation	Does the City have the people and process in place to support this innovative technology?			Significantly greater than alternatives	Relative score	x	Qualitative/Professional Judgement; discussions with City staff		2.7%	5	Will need a new staff complement for composting site, as well as mangement of off takers.	1.3%	5	Need new staffing complement.	1.3%	5	Need new staffing complement.	1.3%	5	Will need support on WWTP, but also new staff at external pre- processing facility.	1.3%	9	Offloaded to Vendor	
	Complexity of operations	Impact to operations, safety, usability, requires new staff, training, flexibility	Technically complex and difficult to operate much training needed	Moderately difficult to operate-some training	Easy to operate- minimal to no nev training required	v Relative score	x	Qualitative/Professional Judgement; discussions with City staff		5.0%	7	Logistics mostly - very simple site to operate. Will need new staff on site.	3.5%	5	Need new staffing complement. This is a new process.	2.5%	5	Need new staffing complement. This is a new process.	2.5%	6	Can use staffing complement at WWTP, but external pre- processing site will require staffing.	3.0%	9	Offloaded to Vendor	
ons & Maintenance	Proprietary Process, Parts, and after-market service	Is the process proprietary? How easy is it to get parts or service?	More proprietary parts; difficult to obtain after- market service	Comparable to alternatives	No proprietary parts, easier to obtain service	Relative score	x		15%	5.0%	8	Will be new to City, but composting industry is mature. Will have after market support.	4.0%	5	Good support, however many mfrs located in Europe.	2.5%	5	Good support, however many mfrs located in Europe.	2.5%	6	Good support, however many mfrs located in Europe for pre- processing. For co- digestion portion, may be able to rely on NA WW experience.	3.0%	9	Offloaded to Vendor	4
	Complexity of maintenance	Impact to maintenance safety, usability, requires new staff, training, flexibility	complex and	Moderately difficult to maintain-some training	Easy to maintain- minimal to no new training required		x	Qualitative/Professional Judgement; discussions with City staff		5.0%	5	New technology for City, but it is well understood by industry.	2.5%	3	Since this is new to City, has potential to have large impact on staffing requirements.	1.5%	3	Since this is new to City, has potential to have large impact on staffing requirements.	1.5%	5	Can use staffing complement at WWTP, but external pre- processing site will require staffing.	2.5%	9	Offloaded to Vendor	
	Capacity Suitable for City of Corriwall?	Is the minimum capacity suitable to accept material from the City?	Capacity too large/not suitable	Comparable to alternatives	Capacity suits the City's output	Relative score	x	Qualitative/Professional Judgement		4.0%	9	Well suited to Cornwall application.	3.6%	1	Need minimum 30,000 wt/year to justify CAPEX and OPEX, need outside material.	0.4%	3	Too large of a process for Cornwall organics - would need outside material. May be able to integrate more L&YW material to make up difference	1.2%	8	Capacity can be designed to suit incoming material and digester capacity	3.2%	9	Vendor will be responsible for capacity	3.
plementation	Implementation hurdles	General ease of implementation, permitting, new site, constructability, schedule, supply chain	Much more difficult than alternatives	Comparable to alternatives	Much less difficult than alternatives		x	Qualitative/Professional Judgement	12%	2.7%	5	Permitting for site will be a challenge	1.3%	5	Permitting for site will be a challenge	1.3%	5	Permitting for site will be a challenge	1.3%	5	Some challenges in implementation on WWTP (permitting, ongoing ops)	1.3%	9	Permitting is vendor's responsibility	
	Footprint	Relative footprint of process at WWTP, or whole new site?	Much larger footprint than alternatives	Comparable to alternatives	Smaller footprint	Relative score	x	Qualitative/Professional Judgement		2.7%	1	Whole new site required.	0.3%	1	Whole new site required.	0.3%	1	Whole new site required.	0.3%	4	Part on WWTP site, but still need new site for pre- processing.	1.1%	9	Only footprint is for transfer station. Processing is by vendor	
	Impact to existing WWTP operations	How will this affect ongoing operations at Cornwall WWTP? Will it be difficult to integrate or require significant shutdowns?	Much larger impact than alternatives	Comparable to alternatives	Much less impact than alternatives		x	Qualitative/Professional Judgement		2.7%	9	No impact to ongoing WWTP ops - this will be a new site.	2.4%	9	No impact to WWTP	2.4%	9	No impact to WWTP	2.4%	4	Compared to other options, significant impact to WWTP.	1.1%	9	No impact to WWTP	
	Community acceptance	Anticipated public acceptance of technology, viewscape	alternatives	Comparable to alternatives	Much greater that alternatives	n Relative score	x	Qualtative/Professional Judgement	10%	3.3%	6	Difficult to say - new composting site has some negative connotations. But can be managed as a long term solution in benefit to the City (esp. for organics integration)	2.0%	5_	New AD facility will get some pushback, but can hopefully addres through diversion and biogas benefits.	1.7%	5_	New AD facility will get some pushback, but can hopefully addres through diversion and biogas benefits.	1.7%	5_	May have an issue regardless - but "visibility" still stick so WWTP site and can be well integrated. Two sites will be required though.	1.7%	9_	No impact other than a possible new transfer station (tentatively located at landfill site).	
	Hauling / truck traffic and noise	Potential change in traffic and noise at site and in nearby areas	Much greater than alternatives	Comparable to alternatives	Much less than alternatives	Relative score	x	Qualitative/Professional Judgement		3.3%	5	Added truck traffic in area of new compost site.	1.7%	5	Comparable to Dry AD	1.7%	5	Comparable to Wet	1.7%	3	Trucks to pre-processing; trucks to WWTP.	1.0%	5	New green bin collection trucks; going to transfer station.	1
	Odour potential	Anticipated potential fo odours or opportunity to reduce odours		No change	Less odour potential	Relative score	x	Qualitative/Professional Judgement		3.3%	_	Odour may be a problem. But can be managed.	1.0%		Odours easier to manage at Wet AD facility.	2.3%		Odours to be managed at Dry AD facility	2.0%		Odour to be managed at WWTP AND pre- processing site.			Odours to be managed at transfer station. All other processing odours responsibility of Vendor	

Appendix C Septage Receiving Station Preliminary Design Memo

CITY OF CORNWALL

SEPTAGE RECEIVING STATION PRELIMINARY DESIGN CITY OF CORNWALL WWTP

JANUARY 30, 2024







SEPTAGE RECEIVING STATION PRELIMINARY DESIGN CITY OF CORNWALL WWTP

CITY OF CORNWALL

PROJECT NO.: CA0001165.3-31 DATE: JANUARY 30, 2024 REV. 0 - FINAL

WSP 1345 ROSEMOUNT AVENUE CORNWALL, ON CANADA K6J 3E5

T: +1 613 933-5602 F: +1 613 936-0335 WSP.COM

REVISION HISTORY

FIRST ISSUE

Rev. A	DRAFT – FOR REVIE	W	
Prepared By	Reviewed By	Approved By	
Daniel Searle	Willy de Wit		

SECOND ISSUE

Rev. B	DRAFT – FOR REVIE	W	
Prepared By	Reviewed By	Approved By	
Daniel Searle	Willy de Wit		

THIRD ISSUE

Rev. 0	FINAL			
Prepared By	Reviewed By	Approved By		
Daniel Searle	Willy de Wit	Gary Thorne		

SIGNATURES

PREPARED BY

Daniel Searle, P.Eng. Project Engineer - Land Development & Municipal Engineering

Decal

January 30, 2024 Date Willy de Wit, M.A.Sc., P.Eng. Senior Process Engineer - Water & Wastewater Infrastructure Willy last 100190573 01/30/202 Date

REVIEWED BY

APPROVED BY

Gary Thorne I.Eng (UK), MIET, PMP Global Technical Lead - Water & Wastewater Infrastructure

January 30, 2024

Date

WSP Canada Inc. prepared this report solely for the use of the intended recipient, City of Cornwall, in accordance with the professional services agreement. The intended recipient is solely responsible for the disclosure of any information contained in this report. The content and opinions contained in the present report are based on the observations and/or information available to WSP Canada Inc. at the time of preparation. If a third party makes use of, relies on, or makes decisions in accordance with this report, said third party is solely responsible for such use, reliance or decisions. WSP Canada Inc. does not accept responsibility for damages, if any, suffered by any third party as a result of decisions made or actions taken by said third party based on this report. This limitations statement is considered an integral part of this report.

The original of this digital file will be conserved by WSP Canada Inc. for a period of not less than 10 years. As the digital file transmitted to the intended recipient is no longer under the control of WSP Canada Inc., its integrity cannot be assured. As such, WSP Canada Inc. does not guarantee any modifications made to this digital file subsequent to its transmission to the intended recipient.

visp

TABLE OF CONTENTS

1	INTRODUCTION	
1.1	Scope1	I
1.2	Regulatory Framework1	I
1.2.1	Municipal	1
1.2.2	Provincial	2
1.3	Facility Description	3
1.3.1	Septage Quantity	3
1.3.2	Septage Quality	3
1.4	Local Practices	ŀ
2	EVALUATION	,
2.1	Design Requirements7	,
2.1.1	Minimum Design Elements	7
2.1.2	Additional Design Elements	7
2.1.3	Discharge Location	3
2.1.4	Operational Requirements	9
2.1.5	Mechanical	9
2.1.6	Electrical)
2.1.7	Instrumentation and Control10)
2.1.8	Structural11	1
2.1.9	Architectural	1
2.2	Evaluation Criteria12)
2.2.1	Socio-Cultural	2
2.2.2	Environmental12	2
2.2.3	Technical / Operating12	2
2.2.4	Financial / Economic12	2
3	IDENTIFIED ALTERNATIVES	3
3.1	Do Nothing13	3
3.2	Option A – Simple Solution13	3
3.3	Option B – Comprehensive Solution14	ŀ
3.4	Option C – Minimal Solution15	5

wsp

4	CONCLUSIONS	16
4.1	Results Summary	16
4.2	Recommendations	16

TABLES

TABLE 1-1 - PHYSICAL AND CHEMICAL
CHARACTERISTICS OF SEPTAGE ¹ .4
TABLE 1-2 - SUMMARY OF SEPTAGE RECEIVING
STATION EQUIPMENT IN LOCAL
COMMUNITIES5
TABLE 1-3 - SUMMARY OF SEPTAGE RECEIVING
PRICES IN LOCAL COMMUNITIES6
TABLE 2-1 - VENTILATION RATES AND ELECTRICAL
CLASSIFICATION FOR PROCESS
AREAS10
TABLE 4-1 - DESIGN ALTERNATIVE EVALUATION
SUMMARY17

FIGURES

FIGURE 1 - OPTION A SIMPLIFIED PROCESS F	LOW
DIAGRAM	13
FIGURE 2 - OPTION B SIMPLIFIED PROCESS F	LOW
DIAGRAM	14
FIGURE 3 - OPTION C SIMPLIFIED PROCESS F	LOW
DIAGRAM	15

APPENDICES

- A PRELIMINARY LAYOUTS
- **B** CAPITAL COST ESTIMATES

1 INTRODUCTION

1.1 SCOPE

WSP Canada Inc. (WSP) was retained by the City of Cornwall (the City) to complete an evaluation of options and preliminary design of a septage receiving station at the City of Cornwall Wastewater Treatment Plant (WWTP). The objective of this study is to evaluate options for a septage receiving at the WWTP, including location and configuration of the works. Specifically, the scope of the work included:

- A review of various septage receiving station locations, technologies, and data handling apparatus.
- A review of current septage receiving station configurations in local, similar-sized municipalities.
- Identifying design criteria (i.e., footprint constraints, storage capacity, effluent quality) and desired outcomes for septage receiving practices in the City of Cornwall.
- A review of potential septage receiving station technologies, identifying the associated budgetary capital and operating costs, as well as technical, socio-cultural, and environmental considerations.

1.2 REGULATORY FRAMEWORK

The existing regulatory framework for septage receiving stations involves primarily municipal and provincial legislation. Additionally, there are several relevant technical guidelines and best management practices associated with septage handling, treatment, storage, and ultimate disposal.

1.2.1 MUNICIPAL

The City of Cornwall WWTP currently has By-law No. 103-2003 for the regulation of the discharge of wastes and sewage into the public sewers (Sewer Use By-law). The by-law defines *Hauled Sewage* as 'waste removed from a sewage system, including a cesspool, a septic tank system, a privy vault or privy pit, a chemical toilet, a portable toilet, or a sewage holding tank'. The by-law also defines *Hauled Waste* as 'industrial waste which is transported to and deposited into any location in the sewage works including hauled sewage'. As such, hauled septage entering the septage receiving station must conform to the following *Hauled Sewage* and *Hauled Waste* requirements:

Hauled Sewage:

- The carrier of the hauled sewage is a waste management system operating under a certificate of approval or provisional certificate of approval issued under the EPA or is exempt from the requirement to have a certificate or provisional certificate of approval;
- *A copy of the most recent certificate or provisional certificate and any amendment is provided to the Municipality; and*
- The carrier meets all conditions for discharge that are or may be required from time to time by the Municipality

Hauled Waste:

- The carrier of the hauled sewage is a waste management system operating under a certificate of approval or provisional certificate of approval issued under the EPA or is exempt from the requirement to have a certificate or provisional certificate of approval;
- *A copy of the most recent certificate or provisional certificate and any amendment is provided to the Municipality;*
- Hauled waste meets the conditions set out in clauses 23(3)(C) and 25(5)(b) of O. Reg. 347, R.R.O. 1990, as amended from time to time.; and
- The carrier meets all conditions for discharge that are or may be required from time to time by the Municipality

1.2.2 PROVINCIAL

1.2.2.1 ENVIRONMENTAL ASSESSMENT ACT

The Environmental Assessment Act (EAA) prescribes separate pathways to assess water and wastewater projects, depending on the type and scale of the project. These are referred to as the Individual Environmental Assessment, the Environmental Screening Process, or the Municipal Engineers Association Municipal Class Environmental Assessment (MCEA). These processes set different objectives and requirements for assessing the environmental impacts of projects, including requirements for consultation with government agencies, the public, and Indigenous communities.

Based on the MCEA (2023), construction of a new septage receiving station at the facility constitutes undertaking 29a - Expand / refurbish / upgrade sewage treatment plant including outfall up to existing rated capacity where no land acquisition is required. As such, this constitutes an undertaking that in earlier versions of the MCEA constituted a Schedule A or Schedule A+ project but is now exempt from the requirements of the EAA.

1.2.2.2 ONTARIO WATER RESOURCES ACT

Construction of a septage receiving station would require approval from the Ontario Ministry of Environment, Conservation and Parks (MECP) in the form of an amendment to the existing Environmental Compliance Approval (ECA) under section 53 of Ontario Water Resources Act (OWRA) for the facility:

53 (1) Subject to section 47.3 of the Environmental Protection Act, no person shall use, operate, establish, alter, extend or replace new or existing sewage works except under and in accordance with an environmental compliance approval.

Demonstration of compliance with the relevant technical guidance for sewage works and waste management facilities would be necessary via a detailed application package that outlines how the proposed amendments comply with the provisions of the OWRA. This package includes detailed engineering drawings for the proposed works, as well as a detailed design report describing the rationale for each piece of equipment and their performance specifications, along with proposed monitoring and reporting requirements.

1.2.2.3 ONTARIO ENVIRONMENTAL PROTECTION ACT

O. REG. 419/05 LOCAL AIR QUALITY

Approval from the MECP is required for equipment with the potential to emit contaminants associated with wastewater treatment to the air. This will require a detailed assessment of contaminant releases to air, including noise and odour, compiled into a detailed application package that demonstrates how the proposed equipment complies with the provisions of O. Reg. 419/05 and other relevant requirements of section 9 of the EPA:

9 (1) No person shall, except under and in accordance with an environmental compliance approval,

(a) use, operate, construct, alter, extend or replace any plant, structure, equipment, apparatus, mechanism or thing that may discharge or from which may be discharged a contaminant into any part of the natural environment other than water; or

(b) alter a process or rate of production with the result that a contaminant may be discharged into any part of the natural environment other than water or the rate or manner of discharge of a contaminant into any part of the natural environment other than water may be altered. R.S.O. 1990, c. E.19, s. 9 (1); 2010, c. 16, Sched. 7, s. 2 (4).

Septage receiving stations may require the implementation of odour control systems to mitigate fugitive emissions and odour releases from the facility. Additionally, the hauling of septage to this station requires truck traffic on the site, which can result in dust and noise emissions. Emissions from wastewater treatment will need assessment to ensure the proposed woks demonstrate compliance with the provisions of O. Reg. 419/05, and the MECP

publication NPC-300 Environmental Noise Guideline – Stationary and Transportation Sources – Approval and Planning.

1.2.2.4 TECHNICAL GUIDANCE

MECP DESIGN GUIDELINES

The MECP publication *Design Guidelines for Sewage Works* (MECP Guidelines) provides technical and design information for engineers responsible for the design of septage receiving stations in Ontario. This information is highlighted in Section 19.1.6.

TEN STATES RECOMMENDED STANDARDS FOR WASTEWATER FACILITIES

The Great Lakes – Upper Mississippi River Board of State and Provincial Public Health and Environmental Managers publication *Ten States Recommended Standards for Wastewater Facilities* (Ten States Standards) is a review and revision of existing standards for sewage works and is intended to serve as a guide in the design and preparation of plans and specifications for wastewater facilities.

USEPA HANDBOOK: SEPTAGE TREATMENT AND DISPOSAL

The United States Environmental Protection Agency (USEPA) publication *Guide to Septage Treatment and Disposal* (USEPA Handbook) offers practical information on handling and disposal of septage for administrators of waste management programs, septage haulers, and plant operators.

1.3 FACILITY DESCRIPTION

The City of Cornwall WWTP has an average daily flow (ADF) capacity of 55,000 m³/day, and a peak daily flow (PDF) of 149,000 m³/day. The treatment process at the facility includes preliminary treatment comprised of screening, grit removal, and chemical treatment, followed by primary clarification. Secondary treatment consists of biological aerated filtration, followed by a UV disinfection system, with the final effluent being discharged to the St. Lawrence River. Primary and secondary sludge is thickened and transferred for anaerobic digestion. Digested sludge is dewatered and transferred off site.

1.3.1 SEPTAGE QUANTITY

Until recently, up to approximately 5 m³ of hauled septage was handled at the City of Cornwall landfill, metered by the on-site scale system, and ultimately arriving at the Cornwall WWTP via the sanitary sewer collection system. This is based on the historical typical demand information provided by the City of Cornwall indicating approximately two trucks per day, each with a load of septage weighing approximately 2 tonnes. In the spirit of meeting the demand associated primarily with legacy haulers, the design basis for the new proposed receiving station at the City of Cornwall WWTP will meet this capacity plus include some provisions for some growth in the amount of hauled septage handled. As such, the design basis will be set for a maximum of 10 m³/day, considering up to two haulage trucks on site simultaneously (one at the septage receiving station, one in queue on the existing access road).

1.3.2 SEPTAGE QUALITY

The design basis for septage quality is based on the MECP Guidelines. **Table 1-1** summarizes the design values for septage quality. Septage is normally considered treatable at most modern wastewater treatment plants, however proper engineering planning and operational measures need to be in place in order to minimize the risk of shock loading resulting in adverse impacts on plant processes and effluent quality.

Parameter	Average (mg/L)	Minimum (mg/L)	Maximum (mg/L)	Design Value
TS	34,100	1,100	130,500	40,000
TVS	23,100	400 71,400 2		25,000
TSS	12,900	300	93,400	15,000
VSS	9,000	100	51,500	10,000
BOD5	6,500	400	78,600	7,000
COD	31,900	1,500	703,000	15,000
TKN	600	100	1,100	700
TAN	100	5	120	150
Total P	200	20	760	250
Alkalinity	1000	500	4,200	1,000
Grease	5,600	200	23,400	8,000
рН	-	1.5	12.6 6.0	
Linear Alkyl Sulphonate (LAS)	-	110	200 150	

Table 1-1 - Physical and Chemical Characteristics of Septage¹

Notes: Values expressed in mg/L, except for pH.

¹Table from MECP publication *Design Guidelines for Sewage Works*.

1.4 LOCAL PRACTICES

Table 1-2 summarizes the septage receiving processes utilized for similar-sized local communities. The information included was drawn from a variety of sources, including the treatment facilities' ECAs or legacy Certificates of Approvals (CofA), and annual performance reports (where available). **Table 1-3** summarizes some of the pricing information available from other municipalities in Ontario.

		Equipment						Outlet		
Community	Design ADF (m³/d)	Rock Trap	Grinder	Screening System	Flow Meter	Holding Tank	Aeration / Mixing System	Odour Control	Headworks	Sewer
Kingston	95,000	\checkmark		√	\checkmark	\checkmark		\checkmark	\checkmark	
Sudbury	79,600			√	\checkmark	\checkmark			\checkmark	
Barrie	76,000	\checkmark	\checkmark		\checkmark	\checkmark	√			\checkmark
Peterborough	68,200			√	\checkmark	\checkmark	√		\checkmark	
Belleville	54,500	\checkmark		√	\checkmark	\checkmark			\checkmark	
North Bay	54,500			√	\checkmark	\checkmark			\checkmark	
Orillia	31,200	\checkmark	\checkmark	√	\checkmark					\checkmark
Brockville	21,800	\checkmark	√		√					\checkmark

Table 1-2 - Summary of Septage Receiving Station Equipment in Local Communities

Community	Pricing (per m ³ of septage)	Other Fees
Barrie	\$25.50	
Brockville	\$14.31	\$50 Administration (Flat Fee)
Kingston	Non-Industrial: \$20.00 Industrial: \$26.07	
Kawartha Lakes	\$21.43	 \$50 Registration (Flat Fee) \$7 Administration (per load if hauled from outside of municipal boundaries)
Niagara Region	\$10.12	\$16 Registration (Flat Fee)
Durham	\$19.56	
Muskoka	\$32.08	\$57.21 Registration (Flat Fee)

Table 1-3 - Summary of Septage Receiving Prices in Local Communities

2 EVALUATION

2.1 DESIGN REQUIREMENTS

2.1.1 MINIMUM DESIGN ELEMENTS

Section 19.1.6 of the MECP Guidelines describes the typical minimum recommended design requirements for a septage receiving facility:

- A hard surface haul truck unloading ramp sloped to a drain to allow ready cleaning of any spillage and washing
 of the haul tank, connector hoses and fittings.
- A flexible hose fitted with easy connect coupling to provide for direct connection from the haul truck outlet to minimize spillage and help control odours;
- Electronic metering and billing systems are available to monitor septage received and provide accurate billing information to septage haulers and plant staff. These systems generally consist of a card reader or key pad for controlled access in combination with a flow meter and isolation valve;
- Washdown water with ample pressure, hose and spray nozzle for convenient cleaning of the septage receiving station and haul trucks. The use of chlorinated effluent may be considered for this purpose;
- Where treated septage is to be discharged directly to the wastewater treatment plant, an adequate off-line septage receiving tank should be provided. The tank should be sized to hold twice the maximum daily volume of septage expected on a peak day. Capability to collect a representative sample of any truck load of waste accepted for co-treatment at the plant should be provided. The receiving tank should be designed to provide complete draining and cleaning by means of a sloped bottom equipped with a drain sump. The design should give consideration to adequate mixing. Adequate mixing will ensure uniformity of septage strength and mixing for chemical addition, if necessary, for treatability and odour control;
- Screening, grit, and grease removal or grinding of the septage as appropriate to protect the sewage treatment plant process units;
- Pumps provided for handling the septage (if necessary) should be of the non-clogging design and capable of passing 100 mm (4 in) diameter solids;
- Glass-lined piping is recommended;
- Valving and piping for operational flexibility to allow the control of the flow rate and point of septage discharge; and
- Safety features to protect the operational personnel.

2.1.2 ADDITIONAL DESIGN ELEMENTS

The City of Cornwall has also identified additional design requirements associated with this project:

- As the City of Cornwall proceeds with the development of the latest biosolids and septage master plan, the preferred ultimate discharge location for the pre-treated septage may change. As such, the proposed septage receiving station should be a skidded, or otherwise containerized unit, that can be transported to a different location at the facility at a later date.
- The proposed septage receiving station process components and interior ventilation and lighting appurtenances shall be suitable for a Class I, Division 1 electrical environment (explosion-proof) in accordance with NFPA 820.
- The proposed septage receiving station interior will include combustible gas detection equipment equipped with audible and visual indicating devices both inside the station and at all entrances to the interior of the station.

 The proposed septage receiving station interior must be accessible to operators and contractors via typical entrance permit requirements, and not required confined space entry procedures.

2.1.3 DISCHARGE LOCATION

With regard to the ultimate outlet for handling pre-treated septage from the septage receiving station, the USEPA Handbook describes three common pathways to the wastewater treatment plant:

- Discharge to upstream sewer in the collection system;
- Discharge directly to plant headworks;
- Discharge directly to digester or sludge handling processes;

A containerized septage receiving station could be equipped with transfer pumps to discharge pre-treated septage to the screening system inlet channel at the WWTP, however process interlocking would be necessary to operate the screens continuously, and increase chemical dosage automatically while treated septage is being transferred from a treated septage holding tank. Alternatively, septage could be transferred directly from the pre-treatment works to the screening inlet channels, but only with significant confidence that the influent screening, grit removal, and primary clarification apparatus can accommodate the increase in influent strength, solids, and nutrient loading.

Although installation of a simple lineup of septage handling devices (rock trap, inline grinder, flow meter, etc.) inside the wastewater treatment plant building offers a simple and reliable mechanism to handle small volumes of septage, there was no suitable location in the existing screening building at the WWTP to install this kind of equipment without including provisions for pumping raw septage to the pre-treatment works. As such, a simple lineup of septage pre-treatment works located inside the screening building discharging directly to the screening influent channel will not be considered further.

As the City of Cornwall proceeds with the development of the latest biosolids and septage master plan, more information associated with a long-term plan for management of solids at the facility will be developed. Although discharge of treated septage directly to the digesters or sludge handling apparatus is possible, the location of the digestion and sludge handling apparatus is not located in an area of the plant that is easily accessible by septage haulers. Additionally, although the major benefit of discharging septage to sludge handling processes is that there is no potential to affect the effluent quality, there is potential for adverse affects to the solids management apparatus, particularly with regard to the anaerobic digesters (mixing and sludge transfer equipment), and digested sludge dewatering processes.

The discharge of pre-treated septage to a sanitary trunk sewer (flow north to south along with west limit of the site) allows for a simpler and resilient septage receiving station due to reduced or eliminated pumping requirements, and provides the opportunity for substantial dilution of the pre-treated septage, reducing the likelihood of upsets in the WWTP processes. Although discharging pre-treated septage to sanitary sewers can result in odour production near the receiving manhole, and results in the potential for accumulation of grit and debris in the sewer, these risks can be mitigated by the proper design of drop junctions and/or inclusion of simple passive odour control devices. The design of the discharge sewer lateral (to the trunk sewer) should also include provisions for maintenance holes and/or clean-outs to support inspection and maintenance. It is generally only recommended to discharge pre-treated septage to sanitary sewer is 1500mm in diameter, and believed to service a significant portion of the city. Moreover, this trunk sewer terminates at the inlet to the main pumping station where it is blended with flows from other trunk sewers. The volumes of septage to be received at the proposed City of Cornwall septage handling facility is expected to be at all times <5% of the total volumetric instantaneous influent flow at the WWTP.

As such, the preferred ultimate discharge location for pre-treated septage is to the trunk sewer. This discharge location provides the benefits of dilution of the pre-treated septage, provides several opportunities to interface existing manholes within the vicinity of the main entrance and screening building (potentially without pumping), and also provides the highest level of protection to the WWTP processes, given that the blended discharge ultimately will be diluted with sewage from the collection system. This arrangement also has the added benefit that in the event of outage of the septage pre-treatment, raw septage could potentially be discharged to the collection

system and still benefit from dilution of the sewage, and still be treated by the coarse screening apparatus at the existing raw sewage pumping station.

2.1.4 OPERATIONAL REQUIREMENTS

The septage receiving station design should include provisions for safe circulation and queuing of septage hauling vehicles, while also considering suitable measures for winter-time access and snow removal. The septage receiving station and septage unloading activities should be arranged in such a way not to impede other traffic on the site, or otherwise not to interfere with normal activities at the WWTP in an operationally significant manner.

The septage receiving station is to be accessible to haulers during weekday daytime hours only (Monday to Friday 8:00 to 2:00pm). This is to ensure that in the event of operational difficulties with the septage receiving equipment, or otherwise in the event that untreated septage needs to be discharged to the collection system, the WWTP operations and management teams can determine the appropriate course of action on a case-by-case basis.

The septage receiving station should be designed such that haulers are not required to interface with WWTP staff under normal operating conditions, and that general maintenance and operation requires a staff commitment of 0.05 Full-time Equivalent (FTE) or less.

An analysis of the impacts on the overall plant performance associated with the blended influent quality associated with the septage loading was undertaken in accordance with the guidance in the USEPA Guide to Septage Treatment and Disposal, and based on a first-principles assessment of proposed combined loadings. The assessments included evaluating the loadings associated with blended influent to the WWTP when combining the typical sewage quality currently observed at the facility, as well typical medium-strength municipal sewage, with MECP design septage quality. The proposed blended hydraulic, solids, and nutrient loadings at the facility compared to the rated design peak loadings at the WWTP. The results of the assessment suggest that the septage receiving station should be initially configured to limit the septage receiving rate to 10 L/s until such a time that the overall plant performance while receiving septage, and the typical hauler septage quality is known. Although typical small septage receiving stations are rated for capacities up to 25 L/s, a septage receiving volumetric flow rate of 10 L/s is comparable to the typical septage truck unloading rate, and would ultimately result in unloading times compatible with the expected hauler queuing and proposed traffic management arrangements.

2.1.5 MECHANICAL

The codes, standards and regulations for the mechanical design are listed below:

- Technical Standards and Safety Act, 2000
- NFPA 820
- ASHRAE 62.1
- Ontario Building Code, O. Reg. 332/12

The ventilation systems will be designed to meet the National Fire Protection Association (NFPA), American Society of Heating, Refrigeration and Air-Conditioning Engineers (ASHRAE), Technical Standards and Safety Authority (TSSA), National Gas Code, as well as the Ontario Building Code (OBC) requirements.

NFPA 820 defines the minimum ventilation criteria for protection against fire and explosion of wastewater treatment and pumping facilities. These recommended rates will largely define the ventilation rates to be used in the process spaces. When odour control or space temperature control is the objective of design, air change rates will increase beyond the levels described in NFPA 820, if required. These air change rates will be based on good engineering practices, and industry experience. However, human occupancy of certain spaces may require more than the minimum ventilation required by NFPA and thus will be governed by ASHRAE Standard 62. This standard specifies the minimum ventilation rates to maintain acceptable indoor air quality to minimize the potential for adverse health effects. Classified areas where combustible gas may be released will be provided with push-pull ventilation systems at rates required by NFPA 820. These systems will include make-up air units with removable filters and high- and low-rate exhaust fan systems that discharge at roof level or higher via a stack.

Combustible gas detectors shall be installed in accordance with NFPA 820 (both audible and visual alarming devices will be provided both inside the space and at all entrances to the space). All continuous ventilation systems shall be fitted with flow detection devices connected to an alarm signalling system to indicate system failure or adverse air quality conditions.

Fire protection systems, including fire suppression systems, will be provided as required, depending on the final architectural design of each facility in the plant. Portable fire extinguishers and hydrant protection will be provided as required by the OBC, NFPA 10, and NFPA 820.

2.1.6 ELECTRICAL

The electrical system will be designed in accordance with the latest editions of the following codes and technical guidance:

- Ontario Electrical Safety Code (OESC)
- Ontario Building Code
- NFPA 820
- National Electrical Manufacturers Association (NEMA)
- Electrical and Electronic Manufacturers Association of Canada (EEMAC)
- ESA Bulletins
- NPFA 70E for Arc Flash Protection
- IEEE
- Illuminating Engineering Society (IES)
- CSA Z462-08 standards for Arc Flash Protection

NFPA 820 defines the minimum ventilation criteria for protection against fire and explosion of wastewater treatment and pumping facilities. The ventilation requirements and NFPA 820 classifications that will be used for the process areas are summarized in **Table 2-1**.

Table 2-1 - Ventilation Rates and Electrical Classification for Process Areas

Building	NFPA 820 Electrical Classification	Ventilation Rate (Air Changes per Hour)
Septage Receiving Station	Class I, Division 1	<12

Since provisions for continuous ventilation are not required as the station interior will not be occupied under normal operating conditions, the appropriate electrical classification for the environment inside the station is NFPA 820 Class 1, Division 1, or the equivalent OESC classification of Category 2, Zone 1. As such, explosion-proof equipment is required inside the structure, within a 0.9m envelope around openings in the structure, and within a 1.5m envelope around ventilation exhaust openings.

2.1.7 INSTRUMENTATION AND CONTROL

All plant equipment will be tagged in accordance with local standards. All new drives will have a local/remote selector switch to allow control from supervisory control and data acquisition (SCADA) as well as local controls panels. The system will be integrated with all equipment and will be monitored through a station set up in the existing administration building.

A building automation system (BAS) will be installed to allow HVAC system monitoring and controls for all new equipment. The new BAS will be integrated with all equipment and will be monitored through a station set up in the existing administration building. This system will have local controls but will be integrated with the facility control system to provide various alarms and allow operations staff to monitor the status of the equipment.

2.1.8 STRUCTURAL

The structural design for the upgrades will be designed, as a minimum, to conform to the current OBC, the National Building Code of Canada (NBCC), the requirements of Occupational Health and Safety Act (OHSA) and local regulations. The codes, standards and regulations that would be considered for the structural design of the plant components are as follows:

- National Building Code of Canada 2020 (NBCC 2020)
- AWWA D103 Standard for Factory Bolted Steel Tanks for Water Storage
- CSA A23.3-19 Design of Concrete Structures
- Cement Association of Canada (CAC) Concrete Design Handbook, Fourth Edition
- CAN/CSA S16-19 Limit States Design of Steel Structures
- Canadian Institute of Steel Construction (CISC) Handbook of Steel Construction, Eleventh Edition
- CSA S136-07 Cold Formed Steel Structural Members
- CSA S304.1-04 Design of Masonry Structures
- Ontario Building Code, O. Reg. 332/12
- ACI 350/350R-06: Code Requirements for Environmental Engineering Concrete Structures and Commentary

2.1.9 ARCHITECTURAL

The proposed structure will be designed, at a minimum, to conform to the current OBC, NFPA 820, the requirements of OHSA, and local regulations. Buildings will be constructed of non-combustible construction and the two primary factors governing the architectural design are to be durability and longevity.

From a functionality perspective, the layout of the structure will be designed to facilitate future equipment removals and replacement. The layout will also be designed to provide easy access to all valves/equipment within the various spaces.

The building envelope, while exempt from the energy efficiency requirements of the OBC, will be designed with thermal resistance values which meet or exceed the requirements of the OBC.

Exterior superstructure wall construction is to consist of cladding, ventilated air space, insulation and structural back-up wall. The cladding, which forms the exterior skin of the superstructure walls and acts as a rain screen, will be low-maintenance and have a long design service life. The exterior wall cladding system is anticipated to be metal cladding.

Doors are to be hollow metal construction with continuously welded seams and fabricated from corrosion resistant galvanized steel. Where required to be fire rated, doors will conform to NFPA 80 - Standard for Fire Doors and Other Opening Protectives. Exterior doors will be painted with an industrial grade epoxy/polyurethane paint system which offers excellent corrosion, abrasion, chemical, and UV resistance. All exterior doors will be insulated.

Where needed, acoustical treatment will be provided to reduce noise to acceptable levels. Interior noise levels will be assessed for worker exposure against the Ontario Ministry of Labour's (MOL) exposure levels.

2.2 EVALUATION CRITERIA

The identified septage receiving station alternatives were evaluated based on a qualitative analysis of their social and cultural merits, environmental impacts, and technical and operational aspects. A quantitative assessment of the financial and economic considerations associated with each alternative was also included. The following sections provide additional detail on each of these considerations.

2.2.1 SOCIO-CULTURAL

The social and cultural acceptability criterion evaluates the alternatives based on the potential risk of nuisance conditions involving odour and noise, or otherwise the potential for devaluation of property or risk to public health and safety. The level of public support for wastewater projects can frequently relate to the aesthetic or visual character of the proposed works, and this was also considered in this evaluation. The final disposal mechanism associated with each of the alternatives was assessed for compatibility with local waste management and agriculture practices.

2.2.2 ENVIRONMENTAL

Environmental considerations include the alternatives' capacity to meet regulatory requirements and the risk of adverse effects associated with emissions of odour, airborne contaminants, and noise. The assessment also included consideration of potential impacts to surface and groundwater resources, as well as the ecological footprint of the operation.

2.2.3 TECHNICAL / OPERATING

Technical and operating considerations were evaluated based on typical performance, complexity of operation, energy requirements, impacts on existing operations and infrastructure, and likelihood of service interruption. Ease of implementation, including land availability and compatibility with existing site conditions, were also considered in this assessment. The management considerations include required operating time and flexibility of operation.

2.2.4 FINANCIAL / ECONOMIC

The evaluation of cost was undertaken by assessing the alternatives' capital and operating costs. Preliminary capital cost estimates were developed for the alternatives based on industry experience and recent estimates from equipment manufacturers. The capital costs include provisions for engineering services and the supply and installation of process equipment, buildings, and civil works.

3 IDENTIFIED ALTERNATIVES

This section describes common septage receiving station configurations that are typical in Ontario wastewater treatment facilities and are applicable to the Cornwall WWTP. The following sections describe the various design alternatives and discusses of the suitability of each:

- 1. Do Nothing
- 2. Option A Simple Solution
- 3. Option B Comprehensive Solution
- 4. Option C Minimal Solution

3.1 DO NOTHING

"Do nothing" is an approach typically included in planning processes. In this case, "doing nothing" would involve not constructing a septage receiving station at the City of Cornwall WWTP, instead maintaining the current practice of receiving hauled septage at the Cornwall Landfill. The practice of receiving septage at the Cornwall landfill has been stopped at the request of the MECP as a result of concern with the potential impact on the functionality of the leachate collection system. As such, "Do Nothing" is not a feasible alternative and will not be considered further.

3.2 OPTION A – SIMPLE SOLUTION

This solution involves the installation of a prefabricated, enclosed septage receiving station outside the existing screening building of the Cornwall WWTP, located along the building's west wall. Haulers would use the existing access road and paved area in front of the existing screening building to access the station. The interior of the station would be accessed via an entrance on the north side of the enclosure. The location of the proposed receiving station is illustrated on drawing SK1-1 included in **Appendix A**.

The enclosure would provide ample space for operators to work and would contain a receiving isolation valve, a rock trap to catch large objects within the septage, a grinder to reduce the particle size of solids not caught in the rock trap, provisions for bypassing the grinder, control valves, real-time monitoring equipment (temperature, pH, and hydrocarbons), and flow meter to regulate and measure the septage received by the facility, as well as provisions for an automated sampler. The treated septage would then be discharged to an existing maintenance hole interfacing the nearby trunk sewer.

Trucks carrying septage would hook-up to a receiving port located on the side of the enclosure, and the septage would discharge into the works via gravity. Haulers pre-approved by the City would access the station via the data and controls kiosk on the exterior of the enclosure. The quality of the septage discharged to the works would be tracked with the use of flow meters and automatic sampling equipment. These measures ensure the accuracy of the hauler's submitted manifests and provide detailed characteristic data for consideration by the WWTP staff. A simplified schematic of the septage receiving process for this design alternative is illustrated in **Figure 1**.

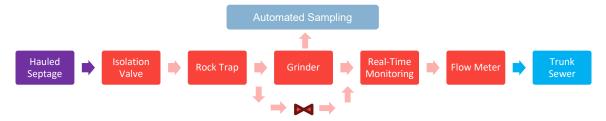


Figure 1 – Option A Simplified Process Flow Diagram

Operators at the facility would be required to undertake regular maintenance of the equipment, specifically removing solids contained within the rock trap, maintenance of the grinder/macerator including bearings, motor, and cutting heads or cartridges. Additionally, operators would need to regularly collect the samples from the automated sampling system for analysis. Periodic debugging and calibration of real-time monitoring equipment is also expected to be necessary. The level of effort associated with operation and maintenance of the system given the anticipated septage volume is expected to be below 0.05 FTE.

3.3 OPTION B - COMPREHENSIVE SOLUTION

This design alternative involves the installation of a highly-robust pre-fabricated, enclosed septage receiving station located south of Cornwall's WWTP and to the west of the existing access road. This solution requires the construction of a new one-way road to aid in traffic flow and to allow for a higher volume of haulers with provisions for adequate queuing. The interior of the station would be accessed via an entrance(s) located on the north, east, and/or south sides of the enclosure. The location of the proposed receiving station is illustrated on drawing SK1-2 included in **Appendix A**.

The enclosure would provide ample space for operators to work and would contain a receiving isolation valve, a rock trap to catch large objects within the septage, a screening system complete with solids bin, real-time monitoring equipment (temperature, pH, TSS, TOC, and hydrocarbons), flow meter to regulate and measure the septage received by the facility, provisions for an automated sampler, and all associated valves and intermediate pumping appurtenances. The design also includes provisions for a holding tank located inside the enclosure to temporarily detain a load of screened septage as necessary, or otherwise to provide flow equalization of treated septage discharge. The screened septage can be detained within the holding tank if the quality of the wastewater does not meet the appropriate septage quality criteria. Otherwise, the treated septage would then be discharged to an existing maintenance hole interfacing the nearby trunk sewer.

Trucks carrying septage would hook-up to a receiving port located on the side of the enclosure, and the septage would discharge into the works via gravity. Haulers pre-approved by the City would access the station via the data and controls kiosk on the exterior of the enclosure. The quality of the septage discharged to the works would be tracked with the use of flow meters, real-time monitoring equipment, and automatic sampling equipment. These measures ensure the accuracy of the hauler's submitted manifests and provide detailed characteristic data for consideration by the WWTP staff. A simplified schematic of the septage receiving process for this design alternative is illustrated in **Figure 2**.





This comprehensive solution is highly-automated and requires less operator intervention when compared to the other solutions, and the capacity to detain loads and significantly reduce solids loading in the treated septage are considered major benefits. However, this option includes more equipment and therefore would require relatively higher periodic maintenance effort, and requires operator effort associated with emptying the solids bin. The footprint of the enclosure would be relatively large, namely to accommodate the screening equipment and holding tank. Additionally, this option requires additional roadways and traffic management on the property.

Operators at the facility would be required to undertake regular maintenance of the equipment, specifically removing solids contained within the rock trap, emptying of the screened solids bin, periodic holding tank flushing, maintenance of the screening grinder/macerator including bearings, motor, and cutting heads or cartridges. Additionally, operators would need to regularly collect the samples from the automated sampling system for analysis. Periodic debugging and

calibration of real-time monitoring equipment is also expected to be necessary. The level of effort associated with operation and maintenance of the system given the anticipated septage volume is expected to be below 0.05 FTE.

3.4 OPTION C – MINIMAL SOLUTION

This solution involves the installation of a prefabricated septage receiving station outside the existing screening building of the Cornwall WWTP, located along the building's west wall. Haulers would use the existing access road and paved area in front of the existing screening building to access the station. The interior of the station would be accessed via an entrance on the north side of the enclosure. The location of the proposed receiving station is illustrated on drawing SK1-3 included in **Appendix A**.

This design option is intended to be considered as the most simple and cost-effective solution meeting the required minimum level of service. The enclosure would provide the minimum space required for operators to work and would contain a rock trap to catch large objects within the septage, a grinder to reduce the particle size of solids not caught in the rock trap, control valves, and flow meter to regulate and measure the septage received by the facility. The enclosure would not be sized to accommodate any additional treatment or sampling equipment. The treated septage would then be discharged to an existing manhole interfacing the nearby trunk sewer. This design would include provisions only for the most simplistic metering and hauler tracking information, and would not include a mechanism for automatic sample collection or any real-time analytics.

Trucks carrying septage would hook-up to a receiving port located on the side of the enclosure, and the septage would discharge into the works via gravity. Haulers pre-approved by the City would access the station via the data and controls kiosk on the exterior of the enclosure. The quality of the septage discharged to the works would not be tracked, only the volumetric flow. Measures for periodic manual auditing of pre-approved hauler's loads would be required to ensure the accuracy of the hauler's submitted manifests and provide detailed characteristic data for consideration by the WWTP staff. A simplified schematic of the septage receiving process for this design alternative is illustrated in **Figure 3**.



Figure 3 – Option C Simplified Process Flow Diagram

Operators at the facility would be required to undertake regular maintenance of the equipment, specifically removing solids contained within the rock trap, and maintenance of the grinder/macerator including bearings, motor, and cutting heads or cartridges. The level of effort associated with operation and maintenance of the system given the anticipated septage volume is expected to be below 0.05 FTE.

4 CONCLUSIONS

4.1 RESULTS SUMMARY

The evaluation criteria were applied in an evaluation matrix summarized in **Table 4-1**. The matrix rates each of the individual criteria for the design alternatives (relative to each other) based on technical merit, impact on the environment, lowest overall cost, and minimum social and cultural impacts as described in Section 2.2. The evaluation was based on a qualitative assessment considering all of the elements identified in the matrix where each of the alternatives were ultimately assigned a composite rating associated with each of the criteria in accordance with the colour rating scheme described below:

Low Impact / Low Risk / Lowest Cost / Most Preferable Moderate Impact / Moderate Risk / Moderate Cost / Preferable or Acceptable High Impact / High Risk / High Cost / Least Preferable

4.2 RECOMMENDATIONS

The minimum level of service common in the industry includes at least provisions for a rock trap, grinder or comminutor, and flow meter, as well as some measures for tracking haulers and inventorying loads.

In general, larger municipalities, municipalities whose service area includes many residents with on-site sewage systems, or otherwise municipalities that accept significant quantities of septage from local or regional septage haulers, will have septage receiving facilities with robust screening equipment, the ability to detain loads (either for enforcing load quality requirements or limiting the treated septage loading rate to the WWTP), and sophisticated measures for tracking and metering the volume and quality of loads.

In general, where robust septage treatment and quality monitoring measures are in place, it is more likely that discharge of treated septage directly to the WWTP can be done responsibly with reasonably low risk of upset to the WWTP screening and secondary treatment processes. Conversely, where there is an opportunity to discharge treated septage to a collection system, a lower level of septage treatment is generally considered appropriate since the collection system naturally attenuates the associated increased strength of the blended influent at the WWTP.

Considering the expected relatively low volumes of septage to be received at the proposed City of Cornwall septage handling facility, the existing relationships with local haulers expected to use the facility in the future, and the availably of a major trunk sewer to accommodate the discharge of treated septage, a septage receiving facility providing the minimum typical level of treatment is considered appropriate.

As such, Option C (Minimal Solution) is the recommended design alternative as it requires the least capital investment, requires the least footprint on the site, requires similar level of operator effort for maintenance and operation to the other design alternatives, and ultimately provides the minimum level of service while also meeting the other design requirements.

The proposed haulage vehicle circulation associated with Option C is illustrated on Figure SK1-4 and SK1-5 included in **Appendix A**. This demonstrates the existing paved area in the vicinity of the screening building can provide adequate space for typical septage hauler vehicles (tandem axle tank truck or similar), as well as a Recreation Vehicle (RV) truck-trailer assembly, to maneuver (typically reverse) for access to the proposed septage receiving station, as well as to allow for safe exit of the property once septage transfer is complete. The proposed septage hauler paths to access the septage receiving station do block access to the exterior doors on the south side of the existing screening building used for access to the screened solids storage bins. However, given the expected

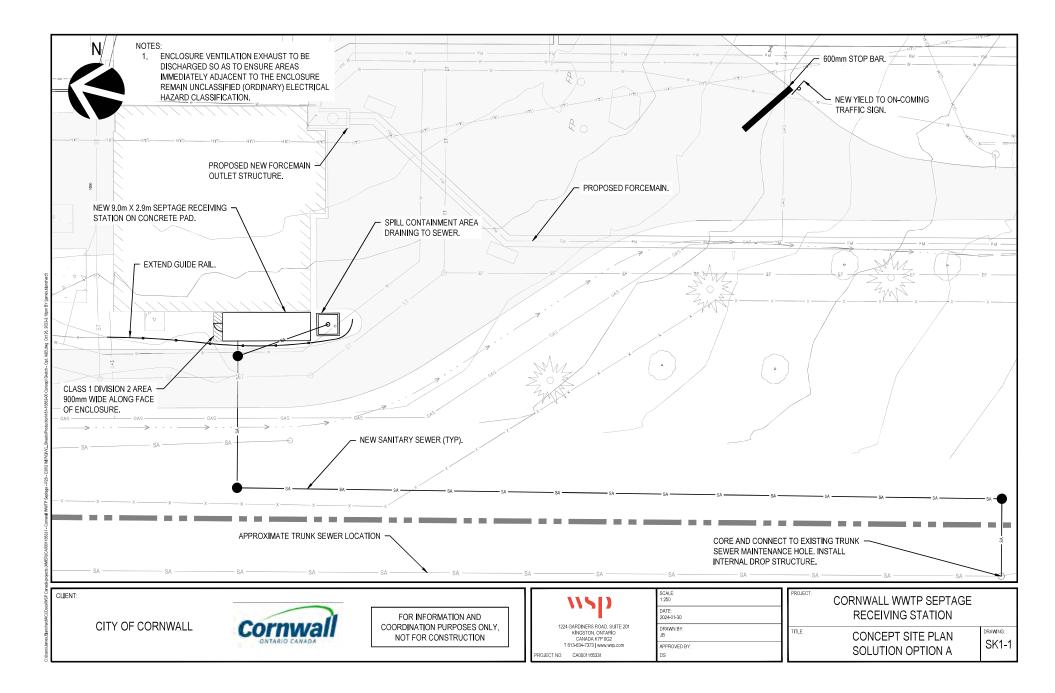
infrequent nature of both the appearance of septage haulers and removal of the solids screening bins, it is not expected that there will be frequent or extended conflict for access of the space associated with these activities.

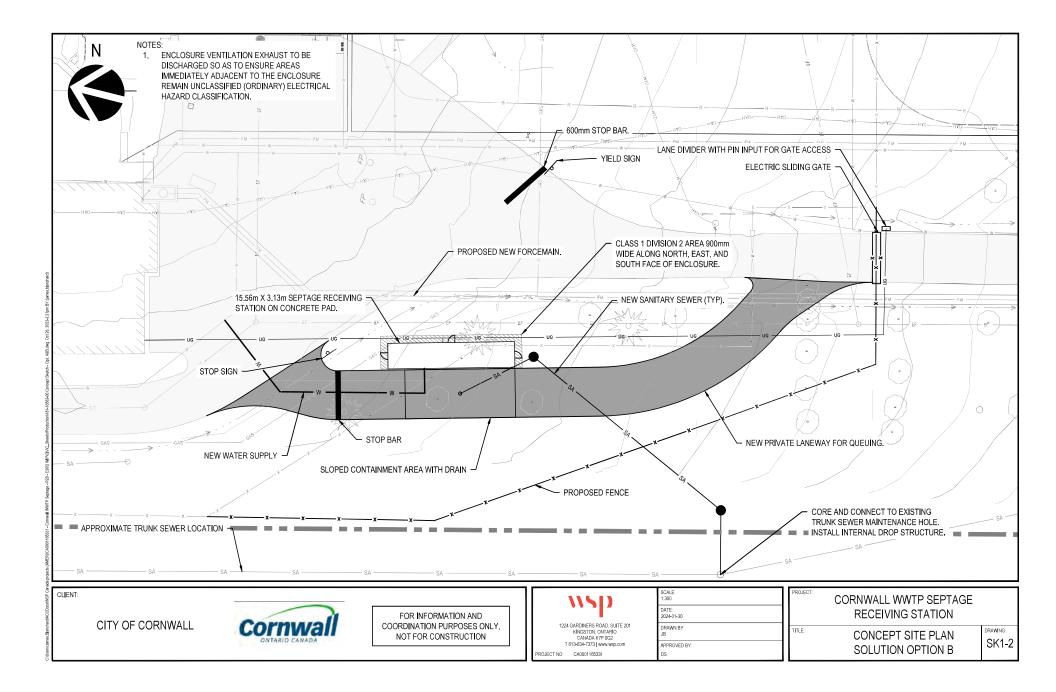
Evaluation Criteria	Option A Simple Solution	Option B Comprehensive Solution	Option C Minimal Solution
Social / Cultural Considerations	 Relatively short construction period. Relatively small footprint Works located immediately adjacent existing structures. Solids from rock trap to be disposed at local landfill. 	 Relatively long construction period. Proposed works located close to property boundary. Solids from rock trap and screening system to be disposed at local landfill. 	 Relatively short construction period. Relatively small footprint. Works located immediately adjacent existing structures. Solids from rock trap to be disposed at local landfill.
Environmental Considerations	 Requires no removal of trees on site. Relatively low potential for odour emissions. Not intended to accommodate significant hauler truck traffic. 	 Requires removal of trees and vegetation on site. Moderate potential for odour emissions associated with screening system. Can accommodate increased hauler truck traffic and noise. 	 Requires no removal of trees on site. Relatively low potential for odour emissions. Not intended to accommodate significant hauler truck traffic.
Technical/ Operating Considerations	 Requires little operator intervention under normal circumstances. Automated sampling and limited real-time analysis help to prevent WWTP plant upset and adverse effluent conditions. No ability to detain loads. No ability for controlled release to sewer or WWTP. Relatively low maintenance requirements. 	 Requires little operator intervention under normal circumstances. Automated sampling and comprehensive real-time analytics help to prevent WWTP plant upset and adverse effluent conditions. Ability to detain loads. Ability for controlled release to sewer or WWTP. Highest effluent quality and lowest risk to WWTP. Relatively high maintenance requirements. 	 Requires little operator intervention under normal circumstances. No automated sampling or real-time analytics to prevent plant upset and adverse effluent conditions. No ability to detain loads. No ability for controlled release to sewer or WWTP. Manual periodic auditing of hauler's load quality is required. Relatively low maintenance requirements.
Financial / Economic Considerations	 Moderate capital and operating costs. Relatively small new civil works requirements. 	 Relatively high capital and operating costs. Significant new civil works requirements. 	 Relatively low capital and operating costs. Relatively small new civil works requirements.
Estimated Capital Cost	- \$840,845	- \$1,813,377	- \$673,233

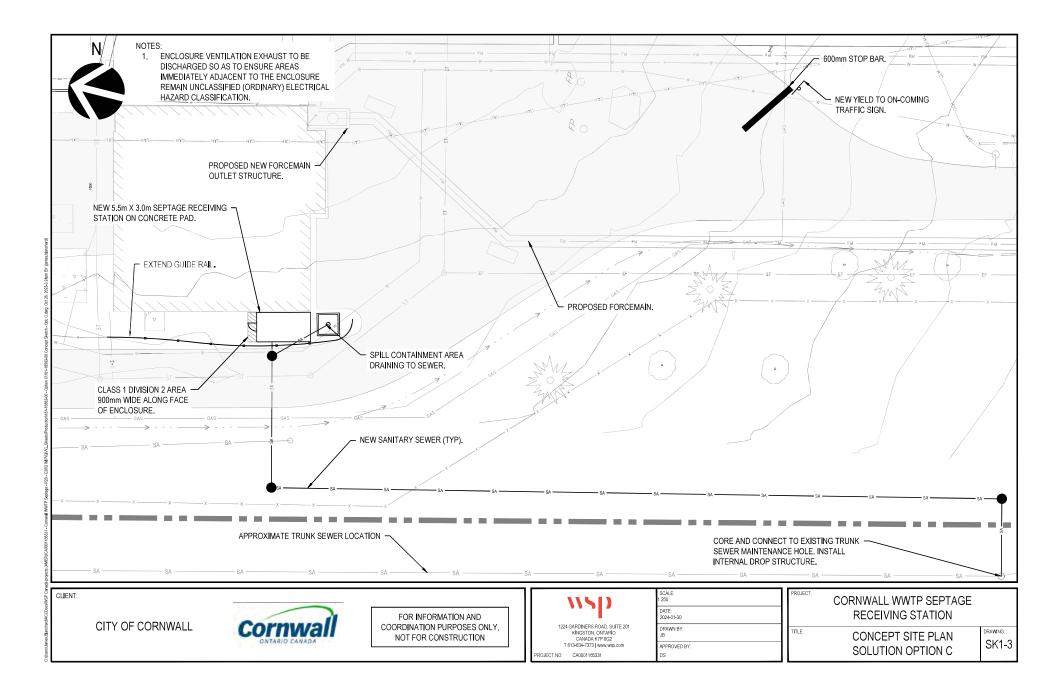
Table 4-1 - Desig	gn Alternative	Evaluation	Summary
-------------------	----------------	-------------------	---------

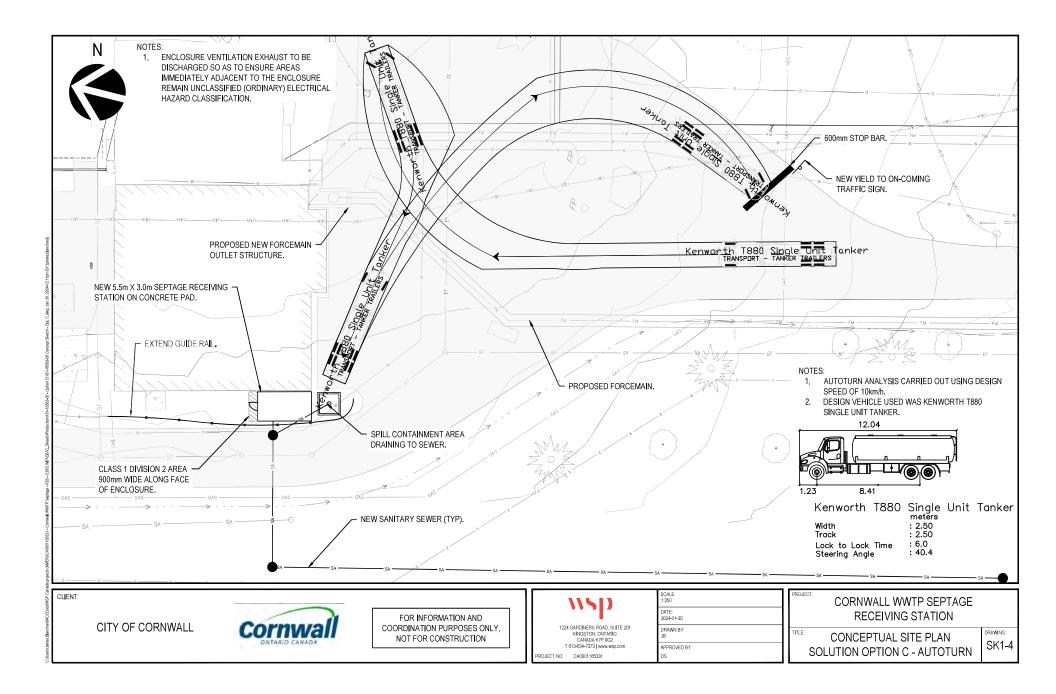
APPENDIX

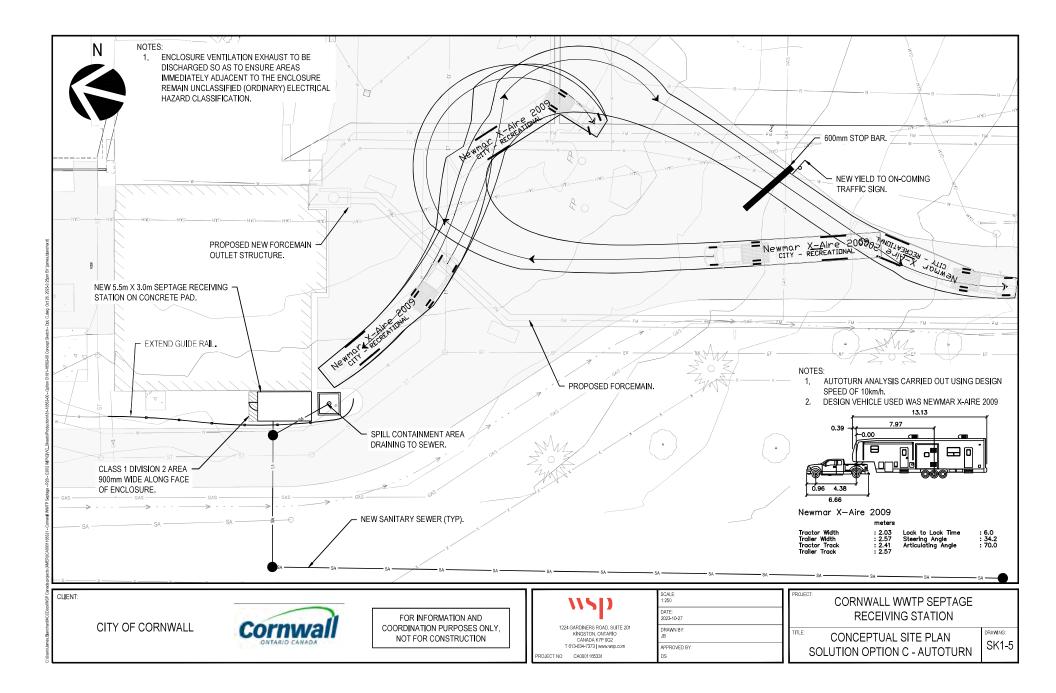
A PRELIMINARY LAYOUTS











APPENDIX

B CAPITAL COST ESTIMATES

Opinion of Probable Cost



Context:

Opinion of probable cost estimate to be read in conjuction with the report titiled Septage Receiving Station Preliminary Design - City of Cornwall WWTP dated January 30th, 2024.

Scope and Quantities Summary - Option A

Item No.	Description	Quantity	Unit	Unit Rate	Cost
0 REMOVALS					
1.1	Clearing & Grubbing	1	l.s.	\$5,000.00	\$5,000.00
1.2	Common Excavation & Grading	1	l.s.	\$5,000.00	\$5,000.00
1.3	Miscellaneous Removal and Reinstatements - Including Signage & Fencing	1	l.s.	\$2,500.00	\$2,500.00
1.4	Asphalt Road Removal	60	s.m.	\$20.00	\$1,200.00
				SUBTOTAL	\$13,700.00
.0 CIVIL					
2.1	New Traffic Guardrail	30	m	\$100.00	\$3,000.00
2.2	New Gravity Sewers	115	m	\$300.00	\$34,500.00
2.3	New Internal Drop Structure & Core Connection	1	ea.	\$2,500.00	\$2,500.00
2.4	New Manholes	3	ea.	\$8,000.00	\$24,000.00
2.5	New Septage Receiving Station Concrete Pad	20	m3	\$1,500.00	\$30,000.00
2.6	New Spill Concrete Containment Pad	2	m3	\$1,500.00	\$3,000.00
2.7	Asphalt Road Reinstatement	60	s.m.	\$75.00	\$4,500.00
2.8	Topsoil and Seeding	600	s.m.	\$20.00	\$12,000.00
				SUBTOTAL	\$113,500.00
.0 PROCESS					
3.1	Supply Containerized Septage Receiving Station - Simple Solution	1	l.s.	\$475,000.00	\$475,000.00
3.2	Crane Mobilization	1	day	\$7,500.00	\$7,500.00
3.3	Services Interconnections	1	l.s.	\$7,500.00	\$7,500.00
			-	SUBTOTAL	\$490,000.00
.0 ELECTRICAL					
4.1	Supply and Install New Wiring and Disconnect for Container	1	l.s.	\$15,000.00	\$15,000.00
4.2	System Integration	1	l.s.	\$10,000.00	\$10,000.00
			•	SUBTOTAL	\$25,000.00
0.0 OTHER					
5.1	Mobilization / Demobilization	1	l.s.	\$15,000.00	\$15,000.00
5.2	Project Administration, Subcontractor Coordination, Submittals	1	l.s.	\$5,000.00	\$5,000.00
5.3	Erosion & Sediment Control	1	l.s.	\$2,500.00	\$2,500.00
	+	<u>.</u>	•	SUBTOTAL	\$22,500.00
.0 ENGINEERING					
6.1	Detailed Engineering and Contract Administration		10% Project Valu	le	\$66,470.00
			,	SUBTOTAL	\$66,470.00
.0 CONTINGENC	Y				
7.1	Contingency		15% Project Valu	le	\$109,675.5
			,	SUBTOTAL	\$109,675.5
	CT COST (excluding applicable taxes)				\$840,845.

Notes:

Nomenclature: I.s. (Lump Sump), ea. (Each), m. (linear meter)



Context:

Opinion of probable cost estimate to be read in conjuction with the report titiled Septage Receiving Station Preliminary Design - City of Cornwall WWTP dated January 30th, 2024.

Scope and Quantities Summary - Option B

Item No.	Description	Quantity	Unit	Unit Rate	Cost
0 REMOVALS					-
1.1	Clearing & Grubbing	1	l.s.	\$5,000.00	\$5,000.00
1.2	Common Excavation & Grading	1	l.s.	\$10,000.00	\$10,000.00
1.3	Miscellaneous Removal and Reinstatements - Including Signage	1	l.s.	\$2,500.00	\$2,500.00
1.4	Fencing Removal	90	m	\$50.00	\$4,500.00
1.5	Fence Gate Removal & Reinstatement	1	l.s.	\$2,500.00	\$2,500.00
		-		SUBTOTAL	\$24,500.00
2.0 CIVIL					
2.1	New 1.8 m High Chain-Link Fence c/w Privacy Screening	85	m	\$200.00	\$17,000.00
2.2	New Automated Electric Gate System c/w Key-In Pad	1	l.s.	\$40,000.00	\$40,000.00
2.3	New Signage	1	l.s.	\$1,500.00	\$1,500.00
2.4	New Line Painting	1	l.s.	\$1,000.00	\$1,000.00
2.5	New Water Service	30	m	\$200.00	\$6,000.00
2.6	New Internal Drop Structure & Core Connection	1	ea.	\$2,500.00	\$2,500.00
2.7	New Sewer Piping	40	m	\$300.00	\$12,000.00
2.8	New Manholes	2	ea.	\$8,000.00	\$16,000.00
2.9	New Septage Receiving Station Concrete Pad	36	m3	\$1,500.00	\$54,000.00
2.10	New Spill Concrete Containment Pad	20	m3	\$1,500.00	\$30,000.00
2.11	New 5m Wide Asphalt Laneway	60	m	\$500.00	\$30,000.00
2.12	Topsoil and Seeding	1200	s.m.	\$20.00	\$24,000.00
				SUBTOTAL	\$234,000.00
3.0 PROCESS					-
3.1	Supply Containerized Septage Receiving Station - Comprehensive Solution	1	ea.	\$1,100,000.00	\$1,100,000.00
3.2	Crane Mobilization	1	day	\$7,500.00	\$7,500.00
3.3	Services Interconnections	1	l.s.	\$7,500.00	\$7,500.00
		-		SUBTOTAL	\$1,115,000.00
4.0 ELECTRICA	L				
4.1	Supply and Install New Wiring for Electric Sliding Gate & Container	1	l.s.	\$25,000.00	\$25,000.00
4.2	System Integration	1	l.s.	\$10,000.00	\$10,000.00
				SUBTOTAL	\$35,000.00
5.0 OTHER					
5.1	Mobilization / Demobilization	1	l.s.	\$15,000.00	\$15,000.00
5.2	Project Administration, Subcontractor Coordination, Submittals	1	l.s.	\$5,000.00	\$5,000.00
5.3	Erosion & Sediment Control	1	l.s.	\$5,000.00	\$5,000.00
		•		SUBTOTAL	\$25,000.00
.0 ENGINEERI	NG				
6.1	Detailed Engineering and Contract Administration	1	0% Project Val	Je	\$143,350.00
				SUBTOTAL	\$143,350.00
.0 CONTINGE	ICY				
7.1	Contingency	1	5% Project Val	le	\$236,527.50
				SUBTOTAL	\$236,527.50
	ECT COST (excluding applicable taxes)				\$1,813,377.5

Notes:

Nomenclature: I.s. (Lump Sump), ea. (Each), m. (linear meter)

Opinion of Probable Cost



Context:

Opinion of probable cost estimate to be read in conjuction with the report titiled Septage Receiving Station Preliminary Design - City of Cornwall WWTP dated January 30th, 2024.

	Scope and Quantities Summ	, ,			
Item No.	Description	Quantity	Unit	Unit Rate	Cost
0 REMOVALS		-	-	-	-
1.1	Clearing & Grubbing	1	l.s.	\$5,000.00	\$5,000.00
1.2	Common Excavation & Grading	1	l.s.	\$5,000.00	\$5,000.00
1.3	Miscellaneous Removal and Reinstatements - Including Signage & Fencing	1	l.s.	\$2,500.00	\$2,500.00
1.4	Asphalt Road Removal	60	s.m.	\$20.00	\$1,200.00
				SUBTOTAL	\$13,700.0
0 CIVIL					
2.1	New Traffic Guardrail	30	m	\$100.00	\$3,000.00
2.2	New Gravity Sewers	115	m	\$300.00	\$34,500.0
2.3	New Internal Drop Structure & Core Connection	1	ea.	\$2,500.00	\$2,500.00
2.4	New Manholes	3	ea.	\$8,000.00	\$24,000.0
2.5	New Septage Receiving Station Concrete Pad	15	m3	\$1,500.00	\$22,500.0
2.6	New Spill Concrete Containment Pad	2	m3	\$1,500.00	\$3,000.00
2.7	Asphalt Road Reinstatement	60	s.m.	\$75.00	\$4,500.00
2.8	Topsoil and Seeding	600	s.m.	\$20.00	\$12,000.0
				SUBTOTAL	\$106,000.0
.0 PROCESS		- 1	-	•	
3.1	Supply Containerized Septage Receiving Station - Minimal Simple Solution	1	l.s.	\$350,000.00	\$350,000.0
3.2	Crane Mobilization	1	day	\$7,500.00	\$7,500.00
3.3	Services Interconnections	1	l.s.	\$7,500.00	\$7,500.00
				SUBTOTAL	\$365,000.0
0 ELECTRICAL					
4.1	Supply and Install New Wiring and Disconnect for Container	1	l.s.	\$15,000.00	\$15,000.00
4.2	System Integration	1	l.s.	\$10,000.00	\$10,000.0
				SUBTOTAL	\$25,000.00
.0 OTHER					
5.1	Mobilization / Demobilization	1	l.s.	\$15,000.00	\$15,000.00
5.2	Project Administration, Subcontractor Coordination, Submittals	1	l.s.	\$5,000.00	\$5,000.00
5.3	Erosion & Sediment Control	1	l.s.	\$2,500.00	\$2,500.00
				SUBTOTAL	\$22,500.0
0 ENGINEERIN					
6.1	Detailed Engineering and Contract Administration		10% Project Value		\$53,220.0
				SUBTOTAL	\$53,220.0
0 CONTINGENO		-			
7.1	Contingency		15% Project Value		\$87,813.0
			,	SUBTOTAL	\$87,813.0

Notes:

Nomenclature: I.s. (Lump Sump), ea. (Each), m. (linear meter)

Appendix D Results of Public Information Centre

Andrew Smale

From:	Nicolas Bialik <nbialik@jlrichards.ca></nbialik@jlrichards.ca>
Sent:	Wednesday, February 21, 2024 2:07 PM
Cc:	Susan Jingmiao Shi; Andrew Smale; dlauzon@cornwall.ca
Subject:	City of Cornwall Biosolids, Organics and Septage Master Plan - Notice of Virtual Public
	Information Centre - February 28, 2024
Attachments:	Cornwall BOSMP_Notice of PIC_2024-02-28.pdf

You don't often get email from nbialik@jlrichards.ca. Learn why this is important

Good afternoon,

You have been copied on this email because you were identified as a stakeholder for the City of Cornwall Biosolids, Organics and Septage Master Plan (BOSMP) study.

You are invited to attend a Public Information Centre (PIC), which will be undertaken virtually on **February 28, 2024**, **starting at 7:00 p.m**. Additional details on the PIC are provided in the attached notice.

Note that the City of Cornwall created a webpage for this Master Plan study on the City of Cornwall website. This webpage will be updated with pertinent information at key study milestones. You may access this webpage through the following link: <u>Biosolids</u>, <u>Organics and Septage Master Plan - City of Cornwall</u>.

Should you have any questions or feedback, please do not hesitate to respond to this email or contact either of the two (2) project contacts found in the attached notice.

We look forward to hearing from you.

Regards,

Nicolas Bialik, P.Eng. Environmental Engineer

J.L. Richards & Associates Limited 1000-343 Preston Street, Ottawa, ON K1S 1N4 Direct: 343-804-5346





Notice of Public Information Centre



The City of Cornwall Biosolids, Organics and Septage Master Plan

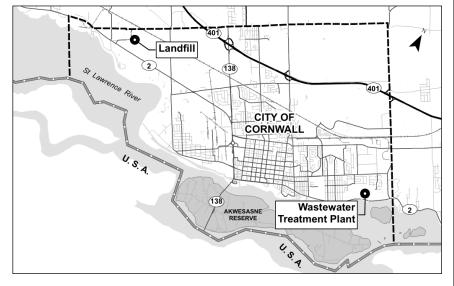
The City of Cornwall (the City) has initiated a Master Planning process in accordance with Approach 2 of the Municipal Engineers Association (MEA) Class Environmental Assessment (Class EA) to develop a Management of Biosolids, Organics and Septage Master Plan.

How Will This Affect Me?

The Master Plan study is assessing various options to improve the management of two key waste streams currently handled at the municipal landfill: wastewater biosolids and hauled septage. This study is also reviewing options for managing the material from the City's organics collection program, set to begin in January 2025. The preferred solution is to receive and treat hauled septage at the Cornwall Wastewater Treatment Plant, divert the biosolids offsite to be processed by a third party, and transport organics materials offsite to be processed by a third party.

How Do I Get More Information?

Public and agency consultation is a key part of the Master Planning process. The Public Information Centre provides an opportunity for the public and stakeholder agencies to speak directly to the Project Team. The Public Information Centre will provide an overview of the work completed and the methodology used to arrive at the recommended solution. The Public Information Centre is scheduled as follows:



Date: February 28, 2024

Time: 7:00 p.m.

Location: Virtual Presentation. Recording will be provided on the City's website. Registration: <u>https://events.teams.microsoft.com/event/8f8fe1a9-0f3d-4c97-aebb-</u>e1f196c4201b@68d0489c-f94f-4412-b722-c894adcb2a17

You can contact a member of the study team listed below with any questions or to provide input on the Master Plan study. Updates will also be provided throughout the Master Plan study on the City's website.

Andrew Smale, P.Eng. Project Manager GHD Limited 179 Colonnade Road South, Suite 400 Ottawa, ON K2E 7J4 andrew.smale@ghd.com Daniel Lauzon Project Supervisor, Environmental Services City of Cornwall 861 Second St. W Cornwall, ON K6J dlauzon@cornwall.ca

This study is being conducted according to the requirements of Approach 2 of a Master Plan under the Ontario Municipal Class Environmental Assessment process (October 2000, as amended in 2015 and 2023). Please note that ALL personal information included in a Part II Order submission – such as name, address, telephone number and property location – is collected, maintained and disclosed by the Ministry of the Environment and Climate Change for the purpose of transparency and consultation. The information is collected under the authority of the Environmental Assessment Act or is collected and maintained for the purpose of creating a record that is available to the general public as described in s.37 of the Freedom of Information and Protection of Privacy Act. Personal information you submit will become part of a public record that is available to the general public unless you request that your personal information remain confidential. For more information, please contact the ministry's Freedom of Information and Privacy Coordinator at 416-327-1434.

This Notice was issued on February 21, 2024



City of Cornwall Biosolids, Organics and Septage Master Plan

Public Information Cent

February 28, 2024 - 7 pm EST (Virtual)



- Welcome and Introductions
- Project Background (5 min)
- Problem and Opportunity Statement (5 min)
- Project Status/Schedule (5 min)
- Overview of the Class Environmental Assessment Process (5 min)
- Review of Alternatives (15 min)
- Evaluation Results (5 min)
- Closing Remarks and Next Steps (5 min)
- Q&A Session (15 min)

Note: This session is being recorded for viewing by those that cannot attend today

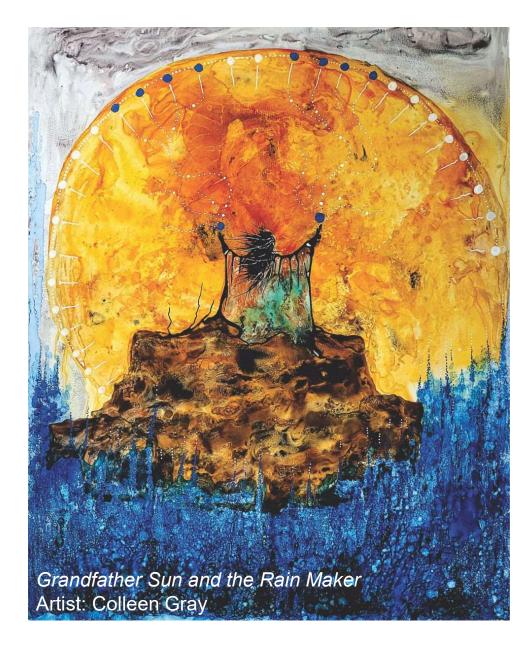
Cornwall BOSMP - Public Information Center I © 2024 GHD. All rights reserved.

Acknowledgement and Respect

The City of Cornwall respectfully acknowledges that the land on which we gather and learn daily is the Traditional territory of the Haudenosaunee peoples and Mohawks of Akwesasne. Our communities have much to learn from the First People as the original caretakers and stewards of these lands and waters.

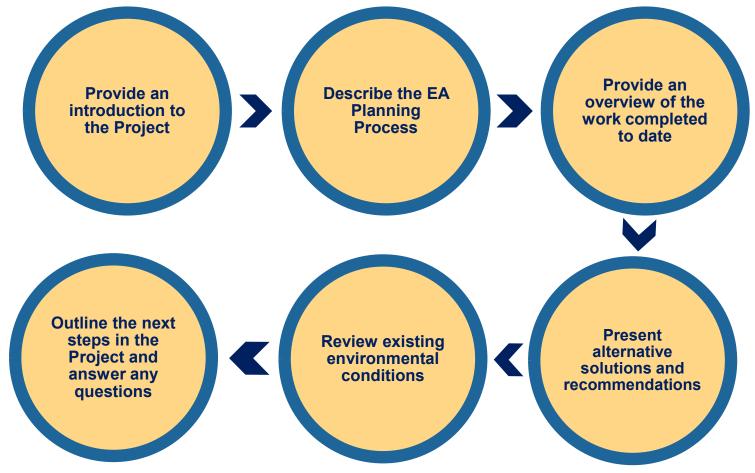
We acknowledge our responsibility to the calls to action for Truth and Reconciliation, and strive to incorporate them into our community work, and commit to continue learning and unlearning to decolonize our minds and work. May we create sustainable partnerships and strong community for the future teachings and benefit of generations to come.

3



Purpose and Goals for this Session

4



Cornwall BOSMP - Public Information Center I © 2024 GHD. All rights reserved.

Project Background

5

- The main goals for Biosolids, Organics and Septage Master Plan project include:

- Establishing a long-term planning framework for the management of:
 - Biosolids from the Wastewater Treatment Plant (WWTP)
 - Organics from the new green bin curbside organics collection program (2025), and
 - Septage that is currently being transported to the landfill and conveyed with leachate via the sanitary collection system to the WWTP.
- Clearly identifying projects to address these waste streams before the Master Planning stage is completed (individual projects or combined project); and,
- Laying the groundwork to allow any identified next stage EA processes to proceed, having provided proposed recommended alternatives that will be carried forward.

What are the waste streams to be managed?



- This is a unique project, as three (3) separate waste streams need to be managed, which may require multiple solutions:
- Dewatered biosolids generated by the Cornwall WWTP that is currently deposited at the local landfill located at 2590 Cornwall Centre Road West, at a rate of 4,000 wet tonnes per year (approximately 27% total solids)
- Organics material collected through a green bin program that is planned to commence January 1, 2025 (projected at a minimum 4,000 wet tonnes/year)
- Septage generated by residents and local customers, that is also currently accepted at the local landfill, and combined into the leachate collection system where it ends up at the Cornwall WWTP (estimated at 5- 10 m3/day).

Cornwall BOSMP - Public Information Center I © 2024 GHD. All rights reserved.

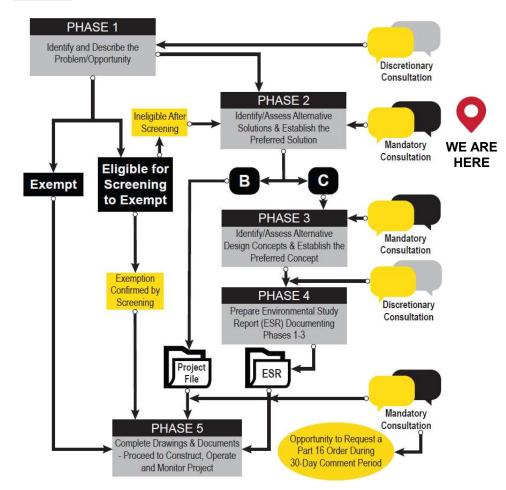
Overview of the Municipal Class Environmental Assessment (MCEA) Process

- We are following "Approach 2" and are in Phase
 2 of a two-phase process that encompasses a
 Master Plan
- The Master Plan process "stops" after feedback collected and document issued after Phase 2.
- This is <u>not</u> a recommendation of a design, only a suggested path forward for the City to achieve their goals

7



Overview of the **Municipal Class Environmental Process**



Cornwall BOSMP - Public Information Center] I © 2024 GHD. All rights reserved.

Problem and Opportunity Statement



- Extend the overall operating lifespan of the landfill by:
 - diverting organics and biosolids, increasing the residential diversion rate from 42.98% to 63.99%, adding approximately with a total diversion rate including organics and biosolids from 32.60% to 49.38%, and
 - adding an approximate 4-year capacity increase to the landfill under current filling conditions.
- Flexibility to accommodate changes in waste streams;
- Optimize operational, financial and environmental benefits of biosolids, organics and septage from collection phases to end use/disposal phases;
- Reduce the overall amount of greenhouse gas (GHG) emissions;
- Protect public health and the environment.

Cornwall BOSMP - Public Information Center I © 2024 GHD. All rights reserved.

Project Status and Schedule

- Notice of Biosolids, Organics and Septage Master Plan Project published July 2023
- Long List of Alternatives Reviewed August/September 2023
- Short List of Alternatives Developed October/November 2023
- Evaluation of Alternative Solutions January/February 2024
- Public Information Center Today!
- Incorporate feedback from Stakeholders going forward
- Draft Master Plan March 2024

9

- Present initial findings to City Council May 2024
- Master Plan Finalized for public review by May 2024
- Green Bin Program planned to commence January 1, 2025

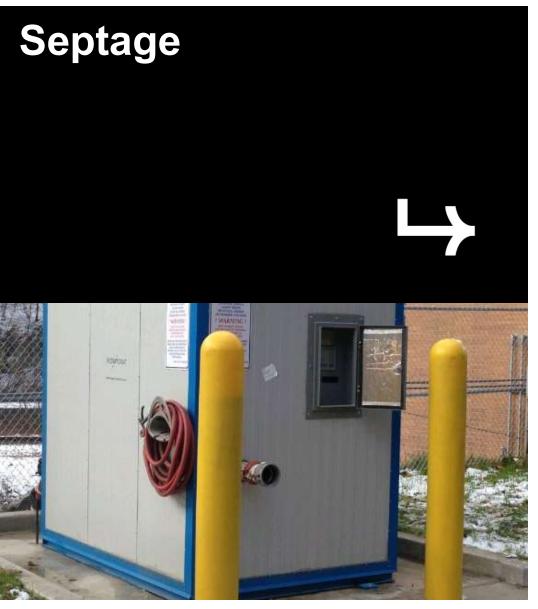


Cornwall BOSMP - Public Information Center I © 2024 GHD. All rights reserved.



Review of Alternative Solutions →

250



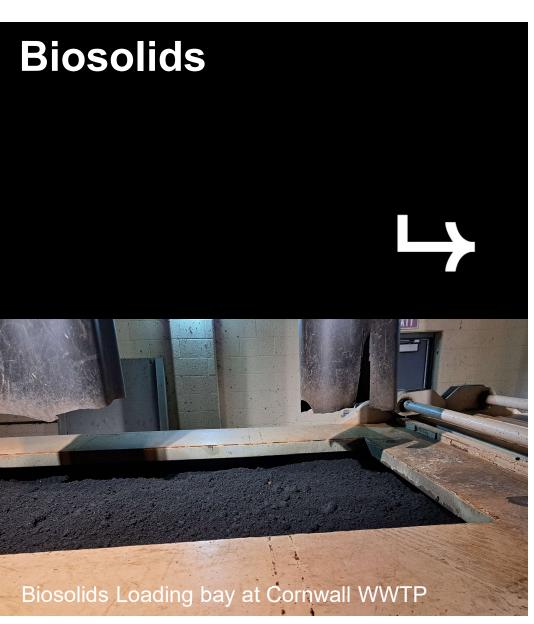
- No alternatives considered, as "Do Nothing" is not a viable option after MECP has provided direction to the City to stop current practice
- Rather, City has pro-actively undertaken a pre-design of a septage receiving station to be located at the Cornwall WWTP
- The MCEA constitutes the construction of a new septage receiving station at the facility as undertaking 29a - Expand / refurbish / upgrade sewage treatment plant including outfall up to existing rated capacity where no land acquisition is required.
- Undertaking 29a is deemed exempt from the requirements of the Environmental Assessment Act (EAA) by the MCEA.
- Given this exemption alternative solutions for septage do not need to be developed or assessed, but in the interest of completeness the recommended solution will be presented

Cornwall BOSMP - Public Information Center I © 2024 GHD. All rights reserved.

Evaluation of Alternatives - Septage

- Septage
 - The Pre-design for the septage station at the Cornwall WWTP is complete
 - Having septage receiving at the WWTP is in line with common practice at many WWTPs across Ontario and Canada
 - The septage station will be designed to mitigate potential odours
 - Project team recommendation is to continue with this approach and complete design/construction of this septage receiving station as a separate project.

Cornwall BOSMP - Public Information Center I © 2024 GHD. All rights reserved.

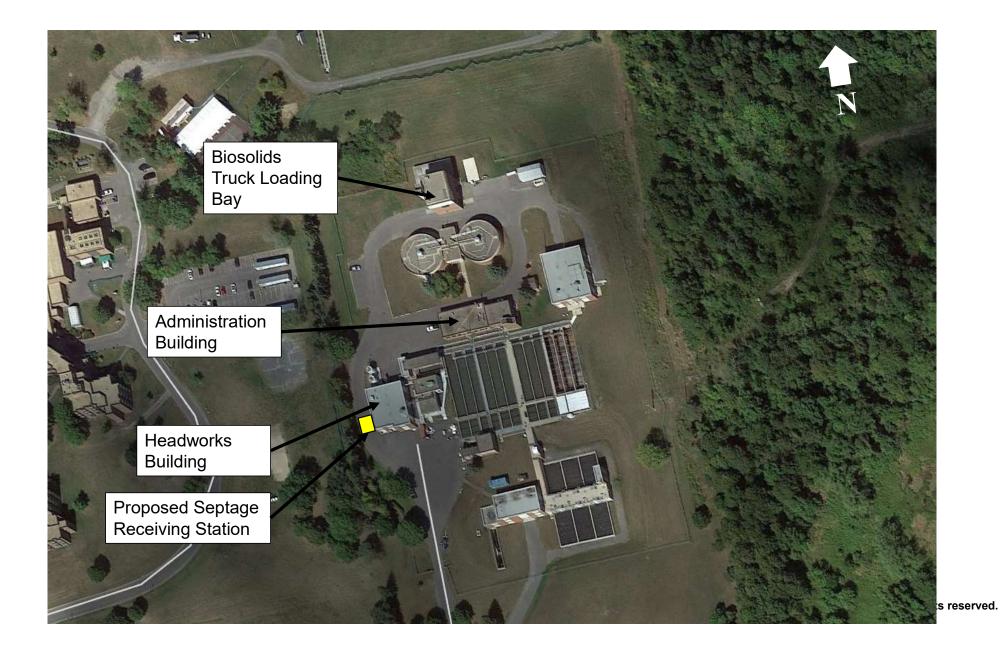


The following Alternatives were evaluated:

- "Do Nothing" continue to put biosolids into landfill and consume limited remaining capacity (current practice)
- 2. Biosolids Processing by others haul City's biosolids to a merchant facility where material will be used as soil amendment or compost bulking, or other external process
- **3. Thermal Hydrolysis Process (THP)** at Cornwall WWTP – this will create a beneficial use product on site, enhance biogas (renewable energy) production and potential partnerships in agricultural sector
- **4. Sludge Drying Process at Cornwall WWTP** "thermal treatment" involving high temperature air or other heating medium to create a biosolids particle or pellet at 98% TS, significantly reducing volume of biosolids to be managed
- **5. Hybrid solution** implement Alternative 2 in short term, and develop permanent solution (Alternative 3 or 4) in long term.

Evaluation of Alternatives - Biosolids

Benefits	Drawbacks	Recommended Solution
No impacts on current O&M practicesNo additional infrastructure required	Decreasing available volume in City's landfillNo beneficial use of material	No
 No impacts on current O&M practices No additional infrastructure practices Beneficial use material (created by others) 	 Truck traffic over longer distance (but no increase in # of trucks) Dependent on 3rd party 	Yes
 Can implement in existing building Builds good security on multiple outlets for material (Agricultural sector) Some additional biogas recovery Potential source of revenue, and partnerships with some THP system suppliers for management of material 	 Will have to convert existing centrifuges to thickening, including downstream equipment, but no new <u>major</u> equipment Higher truck traffic with liquid material leaving site (not high TS cake anymore) 	No
 Significantly reduce volume of biosolids (27% TS to 98% TS) – less truck traffic Potential energy recovery from process to offset energy inputs Produce a beneficial use fertilizer product (pellets) 	 Dryers would be at low end of capacity for City's throughput New building required at WWTP site, safety concerns with dried product, significant capital and energy costs City would have to manage end product 	No
 Refer to Alternative 3 Allows time to develop a more robust, long term solution including earmarking of funds 	Refer to Alternative 3	No
	 No impacts on current O&M practices No additional infrastructure required No impacts on current O&M practices No additional infrastructure practices Beneficial use material (created by others) Can implement in existing building Builds good security on multiple outlets for material (Agricultural sector) Some additional biogas recovery Potential source of revenue, and partnerships with some THP system suppliers for management of material Significantly reduce volume of biosolids (27% TS to 98% TS) – less truck traffic Potential energy recovery from process to offset energy inputs Produce a beneficial use fertilizer product (pellets) Refer to Alternative 3 Allows time to develop a more robust, long 	 No impacts on current O&M practices No additional infrastructure required No impacts on current O&M practices No impacts on current O&M practices No additional infrastructure practices Beneficial use material (created by others) Can implement in existing building Builds good security on multiple outlets for material (Agricultural sector) Some additional biogas recovery Potential source of revenue, and partnerships with some THP system suppliers for management of material Significantly reduce volume of biosolids (27% TS to 98% TS) – less truck traffic Potential energy recovery from process to offset energy inputs Produce a beneficial use fertilizer product (pellets) Refer to Alternative 3 Allows time to develop a more robust, long Decreasing available volume in City's landfill No beneficial use of material Dependent on 3rd party Will have to convert existing centrifuges to thickening, including downstream equipment, but no new <u>major</u> equipment Will have to convert existing centrifuges to thickening, including downstream equipment, but no new <u>major</u> equipment Higher truck traffic with liquid material leaving site (not high TS cake anymore) Dryers would be at low end of capacity for City's throughput New building required at WWTP site, safety concerns with dried product, significant capital and energy costs City would have to manage end product



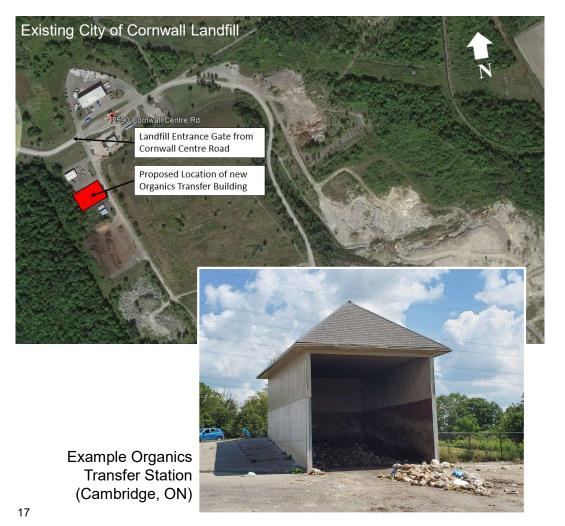


The following Alternatives were evaluated to comply with the objectives of the City:

- 1. "Do Nothing" continue to put collected organics into landfill (currently going as garbage)
- 2. Organics Processing by others haul City's organics to a 3rd party merchant facility where material will be processed and turned into a beneficial use product (either compost, soil amendment material or renewable energy via biogas)

Self-processing of organics material by the City is <u>a significant capital and operational cost</u> <u>investment</u> that was investigated as part of the long list of options for review, but was NOT considered further due to these constraints.

Evaluation of Alternatives - Organics



- Alternative 1: "Do Nothing"

- The "Do Nothing" approach <u>cannot</u> be recommended. The City is required to implement an organics program in 2025 in order to achieve the City's sustainability and adhere to provincial legislation.
- Alternative 2: Organics Processing By Others
 - To implement and process organics at a 3rd party processing facility, a transfer station within the City limits would be required to be designed and constructed prior to January 2025.
 - Therefore, the project team recommendation is the City construct and transfer station adjacent to the current leaf and yard waste depot.

Recommended Path Forward



- Our preliminary findings for a recommended preferred alternative are as follows:
 - For septage, proceed with project to complete septage receiving station at Cornwall WWTP
 - For **biosolids**, proceed with RFP to merchant vendors for haulage of material off-site, and for use as beneficial material (solid amendment, compost bulking, etc.)
 - For organics:
 - proceed with design and construction of a new transfer station at existing landfill site, and,
 - Proceed with RFP to merchant vendors for haulage of organics material from new transfer station

Closing Remarks and Next Steps



- Any further questions or concerns, please submit through the City's communications team by March 13
- We will be integrating all feedback and comments into the final draft Master Plan report prior to finalizing for approval
- Master Plan draft will also be available for public review and comment for 30 days

Andrew Smale, P.Eng. Project Manager GHD Limited 179 Colonnade Road South, Suite 400 Ottawa, ON K2E 7J4 andrew.smale@ghd.com Daniel Lauzon Project Supervisor, Environmental Services City of Cornwall 861 Second St. W Cornwall, ON K6J dlauzon@cornwall.ca

Question and Answer Session



***** Thank You



Susan Jingmiao Shi

From:	Nicolas Bialik
Sent:	February 29, 2024 2:17 PM
То:	Glengarry Outhouses Inc.
Cc:	Susan Jingmiao Shi; Andrew Smale; Dan Lauzon
Subject:	RE: City of Cornwall Biosolids, Organics and Septage Master Plan - Notice of Virtual Public
	Information Centre - February 28, 2024

Hi Jimmy,

Thanks for reaching out. You can find a recording of the public information centre through the following link: <u>https://haveyoursaycornwall.ca/biosolids-organics-and-septage-master-plan</u>.

Let us know if you have any issues accessing the video.

Note that I have copied the main project contacts to this email.

Regards,

From: Glengarry Outhouses Inc. <glengarryouthouses@gmail.com>
Sent: Thursday, February 29, 2024 11:04 AM
To: Nicolas Bialik <nbialik@jlrichards.ca>
Subject: Re: City of Cornwall Biosolids, Organics and Septage Master Plan - Notice of Virtual Public Information Centre - February 28, 2024

[CAUTION] This email originated from outside JLR. Do not click links or open attachments unless you recognize the sender and know the content is safe. Do not forward suspicious emails, if you are unsure, please send a separate message to Helpdesk.

Hi Nicolas,

I had an issue come up last night and I was unable to attend the meeting. Is there a summary or link to discussion from the virtual meeting last night? I'm sorry I was unable to make it and look forward to hearing from you.

Thanks,

Jimmy

On Wed, Feb 21, 2024 at 2:07 PM Nicolas Bialik <<u>nbialik@jlrichards.ca</u>> wrote:

Good afternoon,

You have been copied on this email because you were identified as a stakeholder for the City of Cornwall Biosolids, Organics and Septage Master Plan (BOSMP) study.

You are invited to attend a Public Information Centre (PIC), which will be undertaken virtually on **February 28, 2024**, **starting at 7:00 p.m**. Additional details on the PIC are provided in the attached notice.

Note that the City of Cornwall created a webpage for this Master Plan study on the City of Cornwall website. This webpage will be updated with pertinent information at key study milestones. You may access this webpage through the following link: <u>Biosolids</u>, <u>Organics and Septage Master Plan - City of Cornwall</u>.

Should you have any questions or feedback, please do not hesitate to respond to this email or contact either of the two (2) project contacts found in the attached notice.

We look forward to hearing from you.

Regards,

Nicolas Bialik, P.Eng. Environmental Engineer

J.L. Richards & Associates Limited 1000-343 Preston Street, Ottawa, ON K1S 1N4 Direct: 343-804-5346





Appendix E Notice of Completion

Review Agencies, Stakeholders, and Interested Public Members

First name	Last Name	Job Title	Company	Address	City	Postal Code	Phone	Email
Municipality	Laot_Nume							
Justin	Towndale	Mayor	City of Cornwall	100 Water Street East	Cornwall	K6H 6G4	613-930-2787	
Todd	Bennett	Councillor	City of Cornwall	100 Water Street East	Cornwall	K6H 6G4	613-930-2787	
Sarah	Good	Councillor	City of Cornwall	100 Water Street East	Cornwall	K6H 6G4	613-930-2787	
Maurice	Dupelle	Councillor	City of Cornwall	100 Water Street East	Cornwall	K6H 6G4	613-930-2787	
Syd	Gardiner	Councillor	City of Cornwall	100 Water Street East	Cornwall	K6H 6G4	613-930-2787	
Fred	Ngoundjo	Councillor	City of Cornwall	100 Water Street East	Cornwall	K6H 6G4	613-930-2787	
Denis	Sabourin	Councillor	City of Cornwall	100 Water Street East	Cornwall	K6H 6G4	613-930-2787	
Dean	Hollingsworth	Councillor	City of Cornwall	100 Water Street East	Cornwall	K6H 6G4	613-930-2787	
Elaine	MacDonald	Councillor	City of Cornwall	100 Water Street East	Cornwall	K6H 6G4	613-930-2787	
Claude	McIntosh	Councillor	City of Cornwall	100 Water Street East	Cornwall	K6H 6G4	613-930-2787	
Carilyne	Hebert	Councillor	City of Cornwall	100 Water Street East	Cornwall	K6H 6G4	613-930-2787	
Mattieu	Fleury	CAO	City of Cornwall	100 Water Street East	Cornwall	K6H 6G4	613-930-2787	mfleury@cornwall.ca
Michael	Fawthrop	General Manager, Infrastructure & Municipal	City of Cornwall	1225 Ontario Street	Cornwall	K6H 4E1	613-930-2787	mfawthrop@cornwall.ca
Stephen	Romano	Division Manager, Environment	City of Cornwall	861 Second Street West	Cornwall	K6J 1H5	613-930-2782	sromano@cornwall.ca
Patrick	Carriere	Supervisor, Waste Water Treatment Plant	City of Cornwall	2800 Montreal Road	Cornwall	K6H 1G2	613-930-2787	pcarriere@cornwall.ca
Dave	Kuhn	Supervisor, Waste Management	City of Cornwall	861 Second Street West	Cornwall	K6J 1H5	613-930-2787	dkuhn@cornwall.ca
Dan	Lauzon	Supervisor, Capital Projects	City of Cornwall	2800 Montreal Road	Cornwall	K6H 1G2	613-930-2787	dlauzon@cornwall.ca
Angela	Parker	Coordinator, Sustainable Projects	City of Cornwall	861 Second Street West	Cornwall	K6J 1H5	613-930-2782	aparker@cornwall.ca
Political Representation	-1							
Eric	Duncan	MP	Member of Parliament	691 Brockdale Ave, Unit C	Cornwall	K6J 5C6	613-937-3331	Eric.Duncan@parl.gc.ca
Nolan	Quinn	MPP	Member of Provincial Parliament	120 Second Street West	Cornwall	K6J 1G5	613-933-6513	nolan.quinn@pc.ola.org
Provincial Government	-1							
Jon	Orpana	Environmental Resource Planner & EA Coordinator	Ministry of the Environment, Conservation and Parks	135 St. Clair Ave West	Toronto	M4V 1P5	613-561-8250	jon.orpana@ontario.ca
Michelle	Gordon	Water Compliance Officer	Ministry of the Environment, Conservation and Parks	113 Amelia Street	Cornwall	K6H 3P1	613-363-0878	michelle.gordon2@ontario.ca
Erin	Legue	Environmental Compliance Officer	Ministry of the Environment, Conservation and Parks	113 Amelia Street	Cornwall	K6H 3P1	613-866-0961	erin.legue@ontario.ca
Ken	Mott	Rural Planner, Eastern and Northeastern Ontario (A)	Ministry of Agriculture, Food and Rural Affairs	59 Ministry Road, PO Box 2004	Kemptville	K0G 1J0	613-258-8341	ken.mott@ontario.ca
Melanie	Johnson	Senior Strategic Initiatives Lead (Acting)	Ministry of Mines	933 Ramsey Lake Road	Sudbury	P3E 6B5	705-698-5041	melanie.johnson@ontario.ca
Michael	Elms	Manager, Community Planning and Development	Ministry of Municipal Affairs and Housing	Rockwood House, 8 Estate Lane	Kingston	K7M 9A8	613-545-2132	michael.elms@ontario.ca
Adam	Worth	District Manager (A), Kemptville Work Centre	Ministry of Natural Resources and Forestry	10 Campus Drive, Unit 1	Kemptville	K0G 1J0	647-294-5292	adam.worth@ontario.ca
Karla	Barboza	Team Lead - Heritage, Heritage Planning Unit	Ministry of Tourism, Culture and Sport / Ministry of Citizenship and	400 University Ave, 5th Floor	Toronto	M7A 2R9	416-660-1027	karla.barboza@ontario.ca
			Multiculturalism				407.000.0000	Ű
Nathan	Hammill	Manager (Acting), Strategic Economic Policy Unit	Ministry of Economic Development, Job Creation and Trade	56 Wellesley St. W, 11th Flr	Toronto	M5S 2S3	437-882-0990	nathan.hammill@ontario.ca
Joerg	Wittenbrinck	Manager (A), Integrated Energy Policy and Research	Ministry of Energy	77 Grenville St., 6th Flr.	Toronto	M7A 1B3	289-980-8124	joerg.wittenbrinck@ontario.ca
Jenn	Meleschuk	Manager, Engineering Program Delivery East, Design and	Ministry of Transportation	1355 John Counter Blvd	Kingston	K7L 5A3	613-539-6231	Jenn.Meleschuk@ontario.ca
		Engineering Branch			-		440, 440, 0000	
Kelly	Williams	Manager, Capital Planning	Ministry of the Solicitor General	25 Grosvenor St (George Drew Bldg),	Toronto	M7A 1Y6	416-418-6923	Kelly.Williams@Ontario.ca
-	11-4	Manager Environmental Designate	laferatura Ortania	13th Floor	T		047.004.4570	lasthania hatuwa Qinfu atuwa untania az
Katherine	Hotrum	Manager, Environmental Projects	Infrastructure Ontario	1 Dundas St. West, Suite 2000	Toronto	M5G 2L5	647-264-4573	katherine.hotrum@infrastructureontario.ca
Federal Government	Dunnananathan	Destingel Director, Ontaria Destingel Office	langest Assessment Annual of Consider	EE Varia Streat, Switz 600	Tananta		440.052.4575	
Anjala	Puvananathan	Regional Director, Ontario Regional Office	Impact Assessment Agency of Canada	55 York Street, Suite 600	Toronto	M5J 1R7	416-953-1575	anjala.puvananathan@ceaa-acee.gc.ca
Anne	Scotton	Regional Director General	Indigenous Affairs and Northern Developmen	25 St. Clair Avenue East, 8th Fl	Toronto	M4T 1M2	416-973-1255	anne.scotton@aadnc-aandc.gc.ca
Wesley	Plant	Manager, Environmental Assessment Section, Environmental Protection Branch (Ontario Region)	Environment and Climate Change Canada	4905 Dufferin St.	Downsview	M3H 5T4	416-739-4272	wesley.plant@ec.gc.ca
Aronoico								
Agencies Dr. Paul	Roumeliotis	Medical Officer of Health	Eastern Ontario Health Unit	1000 Pitt Street	Corrowall	K6J 3X1	613-933-1375	nroumaliatia@aabu aa
	Deslandes	Regulation Officer		18045 County Road #2, Box 429	Cornwall	K6H 5T2	613-938-3611	proumeliotis@eohu.ca
Lisa	Desiances	Administrative Assistant, Research and Program Evaluation Unit	Raison Region Conservation Authority	18043 County Road #2, Box 429	Cornwall	KUH JIZ	013-938-3011	info@rrca.on.ca
Jennifer	Davey	/ Research Planning & Analysis Section	Ontario Provincial Police	777 Memorial Avenue	Orillia	L3V 7V3	705-309-2621	jennifer.davey@opp.ca
First Nation Groups								
First Nation Groups			Kitigan Zibi Algonguin Anishinabe Nation	1 Paganakomin Mikan	Kitigan Zibi, Q	J9E 3C3	819-449-5170	dylan.whiteduck@kza.gc.ca
			Algonguins of Ontario – Consultation Office		Kiligan Zibi, Q	19E 2C2	819-449-5170	algonquins@tanakiwin.com
Alv	Alibhai	Director	Metis Nation of Ontario Region				416-977-9881	
Aly	Alibitat	Director	Metis Consultation Unit – Metis Nation of Ontario Head Office	500 Old St. Patrick Street, Unit D	Ottawa	K1N 9G4	410-911-9001	consultations@metisnation.org
			Metis Nation of Ontario – Land, Resources & Consultation	355 Cranston Cres.	Midland	L4R 4K6		
Leslie	Papineau	Acting Director	Mohawk Council of Akwesasne	PO Box 90	Akwesasne	HOM 1A0	613-575-2250	leslie.papineau@akwesasne.ca
Abraham	Francis	Environmental Services Manager	Mohawk Council of Akwesasne	PO Box 9	Akwesasne	HOM 1A0	(613) 575-2250 Ext. 1038	abraham.francis@akwesasne.ca
			Mohawk Council of Akwesasne					info@akwesasne.ca
Abram	Benedict	Grand Chief	Mohawk Council of Akwesasne				613-575-2250	grand.chief@akwesasne.ca
			Huron-Wendat					
Potential Strategic Partners								
Steve	Rakidzioski	Specialist, RNG Business Development	Enbridge	109 Commissioners Road West	London, ON,	N6A 4P1	226-926-7484	steve.rakidzioski@enbridge.com
Mary	Sye	Energy Advisor-Municipal Energy Solutions	Enbridge	500 Consumers Road, 4th Floor	Toronto	M2J 1P8	416-420-9281	mary.sye@enbridge.com
			Cornwall Electric	,				cecustomer.service@cornwallelectric.com
Prashant	Vats	General Director/District Manager	GFL Environmental Inc	17125 Laflech Road	Moose Creek	KOC 1WO	613-538-2776 Ext.2240	pvats@gflenv.com
James	Bruce	Business Development Manager	Convertus	8-307 Commissioners Road West,	London, ON,	N6J 1Y4	1-226-577-1603	aironmonger@convertusgroup.com
Brian Kronstal		Operations	Third High Farms	, , , , , , , , , , , , , , , , , , , ,	. ,			bkronstal@gflenv.com
Sarah	Mason-Renton	Business Development Manager	Lystek	125 McGoven Drive	Cambridge	N3H 4R7	519-465-1294	smasonrenton@lystek.com
Currently Engaged Consultants								
ouncitity Engaged oonsultants	Searl	Muicipal Project Engineer/ Septage	WSP				613-935-0538	daniel.searle@wsp.com
Daniel	ooun			1565 Carling Ave	Ottown	K17 0D1		
Daniel		Project Engineer/WW IP Odour Study and Dewatering Building		LIDDD CARIING AVE	Ottawa	K1Z 8R1	1	Jordan.Smyth@Jacobs.com
	Smyth	Project Engineer/WWTP Odour Study and Dewatering Building Odour Control	Jacobs	······································				
Daniel Jordan								
Daniel Jordan Surounding Municipalities	Smyth							
Daniel Jordan	Smyth							
Daniel Jordan Surounding Municipalities	Smyth		United Counties of SDG	26 Pitt Street	Cornwall	K6J 3P2	613-932-1515 ext. 1202	madams@sdgcounties.ca
Daniel Jordan Surounding Municipalities Stormont/Dundas/Glengary (SDG	Smyth	Odour Control			Cornwall Cornwall	K6J 3P2 K6J 3P2	613-932-1515 ext. 1202 613-932-1515 ext. 1266	madams@sdgcounties.ca
Daniel Jordan Surounding Municipalities Stormont/Dundas/Glengary (SDG Maureen	Smyth G) Adams	Odour Control Chief Administrative Officer	United Counties of SDG	26 Pitt Street	-			
Daniel Jordan Surounding Municipalities Stormont/Dundas/Glengary (SDG Maureen Peter	Smyth G) Adams Young	Odour Control Chief Administrative Officer Director of Planing and Economic Development Services	United Counties of SDG United Counties of SDG	26 Pitt Street 26 Pitt Street	Cornwall	K6J 3P2	613-932-1515 ext. 1266	pyoung@sdgcounties.ca tkirkpatrick@sdgcounties.ca
Daniel Jordan Surounding Municipalities Stormont/Dundas/Glengary (SDG Maureen Peter Tara	Smyth Adams Young Kirpatrick	Odour Control Chief Administrative Officer Director of Planing and Economic Development Services Manager of Economic Development	United Counties of SDG United Counties of SDG United Counties of SDG	26 Pitt Street 26 Pitt Street 26 Pitt Street 26 Pitt Street	Cornwall Cornwall	K6J 3P2 K6J 3P2	613-932-1515 ext. 1266	pyoung@sdgcounties.ca
Daniel Jordan Surounding Municipalities Stormont/Dundas/Glengary (SDG Maureen Peter Tara	Adams Young Kirpatrick McMillan	Odour Control Chief Administrative Officer Director of Planing and Economic Development Services Manager of Economic Development Director of Transportation and Planning Service	United Counties of SDG United Counties of SDG United Counties of SDG United Counties of SDG South Dundas	26 Pitt Street 26 Pitt Street 26 Pitt Street 26 Pitt Street	Cornwall Cornwall	K6J 3P2 K6J 3P2	613-932-1515 ext. 1266	pyoung@sdgcounties.ca tkirkpatrick@sdgcounties.ca dmcmillan@sdgcounties.ca
Daniel Jordan Surounding Municipalities Stormont/Dundas/Glengary (SDG Maureen Peter Tara Derek Jeff	Adams Young Kirpatrick McMillan Hyndman	Odour Control Chief Administrative Officer Director of Planing and Economic Development Services Manager of Economic Development Director of Transportation and Planning Service Manager of Transportation and Public Works	United Counties of SDG United Counties of SDG United Counties of SDG United Counties of SDG United Counties of SDG South Dundas	26 Pitt Street 26 Pitt Street 26 Pitt Street 26 Pitt Street	Cornwall Cornwall	K6J 3P2 K6J 3P2	613-932-1515 ext. 1266 613-932-1515 ext 1227	pyoung@sdgcounties.ca tkirkpatrick@sdgcounties.ca dmcmillan@sdgcounties.ca jhyndman@southdundas.com

Review Agencies, Stakeholders, and Interested Public Members

Douglas	Sitland	Director of Public Works	North Glengarry					pwdirector@northglengarry.ca
Blake	Henderson	Public Works Director	North Stormont					bhenderson@northstormont.ca
Former Septage Customers								
Landfill)								
David Brown Construction LTD				14855 Dafoe Rd	Ingleside	K0C 1M0	613-537-2255	
DBC Environmental Services LTD				5190 WindFall Rd	Long Sault	K0C 1P0	613-534-3861	
Glengary Outhouses				18998 County Rd 18	Williamstown	K0C 1S0	613-528-0606	glengarryouthouses@gmail.com
Glen Lauzon Trucking				18901 Glen Rd	Williamstown	K0C 2J0	613-931-1190	
John Warden Septic & Trucking				6275 Boundary Rd	Cornwall	K6H 5R5	613-932-2813	
₋osey's Haulage				5391 County Road 15	Avonmore	K0C 1P0	613-534-2404	
Twin Peaks Sanitary Services Inc.				4136 County Rd 7	Williamsburg	K0C 2H0	613-448-3066	

Appendix F Stakeholder Correspondence

Andrew Smale

From: Sent: To:	Orpana, Jon (MECP) <jon.orpana@ontario.ca> Thursday, February 22, 2024 4:11 PM sromano@cornwall.ca; Andrew Smale; Susan Jingmiao Shi; Orpana, Jon (MECP)</jon.orpana@ontario.ca>
Cc: Subject:	Forrester, Terri (She/Her) (MECP); Hamilton-Browne, Shannon (She/Her) (MECP) The City of Cornwall Biosolids, Organics and Septage Master Plan Notice of Commencement Response
Attachments:	Supporting Attachment - Proponent's Intro to Delegation of Procedural Aspects of Consultation with Aboriginal Communities.docx; Supporting Attachment - Species at Risk Proponents Guide to Preliminary Screening (Draft May 2019).pdf; fjo_MEA_Biosolids_Organics_and_Septage_MasterPlan_City of Cornwall_2023.pdf

You don't often get email from jon.orpana@ontario.ca. Learn why this is important

Hello Mr. Romano,

Please find attached MECP's preliminary comments on the above mentioned file. Also attached is the list of Indigenous Communities which must at a minimum be consulted with during your study.

Also for your consideration is a variety of resources and hyperlinks you may reference during the period of your study.

Regards,

Jon

Jon K. Orpana <u>hear name</u> Regional Environmental Planner Environmental Assessment Branch Ministry of the Environment, Conservation and Parks Kingston Regional Office PO Box 22032, 1259 Gardiners Road Kingston, Ontario K7M 8S5

Phone: (613) 548-6918 Fax: (613) 548-6908 Email: jon.orpana@ontario.ca

Ministry of the Environment, Conservation and Parks	Ministère de l'Environnement, de la Protection de la nature et des Parcs
Environmental Assessment	Direction des évaluations
Branch	environnementales
1 st Floor	Rez-de-chaussée
135 St. Clair Avenue W	135, avenue St. Clair Ouest
Toronto ON M4V 1P5	Toronto ON M4V 1P5
Tel. : 416 314-8001	Tél. : 416 314-8001
Fax .: 416 314-8452	Téléc. : 416 314-8452

By email only

February 22, 2024

The City of Cornwall

Attention: Stephen Romano, M. Eng., P. Eng. Manager of Environmental Services sromano@cornwall.ca

Dear Stephen Romano,

Re: The City of Cornwall – Biosolids, Organics, and Septage Master Plan – MECP response to the Notice of Commencement

Thank you for the Notice of Study Commencement provided by email on February 21st, 2024th, and issued July 18th 2023. You are getting this letter now as MECP was not circulated the notice on the date of issuance. As a mandatory point of contact under the Municipal Class EA parent document and process, MECP expects that any projects going forward by the City of Cornwall that MECP will be circulated in a timely manner.

The notice indicates that the City of Cornwall is initiating a Master Planning process in accordance with Approach 2 of the Municipal Engineers Association (MEA – Amended 2023) Class Environmental Assessment (Class EA) to develop a Management of Biosolids, Organics and Septage Master Plan.

The Master Plan study is assessing various options to improve the management of two

key waste streams currently handled at the municipal landfill: wastewater biosolids and hauled septage. This study is also reviewing options for managing the material from the City's organics collection program, set to begin in January 2025. The City strives towards a waste free Ontario and circular economy, and to maximize the remaining available capacity in the City's existing landfill. Public and agency consultation is a key part of the Master Planning process. Based on your input, the Master Plan study will identify preferred solution(s) that will benefit the community over the short, mid, and long terms.

MECP understands that this study is being conducted in accordance with Approach 2 requirements of Phases 1 and 2 of the Municipal Class Environmental Assessment (2023), which is an approved process under the Environmental Assessment Act and is detailed on page 54 – Part A of the Municipal Class EA parent document as Approach 2. This approach is undertaken with detailed assessment work to appropriately meet the requirements of Schedule B projects. This would include that the Notice of Completion issued for the Master Plan would serve as the Notice of Completion for Schedule B projects identified within it.

For any Schedule C projects identified within the Master Plan the proponent would have to fulfill Phases 3 and 4 prior to filing an Environmental Study Report for review.

Individual projects and their respective schedules should be summarized in the final Master Plan document as a list or a table.

The **updated (August 2022)** attached "Areas of Interest" document provides guidance regarding the ministry's interests with respect to the Class EA process. Please address all areas of interest in the EA documentation at an appropriate level for the EA study. Proponents who address all the applicable areas of interest can minimize potential delays to the project schedule. Further information is provided at the end of the Areas of Interest document relating to recent changes to the Environmental Assessment Act through Bill 197, Covid-19 Economic Recovery Act 2020.

The Crown has a legal duty to consult Aboriginal communities when it has knowledge, real or constructive, of the existence or potential existence of an Aboriginal or treaty right and contemplates conduct that may adversely impact that right. Before authorizing the projects identified in this Master Plan, the Crown must ensure that its duty to consult has been fulfilled, where such a duty is triggered. Although the duty to consult with Aboriginal peoples is a duty of the Crown, the Crown may delegate procedural aspects of this duty to project proponents while retaining oversight of the consultation process.

2

The proposed Master Plan projects may have the potential to affect Aboriginal or treaty rights protected under Section 35 of Canada's *Constitution Act* 1982. Where the Crown's duty to consult is triggered in relation to the proposed projects, **the MECP is delegating the procedural aspects of rights-based consultation to the proponent through this letter.** The Crown intends to rely on the delegated consultation process in discharging its duty to consult and maintains the right to participate in the consultation process as it sees fit.

Based on information provided to date and the Crown's preliminary assessment the proponent is required to consult with the following communities who have been identified as potentially affected by the proposed Master Plan projects:

• Mohawk Council of Akwesasne

If the proponent has undertaken archeological studies and are required to undertake any work related to archeological resources, they should also include:

• Huron-Wendat

Steps that the proponent may need to take in relation to Aboriginal consultation for the proposed projects are outlined in the "<u>Code of Practice for Consultation in Ontario's</u> <u>Environmental Assessment Process</u>". Additional information related to Ontario's Environmental Assessment Act is available online at: <u>www.ontario.ca/environmentalassessments</u>.

Please also refer to the attached document "A Proponent's Introduction to the Delegation of Procedural Aspects of consultation with Aboriginal Communities" for further information, including the MECP's expectations for EA report documentation related to consultation with communities.

The proponent must contact the Director of Environmental Assessment Branch (EABDirector@ontario.ca) under the following circumstances after initial discussions with the communities identified by the MECP:

- Aboriginal or treaty rights impacts are identified to you by the communities;
- You have reason to believe that your proposed projects may adversely affect an Aboriginal or treaty right;
- Consultation with Indigenous communities or other stakeholders has reached an impasse; or
- A Section 16 Order request is expected based on impacts to Aboriginal or treaty rights

The MECP will then assess the extent of any Crown duty to consult for the circumstances and will consider whether additional steps should be taken, including what role you will be asked to play should additional steps and activities be required.

A draft copy of the report should be sent directly to me prior to the filing of the final report, allowing a minimum of 30 days for the ministry's technical reviewers to provide comments.

Please also ensure a copy of the final notice is sent to the ministry's Eastern Region EA notification email account (eanotification.eregion@ontario.ca) after the draft report is reviewed and finalized.

Should you or any members of your project team have any questions regarding the material above, please contact me at Jon.orpana@ontario.ca.

Regards,

Jon K. Orpana Environmental Planner & Environmental Assessment Coordinator Ministry of the Environment, Conservation and Parks Kingston Regional Office PO Box 22032, 1259 Gardiners Road Kingston, Ontario K7M 8S5

 Phone:
 (613) 548-6918

 Fax:
 (613) 548-6908

 Email:
 jon.orpana@ontario.ca

EC.

Andrew Smale, P.Eng. Project Manager GHD Limited Andrew.smale@ghd.com Shannon Hamilton Browne, (A) Drinking Water and Compliance Supervisor Ottawa District Ministry of Environment Conservation and Parks <u>shannon.hamiltonbrowne@ontario.ca</u>

Terri Forrester, (A) Compliance Supervisor Cornwall Area Office terri.forrester@ontario.ca

Encl. Areas of Interest

AREAS OF INTEREST (v. August 2022)

It is suggested that you check off each section after you have considered / addressed it.

Planning and Policy

- Applicable plans and policies should be identified in the report, and the proponent should <u>describe</u> how the proposed project adheres to the relevant policies in these plans.
 - Projects located in MECP Central, Eastern or West Central Region may be subject to <u>A Place to Grow: Growth Plan for the Greater Golden</u> <u>Horseshoe</u> (2020).
 - Projects located in MECP Central or Eastern Region may be subject to the Oak Ridges Moraine Conservation Plan (2017) or the Lake Simcoe Protection Plan (2014).
 - Projects located in MECP Central, Southwest or West Central Region may be subject to the <u>Niagara Escarpment Plan</u> (2017).
 - Projects located in MECP Central, Eastern, Southwest or West Central Region may be subject to the <u>Greenbelt Plan</u> (2017).
 - Projects located in MECP Northern Region may be subject to the <u>Growth</u> <u>Plan for Northern Ontario</u> (2011).
- The <u>Provincial Policy Statement</u> (2020) contains policies that protect Ontario's natural heritage and water resources. Applicable policies should be referenced in the report, and the proponent should <u>describe</u> how the proposed project is consistent with these policies.
- In addition to the provincial planning and policy level, the report should also discuss the planning context at the municipal and federal levels, as appropriate.

□ Source Water Protection

The *Clean Water Act*, 2006 (CWA) aims to protect existing and future sources of drinking water. To achieve this, several types of vulnerable areas have been delineated around surface water intakes and wellheads for every municipal residential drinking water system that is located in a source protection area. These vulnerable areas are known as a Wellhead Protection Areas (WHPAs) and surface water Intake Protection Zones (IPZs). Other vulnerable areas that have been delineated under the CWA include

6

Highly Vulnerable Aquifers (HVAs), Significant Groundwater Recharge Areas (SGRAs), Event-based modelling areas (EBAs), and Issues Contributing Areas (ICAs). Source protection plans have been developed that include policies to address existing and future risks to sources of municipal drinking water within these vulnerable areas.

Projects that are subject to the Environmental Assessment Act that fall under a Class EA, or one of the Regulations, have the potential to impact sources of drinking water if they occur in designated vulnerable areas or in the vicinity of other at-risk drinking water systems (i.e. systems that are not municipal residential systems). MEA Class EA projects may include activities that, if located in a vulnerable area, could be a threat to sources of drinking water (i.e. have the potential to adversely affect the quality or quantity of drinking water sources) and the activity could therefore be subject to policies in a source protection plan. Where an activity poses a risk to drinking water, policies in the local source protection plan may impact how or where that activity is undertaken. Policies may prohibit certain activities, or they may require risk management measures for these activities. Municipal Official Plans, planning decisions, Class EA projects (where the project includes an activity that is a threat to drinking water) and prescribed instruments must conform with policies that address significant risks to drinking water and must have regard for policies that address moderate or low risks.

- The proponent should identify the source protection area and should clearly document how the proximity of the project to sources of drinking water (municipal or other) and any delineated vulnerable areas was considered and assessed. Specifically, the report should discuss whether or not the project is located in a vulnerable area and provide applicable details about the area.
- If located in a vulnerable area, proponents should document whether any project activities are prescribed drinking water threats and thus pose a risk to drinking water (this should be consulted on with the appropriate Source Protection Authority). Where an activity poses a risk to drinking water, the proponent must document and discuss in the report how the project adheres to or has regard to applicable policies in the local source protection plan. This section should then be used to inform and be reflected in other sections of the report, such as the identification of net positive/negative effects of alternatives, mitigation measures, evaluation of alternatives etc.
- While most source protection plans focused on including policies for significant drinking water threats in the WHPAs and IPZs it should be noted that even though source protection plan policies may not apply in HVAs, these are areas where aquifers are sensitive and at risk to impacts and within these areas, activities may impact the quality of sources of drinking water for systems other than municipal residential systems.

- In order to determine if this project is occurring within a vulnerable area, proponents can use this mapping tool: <u>http://www.applications.ene.gov.on.ca/swp/en/index.php</u>. Note that various layers (including WHPAs, WHPA-Q1 and WHPA-Q2, IPZs, HVAs, SGRAs, EBAs, ICAs) can be turned on through the "Map Legend" bar on the left. The mapping tool will also provide a link to the appropriate source protection plan in order to identify what policies may be applicable in the vulnerable area.
- For further information on the maps or source protection plan policies which may relate to their project, proponents must contact the appropriate source protection authority. Please consult with the local source protection authority to discuss potential impacts on drinking water. Please document the results of that consultation within the report and include all communication documents/correspondence.

More Information

For more information on the *Clean Water Act*, source protection areas and plans, including specific information on the vulnerable areas and drinking water threats, please refer to <u>Conservation Ontario's website</u> where you will also find links to the local source protection plan/assessment report.

A list of the prescribed drinking water threats can be found in <u>section 1.1 of Ontario</u> <u>Regulation 287/07</u> made under the *Clean Water Act*. In addition to prescribed drinking water threats, some source protection plans may include policies to address additional "local" threat activities, as approved by the MECP.

□ Climate Change

The document "<u>Considering Climate Change in the Environmental Assessment</u> <u>Process</u>" (Guide) is now a part of the Environmental Assessment program's Guides and Codes of Practice. The Guide sets out the MECP's expectation for considering climate change in the preparation, execution and documentation of environmental assessment studies and processes. The guide provides examples, approaches, resources, and references to assist proponents with consideration of climate change in EA. Proponents should review this Guide in detail.

- The MECP expects proponents of projects under a Class EA or EA Act Regulation to:
- 1. Consider during the assessment of alternative solutions and alternative designs, the following:
 - a. the project's expected production of greenhouse gas emissions and impacts on carbon sinks (climate change mitigation); and

- b. resilience or vulnerability of the undertaking to changing climatic conditions (climate change adaptation).
- 2. Include a discrete section in the report detailing how climate change was considered in the EA.

How climate change is considered can be qualitative or quantitative in nature and should be scaled to the project's level of environmental effect. In all instances, both a project's impacts on climate change (mitigation) and impacts of climate change on a project (adaptation) should be considered.

 The MECP has also prepared another guide to support provincial land use planning direction related to the completion of energy and emission plans. The "<u>Community Emissions Reduction Planning: A Guide for Municipalities</u>" document is designed to educate stakeholders on the municipal opportunities to reduce energy and greenhouse gas emissions, and to provide guidance on methods and techniques to incorporate consideration of energy and greenhouse gas emissions into municipal activities of all types. We encourage you to review the Guide for information.

□ Air Quality, Dust and Noise

- If there are sensitive receptors in the surrounding area of this project, a quantitative air quality/odour impact assessment will be useful to evaluate alternatives, determine impacts and identify appropriate mitigation measures. The scope of the assessment can be determined based on the potential effects of the proposed alternatives, and typically includes source and receptor characterization and a quantification of local air quality impacts on the sensitive receptors and the environment in the study area. The assessment will compare to all applicable standards or guidelines for all contaminants of concern.
- If a quantitative Air Quality Impact Assessment is not required for the project, the MECP expects that the report contain a qualitative assessment which includes:
 - A discussion of local air quality including existing activities/sources that significantly impact local air quality and how the project may impact existing conditions;
 - A discussion of the nearby sensitive receptors and the project's potential air quality impacts on present and future sensitive receptors;
 - A discussion of local air quality impacts that could arise from this project during both construction and operation; and
 - A discussion of potential mitigation measures.

- Dust and noise control measures should be addressed and included in the construction plans to ensure that nearby residential and other sensitive land uses within the study area are not adversely affected during construction activities.
- The MECP recommends that non-chloride dust-suppressants be applied. For a comprehensive list of fugitive dust prevention and control measures that could be applied, refer to <u>Cheminfo Services Inc. Best Practices for the Reduction of Air</u> <u>Emissions from Construction and Demolition Activities</u> report prepared for Environment Canada. March 2005.
- The report should consider the potential impacts of increased noise levels during the operation of the completed project. The proponent should explore all potential measures to mitigate significant noise impacts during the assessment of alternatives.
- Noise associated with a proposed transformer station should be evaluated. Note that any noise monitoring and assessment should be conducted in accordance with the requirements of MECP guidelines, such as MECP Publication NPC-233, *"Information to be Submitted for Approval of Stationary Sources of Sound"*.
- In order to address potential noise impacts of the transformer station, it may be necessary to first monitor ambient noise levels prior to the installation of the transformer station, and to then conduct a noise assessment after the transformer station is installed and operational. Depending on the results of these studies and the proximity to sensitive receptors, remedial measures may be needed to address noise generated by the transformer station.

Ecosystem Protection and Restoration

- Any impacts to ecosystem form and function must be avoided where possible. The report should describe any proposed mitigation measures and how project planning will protect and enhance the local ecosystem.
- Natural heritage and hydrologic features should be identified and described in detail to assess potential impacts and to develop appropriate mitigation measures. The following sensitive environmental features may be located within or adjacent to the study area:
 - Key Natural Heritage Features: Habitat of endangered species and threatened species, fish habitat, wetlands, areas of natural and scientific interest (ANSIs), significant valleylands, significant woodlands; significant wildlife habitat (including habitat of special concern species); sand barrens, savannahs, and tallgrass prairies; and alvars.

- Key Hydrologic Features: Permanent streams, intermittent streams, inland lakes and their littoral zones, seepage areas and springs, and wetlands.
- Other natural heritage features and areas such as: vegetation communities, rare species of flora or fauna, Environmentally Sensitive Areas, Environmentally Sensitive Policy Areas, federal and provincial parks and conservation reserves, Greenland systems etc.

We recommend consulting with the Ministry of Natural Resources and Forestry (MNRF), Fisheries and Oceans Canada (DFO) and your local conservation authority to determine if special measures or additional studies will be necessary to preserve and protect these sensitive features.

□ Species at Risk

- The Ministry of the Environment, Conservation and Parks has now assumed responsibility of Ontario's Species at Risk program. Information, standards, guidelines, reference materials and technical resources to assist you are found at https://www.ontario.ca/page/species-risk.
- The Client's Guide to Preliminary Screening for Species at Risk (Draft May 2019) has been attached to the covering email for your reference and use. Please review this document for next steps.
- For any questions related to subsequent permit requirements, SAR considerations etc., proponents / consultants are highly recommended to contact <u>SAROntario@ontario.ca</u>.

□ Surface Water

- The report must include enough information to demonstrate that there will be no negative impacts on the natural features or ecological functions of any watercourses within the study area. Measures should be included in the planning and design process to ensure that any impacts to watercourses from construction or operational activities (e.g. spills, erosion, pollution) are mitigated as part of the proposed undertaking.
- Additional stormwater runoff from new pavement can impact receiving watercourses and flood conditions. Quality and quantity control measures to treat stormwater runoff should be considered for all new impervious areas and, where possible, existing surfaces. The ministry's <u>Stormwater Management Planning</u> and <u>Design Manual (2003)</u> should be referenced in the report and utilized when designing stormwater control methods.

- A Stormwater Management Plan prepared as part of the Class EA process should include:
 - Strategies to address potential water quantity and erosion impacts related to stormwater draining into streams or other sensitive environmental features, and to ensure that adequate (enhanced) water quality is maintained
 - Watershed information, drainage conditions, and other relevant background information
 - Future drainage conditions, stormwater management options, information on erosion and sediment control during construction, and other details of the proposed works
 - Information on maintenance and monitoring commitments.
- Any potential approval requirements for surface water taking or discharge should be identified in the report. A Permit to Take Water (PTTW) under the OWRA will be required for any water takings that exceed 50,000 L/day, except for certain water taking activities that have been prescribed by the Water Taking EASR Regulation – O. Reg. 63/16. These prescribed water-taking activities require registration in the EASR instead of a PTTW. Please review the <u>Water Taking</u> <u>User Guide for EASR</u> for more information. Additionally, an Environmental Compliance Approval under the OWRA is required for municipal stormwater management works.

Groundwater

- The status of, and potential impacts to any well water supplies should be addressed. If the project involves groundwater takings or changes to drainage patterns, the quantity and quality of groundwater may be affected due to drawdown effects or the redirection of existing contamination flows. In addition, project activities may infringe on existing wells such that they must be reconstructed or sealed and abandoned. Appropriate information to define existing groundwater conditions should be included in the report.
- If the potential construction or decommissioning of water wells is identified as an issue, the report should refer to Ontario Regulation 903, Wells, under the OWRA.
- Potential impacts to groundwater-dependent natural features should be addressed. Any changes to groundwater flow or quality from groundwater taking may interfere with the ecological processes of streams, wetlands or other surficial features. In addition, discharging contaminated or high volumes of groundwater to these features may have direct impacts on their function. Any potential effects

should be identified, and appropriate mitigation measures should be recommended. The level of detail required will be dependent on the significance of the potential impacts. For example, where construction of transmission towers is proposed, any pile driving into the subsurface that is required for steel pile type tower foundations, particularly to the bedrock surface at depth, may have an adverse effect on local groundwater resources.

- Any potential approval requirements for groundwater taking or discharge should be identified in the report. A Permit to Take Water (PTTW) under the OWRA will be required for any water takings that exceed 50,000 L/day, with the exception of certain water taking activities that have been prescribed by the Water Taking EASR Regulation – O. Reg. 63/16. These prescribed water-taking activities require registration in the EASR instead of a PTTW. Please review the <u>Water</u> <u>Taking User Guide for EASR</u> for more information.
- Consultation with the railroad authorities is necessary wherever there is a plan to use construction dewatering in the vicinity of railroad lines or where the zone of influence of the construction dewatering potentially intercepts railroad lines.
- Groundwater should be protected from the potential for spills, dewatering and wood pole preservative during construction. A plan should be in place for preventing and dealing with spills. All spills that could potentially cause damage to the environment should be reported to the Spills Action Centre of the Ministry of the Environment, Conservation and Parks at 1-800-268-6060.

Excess Materials Management

- In December 2019, MECP released a new regulation under the Environmental Protection Act, titled "<u>On-Site and Excess Soil Management</u>" (O. Reg. 406/19) to support improved management of excess construction soil. This regulation is a key step to support proper management of excess soils, ensuring valuable resources don't go to waste and to provide clear rules on managing and reusing excess soil. New risk-based standards referenced by this regulation help to facilitate local beneficial reuse which in turn will reduce greenhouse gas emissions from soil transportation, while ensuring strong protection of human health and the environment. The new regulation is being phased in over time, with the first phase in effect on January 1, 2021. For more information, please visit <u>https://www.ontario.ca/page/handling-excess-soil</u>.
- The report should reference that activities involving the management of excess soil should be completed in accordance with O. Reg. 406/19 and the MECP's

current guidance document titled "<u>Management of Excess Soil – A Guide for Best</u> <u>Management Practices</u>" (2014).

• All waste generated during construction must be disposed of in accordance with ministry requirements

□ Contaminated Sites

- Any current or historical waste disposal sites should be identified in the report. The status of these sites should be determined to confirm whether approval pursuant to Section 46 of the EPA may be required for land uses on former disposal sites. We recommend referring to the <u>MECP's D-4 guideline</u> for land use considerations near landfills and dumps.
- Resources available may include regional/local municipal official plans and data; provincial data on <u>large landfill sites</u> and <u>small landfill sites</u>; Environmental Compliance Approval information for waste disposal sites on <u>Access</u> <u>Environment</u>.
- Other known contaminated sites (local, provincial, federal) in the study area should also be identified in the report (Note information on federal contaminated sites is found on the Government of Canada's <u>website</u>).
- The location of any underground storage tanks should be investigated in the report. Measures should be identified to ensure the integrity of these tanks and to ensure an appropriate response in the event of a spill. The ministry's Spills Action Centre must be contacted in such an event.
- Since the removal or movement of soils may be required, appropriate tests to determine contaminant levels from previous land uses or dumping should be undertaken. If the soils are contaminated, you must determine how and where they are to be disposed of, consistent with *Part XV.1 of the Environmental Protection Act* (EPA) and Ontario Regulation 153/04, Records of Site Condition, which details the new requirements related to site assessment and clean up. Consideration of potential environmental contamination should be given following regulatory guidance where the project involves decommissioning of facilities. Please contact the appropriate MECP District Office for further consultation if contaminated sites are present.
- Where poles are being removed that have been chemically treated, we recommend that the proponent consider soil testing to determine the extent of any related soil contamination. Soil testing may be contingent on factors such as

proximity to water bodies or wetlands, proximity to wells, locations where poles are being removed but not replaced, and the treatment chemicals used (i.e. chromated copper arsenate (CCA) or creosote). In the case of poles which have been treated with CCA or creosote, testing for arsenic, copper and creosote should be completed.

□ Servicing, Utilities and Facilities

- The report should identify any above or underground utilities in the study area such as transmission lines, telephone/internet, oil/gas etc. The owners should be consulted to discuss impacts to this infrastructure, including potential spills.
- The report should identify any servicing infrastructure in the study area such as wastewater, water, stormwater that may potentially be impacted by the project.
- Any facility that releases emissions to the atmosphere, discharges contaminants to ground or surface water, provides potable water supplies, or stores, transports or disposes of waste must have an Environmental Compliance Approval (ECA) before it can operate lawfully. Please consult with MECP's Environmental Permissions Branch to determine whether a new or amended ECA will be required for any proposed infrastructure.
- We recommend referring to the ministry's <u>environmental land use planning</u> <u>guides</u> to ensure that any potential land use conflicts are considered when planning for any infrastructure or facilities related to wastewater, pipelines, landfills or industrial uses.

□ Mitigation and Monitoring

- Contractors must be made aware of all environmental considerations so that all environmental standards and commitments for both construction and operation are met. Mitigation measures should be clearly referenced in the report and regularly monitored during the construction stage of the project. In addition, we encourage proponents to conduct post-construction monitoring to ensure all mitigation measures have been effective and are functioning properly.
- Design and construction reports and plans should be based on a best management approach that centres on the prevention of impacts, protection of the existing environment, and opportunities for rehabilitation and enhancement of any impacted areas.

- The proponent's construction and post-construction effects monitoring strategies and programs must be documented in the report.
- The proponent must consider cumulative effects when planning projects. The assessment will include the proposed undertaking and any other proposed undertakings in the immediate project area where documentation is available (e.g. other environmental assessments).

□ Consultation

- The report must demonstrate how the consultation provisions of the Class EA have been fulfilled, including documentation of all stakeholder consultation efforts undertaken during the planning process. This includes a discussion in the report that identifies concerns that were raised and <u>describes how they have been</u> <u>addressed by the proponent</u> throughout the planning process. The report should also include copies of comments submitted on the project by interested stakeholders, and the proponent's responses to these comments (as directed by the Guide to Environmental Assessment Requirements for Electricity Projects to include full documentation).
- Please include the full stakeholder distribution/consultation list in the documentation.

Class EA Process

- The report should provide clear and complete documentation of the planning process in order to allow for transparency in decision-making.
- The Class EA requires the consideration of the effects of each alternative on all aspects of the environment (including planning, natural, social, cultural, economic, technical). The report should include a level of detail (e.g. hydrogeological investigations, terrestrial and aquatic assessments, cultural heritage assessments) such that all potential impacts can be identified, and appropriate mitigation measures can be developed. Any supporting studies conducted during the Class EA process should be referenced and included as part of the report.
- Please include in the report a list of all subsequent permits or approvals that may be required for the implementation of the preferred alternative, including but not limited to, MECP's PTTW, EASR Registrations and ECAs, conservation authority permits, species at risk permits, MTO permits and approvals under the *Impact Assessment Act*, 2019.

16

 Ministry guidelines and other information related to the issues above are available at <u>http://www.ontario.ca/environment-and-energy/environment-andenergy</u>. We encourage you to review all the available guides and to reference any relevant information in the report.

Amendments to the EAA through the Covid-19 Economic Recovery Act, 2020

Once the report is finalized, the proponent must issue a Notice of Completion providing a minimum 30-day period during which documentation may be reviewed and comment and input can be submitted to the proponent. The Notice of Completion must be sent to the appropriate MECP Regional Office email address (for projects in MECP Southwest Region, the email is eanotification.swregion@ontario.ca).

The public has the ability to request a higher level of assessment on a project if they are concerned about potential adverse impacts to constitutionally protected Aboriginal and treaty rights. In addition, the Minister may issue an order on his or her own initiative within a specified time period. The Director (of the Environmental Assessment Branch) will issue a Notice of Proposed Order to the proponent if the Minister is considering an order for the project within 30 days after the conclusion of the comment period on the Notice of Completion. At this time, the Director may request additional information from the proponent. Once the requested information has been received, the Minister will have 30 days within which to make a decision or impose conditions on your project.

Therefore, the proponent cannot proceed with the project until at least 30 days after the end of the comment period provided for in the Notice of Completion. Further, the proponent may not proceed after this time if:

- a Section 16 Order request has been submitted to the ministry regarding potential adverse impacts to constitutionally protected Aboriginal and treaty rights, or
- the Director has issued a Notice of Proposed order regarding the project.

Please ensure that the Notice of Completion advises that outstanding concerns are to be directed to the proponent for a response, and that in the event there are outstanding concerns regarding potential adverse impacts to constitutionally protected Aboriginal and treaty rights, Section 16 Order requests on those matters should be addressed in writing to:

Minister

Ministry of Environment, Conservation and Parks 777 Bay Street, 5th Floor

Toronto ON M7A 2J3 minister.mecp@ontario.ca

and

Director, Environmental Assessment Branch Ministry of Environment, Conservation and Parks 135 St. Clair Ave. W, 1st Floor Toronto ON, M4V 1P5 EABDirector@ontario.ca Client's Guide to Preliminary Screening for Species at Risk

Ministry of the Environment, Conservation and Parks Species at Risk Branch, Permissions and Compliance DRAFT - May 2019

Table of Contents

1.0 Purpose, Scope, Background and Context	3
1.1 Purpose of this Guide	3
1.2 Scope	3
1.3 Background and Context	4
2.0 Roles and Responsibilities	5
3.0 Information Sources	6
3.1 Make a Map: Natural Heritage Areas	7
3.2 Land Information Ontario (LIO)	7
3.3 Additional Species at Risk Information Sources	8
3.4 Information Sources to Support Impact Assessments	8
4.0 Check-List	9

1.0 Purpose, Scope, Background and Context

1.1 Purpose of this Guide

This guide has been created to:

- help clients better understand their obligation to gather information and complete a preliminary screening for species at risk before contacting the ministry,
- outline guidance and advice clients can expect to receive from the ministry at the preliminary screening stage,
- help clients understand how they can gather information about species at risk by accessing publicly available information housed by the Government of Ontario, and
- provide a list of other potential sources of species at risk information that exist outside the Government of Ontario.

It remains the client's responsibility to:

- carry out a preliminary screening for their projects,
- obtain best available information from all applicable information sources,
- conduct any necessary field studies or inventories to identify and confirm the presence or absence of species at risk or their habitat,
- consider any potential impacts to species at risk that a proposed activity might cause, and
- comply with the *Endangered Species Act* (ESA).

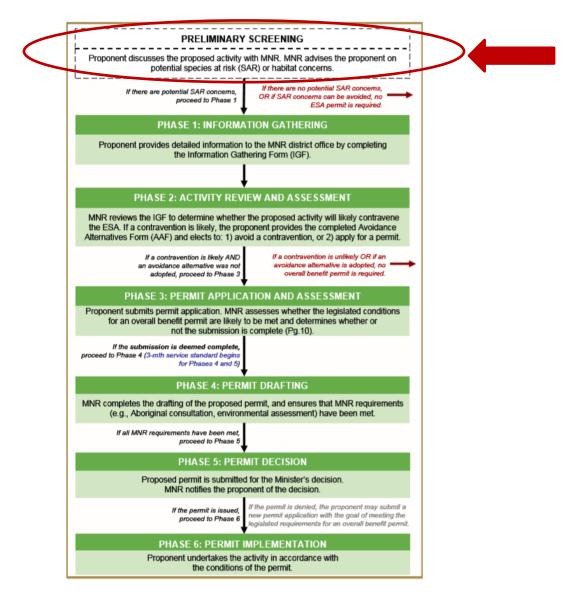
To provide the most efficient service, clients should initiate species at risk screenings and seek information from all applicable information sources identified in this guide, at a minimum, <u>prior to</u> contacting Government of Ontario ministry offices for further information or advice.

1.2 Scope

This guide is a resource for clients seeking to understand if their activity is likely to impact species at risk or if they are likely to trigger the need for an authorization under the ESA. It is not intended to circumvent any detailed site surveys that may be necessary to document species at risk or their habitat nor to circumvent the need to assess the impacts of a proposed activity on species at risk or their habitat. This guide is not an exhaustive list of available information sources for any given area as the availability of information on species at risk and their habitat varies across the province. This guide is intended to support projects and activities carried out on Crown and private land, by private landowners, businesses, other provincial ministries and agencies, or municipal government.

1.3 Background and Context

To receive advice on their proposed activity, clients <u>must first</u> determine whether any species at risk or their habitat exist or are likely to exist at or near their proposed activity, and whether their proposed activity is likely to contravene the ESA. Once this step is complete, clients may contact the ministry at <u>SAROntario@ontario.ca</u> to discuss the main purpose, general methods, timing and location of their proposed activity as well as information obtained about species at risk and their habitat at, or near, the site. At this stage, the ministry can provide advice and guidance to the client about potential species at risk or habitat concerns, measures that the client is considering to avoid adverse effects on species at risk or their habitat and whether additional field surveys are advisable. This is referred to as the "Preliminary Screening" stage. For more information on additional phases in the diagram below, please refer to the *Endangered Species Act Submission Standards for Activity Review and 17(2)(c) Overall Benefit Permits* policy available online at <u>https://www.ontario.ca/page/species-risk-overall-benefit-permits</u>



2.0 Roles and Responsibilities

To provide the most efficient service, clients should initiate species at risk screenings and seek information from all applicable information sources identified in this guide <u>prior to</u> contacting Government of Ontario ministry offices for further information or advice.

Step 1: Client seeks information regarding species at risk or their habitat that exist, or are likely to exist, at or near their proposed activity by referring to all applicable information sources identified in this guide.

Step 2: Client reviews and consider guidance on whether their proposed activity is likely to contravene the ESA (see section 3.4 of this guide for guidance on what to consider).

Step 3: Client gathers information identified in the checklist in section 4 of this guide.

Step 4: Client contacts the ministry at <u>SAROntario@ontario.ca</u> to discuss their preliminary screening. Ministry staff will ask the client questions about the main purpose, general methods, timing and location of their proposed activity as well as information obtained about species at risk and their habitat at, or near, the site. Ministry staff will also ask the client for their interpretation of the impacts of their activity on species at risk or their habitat as well as measures the client has considered to avoid any adverse impacts.

Step 5: Ministry staff will provide advice on next steps.

Option A: Ministry staff may advise the client they can proceed with their activity without an authorization under the ESA where the ministry is confident that:

- no protected species at risk or habitats are likely to be present at or near the proposed location of the activity; or
- protected species at risk or habitats are known to be present but the activity is not likely to contravene the ESA; or
- through the adoption of avoidance measures, the modified activity is not likely to contravene the ESA.

Option B: Ministry staff may advise the client to proceed to Phase 1 of the overall benefit permitting process (i.e. Information Gathering in the previous diagram), where:

- there is uncertainty as to whether any protected species at risk or habitats are present at or near the proposed location of the activity; or
- the potential impacts of the proposed activity are uncertain; or
- ministry staff anticipate the proposed activity is likely to contravene the ESA.

3.0 Information Sources

Land Information Ontario (LIO) and the Natural Heritage Information Centre (NHIC) maintain and provide information about species at risk, as well as related information about fisheries, wildlife, crown lands, protected lands and more. This information is made available to organizations, private individuals, consultants, and developers through online sources and is often considered under various pieces of legislation or as part of regulatory approvals and planning processes.

The information available from LIO or NHIC and the sources listed in this guide should not be considered as a substitute for site visits and appropriate field surveys. Generally, this information can be regarded as a starting point from which to conduct further field surveys, if needed. While this data represents best available current information, it is important to note that a lack of information for a site does not mean that species at risk or their habitat are not present. There are many areas where the Government of Ontario does not currently have information, especially in more remote parts of the province. The absence of species at risk location data at or near your site does not necessarily mean no species at risk are present at that location. Onsite assessments can better verify site conditions, identify and confirm presence of species at risk and/or their habitats.

Information on the location (i.e. observations and occurrences) of species at risk is considered sensitive and therefore publicly available only on a 1km square grid as opposed to as a detailed point on a map. This generalized information can help you understand which species at risk are in the general vicinity of your proposed activity and can help inform field level studies you may want to undertake to confirm the presence, or absence of species at risk at or near your site.

Should you require specific and detailed information pertaining to species at risk observations and occurrences at or near your site on a finer geographic scale; you will be required to demonstrate your need to access this information, to complete data sensitivity training and to obtain a Sensitive Data Use License from the NHIC. Information on how to obtain a license can be found online at https://www.ontario.ca/page/get-natural-heritage-information.

Many organizations (e.g. other Ontario ministries, municipalities, conservation authorities) have ongoing licensing to access this data so be sure to check if your organization has this access and consult this data as part of your preliminary screening if your organization already has a license.

3.1 Make a Map: Natural Heritage Areas

The Make a Natural Heritage Area Map (available online at http://www.gisapplication.lrc.gov.on.ca/mamnh/Index.html?site=MNR_NHLUPS_NaturalHeritage e&viewer=NaturalHeritage&locale=en-US provides public access to natural heritage information, including species at risk, without the user needing to have Geographic Information System (GIS) capability. It allows users to view and identify generalized species at risk information, mark areas of interest, and create and print a custom map directly from the web application. The tool also shows topographic information such as roads, rivers, contours and municipal boundaries.

Users are advised that sensitive information has been removed from the natural areas dataset and the occurrences of species at risk has been generalized to a 1-kilometre grid to mitigate the risks to the species (e.g. illegal harvest, habitat disturbance, poaching).

The web-based mapping tool displays natural heritage data, including:

- Generalized Species at risk occurrence data (based on a 1-km square grid),
- Natural Heritage Information Centre data.

Data cannot be downloaded directly from this web map; however, information included in this application is available digitally through Land Information Ontario (LIO) at https://www.ontario.ca/page/land-information-ontario.

3.2 Land Information Ontario (LIO)

Most natural heritage data is publicly available. This data is managed in a large provincial corporate database called the LIO Warehouse and can be accessed online through the LIO Metadata Management Tool at

<u>https://www.javacoeapp.lrc.gov.on.ca/geonetwork/srv/en/main.home</u>. This tool provides descriptive information about the characteristics, quality and context of the data. Publicly available geospatial data can be downloaded directly from this site.

While most data are publicly available, some data may be considered highly sensitive (i.e. nursery areas for fish, species at risk observations) and as such, access to some data maybe restricted.

3.3 Additional Species at Risk Information Sources

- The Breeding Bird Atlas can be accessed online at http://www.birdsontario.org/atlas/index.jsp?lang=en
- eBird can be accessed online at https://ebird.org/home
- iNaturalist can be accessed online at https://www.inaturalist.org/
- The Ontario Reptile and Amphibian Atlas can be accessed online at <u>https://ontarionature.org/programs/citizen-science/reptile-amphibian-atlas</u>
- Your local Conservation Authority. Information to help you find your local Conservation Authority can be accessed online at <u>https://conservationontario.ca/conservation-</u> <u>authorities/find-a-conservation-authority/</u>

Local naturalist groups or other similar community-based organizations

- Local Indigenous communities
- Local land trusts or other similar Environmental Non-Government Organizations
- Field level studies to identify if species at risk, or their habitat, are likely present or absent at or near the site.
- When an activity is proposed within one of the continuous caribou ranges, please be sure to consider the caribou Range Management Policy. This policy includes figures and maps of the continuous caribou range, can be found online at <u>https://www.ontario.ca/page/range-management-policy-support-woodland-caribouconservation-and-recovery</u>

3.4 Information Sources to Support Impact Assessments

- Guidance to help you understand if your activity is likely to adversely impact species at risk or their habitat can be found online at <u>https://www.ontario.ca/page/policy-guidanceharm-and-harass-under-endangered-species-act</u> and <u>https://www.ontario.ca/page/categorizing-and-protecting-habitat-under-endangeredspecies-act</u>
- A list of species at risk in Ontario is available online at <u>https://www.ontario.ca/page/species-risk-ontario</u>. On this webpage, you can find out more about each species, including where is lives, what threatens it and any specific habitat protections that apply to it by clicking on the photo of the species.

4.0 Check-List

Please feel free to use the check list below to help you confirm you have explored all applicable information sources and to support your discussion with Ministry staff at the preliminary screening stage.

- ✓ Land Information Ontario (LIO)
- ✓ Natural Heritage Information Centre (NHIC)
- ✓ The Breeding Bird Atlas
- ✓ eBird
- ✓ iNaturalist
- ✓ Ontario Reptile and Amphibian Atlas
- ✓ List Conservation Authorities you contacted:_____
- ✓ List local naturalist groups you contacted:______
- ✓ List any other local land trusts or Environmental Non-Government Organizations you contacted:
- ✓ List and field studies that were conducted to identify species at risk, or their habitat, likely to be present or absent at or near the site: ______



A PROPONENT'S INTRODUCTION TO THE DELEGATION OF PROCEDURAL ASPECTS OF CONSULTATION WITH ABORIGINAL COMMUNITIES

DEFINITIONS

The following definitions are specific to this document and may not apply in other contexts:

Aboriginal communities – the First Nation or Métis communities identified by the Crown for the purpose of consultation.

Consultation – the Crown's legal obligation to consult when the Crown has knowledge of an established or asserted Aboriginal or treaty right and contemplates conduct that might adversely impact that right. This is the type of consultation required pursuant to s. 35 of the *Constitution Act, 1982.* Note that this definition does not include consultation with Aboriginal communities for other reasons, such as regulatory requirements.

Crown - the Ontario Crown, acting through a particular ministry or ministries.

Procedural aspects of consultation – those portions of consultation related to the process of consultation, such as notifying an Aboriginal community about a project, providing information about the potential impacts of a project, responding to concerns raised by an Aboriginal community and proposing changes to the project to avoid negative impacts.

Proponent – the person or entity that wants to undertake a project and requires an Ontario Crown decision or approval for the project.

I. PURPOSE

The Crown has a legal duty to consult Aboriginal communities when it has knowledge of an existing or asserted Aboriginal or treaty right and contemplates conduct that may adversely impact that right. In outlining a framework for the duty to consult, the Supreme Court of Canada has stated that the Crown may delegate procedural aspects of consultation to third parties. This document provides general information about the Ontario Crown's approach to delegation of the procedural aspects of consultation to proponents.

This document is not intended to instruct a proponent about an individual project, and it does not constitute legal advice.

II. WHY IS IT NECESSARY TO CONSULT WITH ABORIGINAL COMMUNITIES?

The objective of the modern law of Aboriginal and treaty rights is the *reconciliation* of Aboriginal peoples and non-Aboriginal peoples and their respective rights, claims and interests. Consultation is an important component of the reconciliation process.

The Crown has a legal duty to consult Aboriginal communities when it has knowledge of an existing or asserted Aboriginal or treaty right and contemplates conduct that might adversely impact that right. For example, the Crown's duty to consult is triggered when it considers

issuing a permit, authorization or approval for a project which has the potential to adversely impact an Aboriginal right, such as the right to hunt, fish, or trap in a particular area.

The scope of consultation required in particular circumstances ranges across a spectrum depending on both the nature of the asserted or established right and the seriousness of the potential adverse impacts on that right.

Depending on the particular circumstances, the Crown may also need to take steps to accommodate the potentially impacted Aboriginal or treaty right. For example, the Crown may be required to avoid or minimize the potential adverse impacts of the project.

III. THE CROWN'S ROLE AND RESPONSIBILITIES IN THE DELEGATED CONSULTATION PROCESS

The Crown has the responsibility for ensuring that the duty to consult, and accommodate where appropriate, is met. However, the Crown may delegate the procedural aspects of consultation to a proponent.

There are different ways in which the Crown may delegate the procedural aspects of consultation to a proponent, including through a letter, a memorandum of understanding, legislation, regulation, policy and codes of practice.

If the Crown decides to delegate procedural aspects of consultation, the Crown will generally:

- Ensure that the delegation of procedural aspects of consultation and the responsibilities of the proponent are clearly communicated to the proponent;
- Identify which Aboriginal communities must be consulted;
- Provide contact information for the Aboriginal communities;
- Revise, as necessary, the list of Aboriginal communities to be consulted as new information becomes available and is assessed by the Crown;
- Assess the scope of consultation owed to the Aboriginal communities;
- Maintain appropriate oversight of the actions taken by the proponent in fulfilling the procedural aspects of consultation;
- Assess the adequacy of consultation that is undertaken and any accommodation that may be required;
- Provide a contact within any responsible ministry in case issues arise that require direction from the Crown; and
- Participate in the consultation process as necessary and as determined by the Crown.

IV. THE PROPONENT'S ROLE AND RESPONSIBILITIES IN THE DELEGATED CONSULTATION PROCESS

Where aspects of the consultation process have been delegated to a proponent, the Crown, in meeting its duty to consult, will rely on the proponent's consultation activities and documentation of those activities. The consultation process informs the Crown's decision of whether or not to approve a proposed project or activity.

A proponent's role and responsibilities will vary depending on a variety of factors including the extent of consultation required in the circumstance and the procedural aspects of consultation the Crown has delegated to it. Proponents are often in a better position than the Crown to discuss a project and its potential impacts with Aboriginal communities and to determine ways to avoid or minimize the adverse impacts of a project.

A proponent can raise issues or questions with the Crown at any time during the consultation process. If issues or concerns arise during the consultation that cannot be addressed by the proponent, the proponent should contact the Crown.

a) What might a proponent be required to do in carrying out the procedural aspects of consultation?

Where the Crown delegates procedural aspects of consultation, it is often the proponent's responsibility to provide notice of the proposed project to the identified Aboriginal communities. The notice should indicate that the Crown has delegated the procedural aspects of consultation to the proponent and should include the following information:

- a description of the proposed project or activity;
- mapping;
- proposed timelines;
- details regarding anticipated environmental and other impacts;
- details regarding opportunities to comment; and
- any changes to the proposed project that have been made for seasonal conditions or other factors, where relevant.

Proponents should provide enough information and time to allow Aboriginal communities to provide meaningful feedback regarding the potential impacts of the project. Depending on the nature of consultation required for a project, a proponent also may be required to:

- provide the Crown with copies of any consultation plans prepared and an opportunity to review and comment;
- ensure that any necessary follow-up discussions with Aboriginal communities take place in a timely manner, including to confirm receipt of information, share and update information and to address questions or concerns that may arise;

- as appropriate, discuss with Aboriginal communities potential mitigation measures and/or changes to the project in response to concerns raised by Aboriginal communities;
- use language that is accessible and not overly technical, and translate material into Aboriginal languages where requested or appropriate;
- bear the reasonable costs associated with the consultation process such as, but not limited to, meeting hall rental, meal costs, document translation(s), or to address technical & capacity issues;
- provide the Crown with all the details about potential impacts on established or asserted Aboriginal or treaty rights, how these concerns have been considered and addressed by the proponent and the Aboriginal communities and any steps taken to mitigate the potential impacts;
- provide the Crown with complete and accurate documentation from these meetings and communications; and
- notify the Crown immediately if an Aboriginal community not identified by the Crown approaches the proponent seeking consultation opportunities.

b) What documentation and reporting does the Crown need from the proponent?

Proponents should keep records of all communications with the Aboriginal communities involved in the consultation process and any information provided to these Aboriginal communities.

As the Crown is required to assess the adequacy of consultation, it needs documentation to satisfy itself that the proponent has fulfilled the procedural aspects of consultation delegated to it. The documentation required would typically include:

- the date of meetings, the agendas, any materials distributed, those in attendance and copies of any minutes prepared;
- the description of the proposed project that was shared at the meeting;
- any and all concerns or other feedback provided by the communities;
- any information that was shared by a community in relation to its asserted or established Aboriginal or treaty rights and any potential adverse impacts of the proposed activity, approval or disposition on such rights;
- any proposed project changes or mitigation measures that were discussed, and feedback from Aboriginal communities about the proposed changes and measures;
- any commitments made by the proponent in response to any concerns raised, and feedback from Aboriginal communities on those commitments;
- copies of correspondence to or from Aboriginal communities, and any materials distributed electronically or by mail;

- information regarding any financial assistance provided by the proponent to enable participation by Aboriginal communities in the consultation;
- periodic consultation progress reports or copies of meeting notes if requested by the Crown;
- a summary of how the delegated aspects of consultation were carried out and the results; and
- a summary of issues raised by the Aboriginal communities, how the issues were addressed and any outstanding issues.

In certain circumstances, the Crown may share and discuss the proponent's consultation record with an Aboriginal community to ensure that it is an accurate reflection of the consultation process.

c) Will the Crown require a proponent to provide information about its commercial arrangements with Aboriginal communities?

The Crown may require a proponent to share information about aspects of commercial arrangements between the proponent and Aboriginal communities where the arrangements:

- include elements that are directed at mitigating or otherwise addressing impacts of the project;
- include securing an Aboriginal community's support for the project; or
- may potentially affect the obligations of the Crown to the Aboriginal communities.

The proponent should make every reasonable effort to exempt the Crown from confidentiality provisions in commercial arrangements with Aboriginal communities to the extent necessary to allow this information to be shared with the Crown.

The Crown cannot guarantee that information shared with the Crown will remain confidential. Confidential commercial information should not be provided to the Crown as part of the consultation record if it is not relevant to the duty to consult or otherwise required to be submitted to the Crown as part of the regulatory process.

V. WHAT ARE THE ROLES AND RESPONSIBILITIES OF ABORIGINAL COMMUNITIES' IN THE CONSULTATION PROCESS?

Like the Crown, Aboriginal communities are expected to engage in consultation in good faith. This includes:

- responding to the consultation notice;
- engaging in the proposed consultation process;
- providing relevant documentation;

- clearly articulating the potential impacts of the proposed project on Aboriginal or treaty rights; and
- discussing ways to mitigates any adverse impacts.

Some Aboriginal communities have developed tools, such as consultation protocols, policies or processes that provide guidance on how they would prefer to be consulted. Although not legally binding, proponents are encouraged to respect these community processes where it is reasonable to do so. Please note that there is no obligation for a proponent to pay a fee to an Aboriginal community in order to enter into a consultation process.

To ensure that the Crown is aware of existing community consultation protocols, proponents should contact the relevant Crown ministry when presented with a consultation protocol by an Aboriginal community or anyone purporting to be a representative of an Aboriginal community.

VI. WHAT IF MORE THAN ONE PROVINCIAL CROWN MINISTRY IS INVOLVED IN APPROVING A PROPONENT'S PROJECT?

Depending on the project and the required permits or approvals, one or more ministries may delegate procedural aspects of the Crown's duty to consult to the proponent. The proponent may contact individual ministries for guidance related to the delegation of procedural aspects of consultation for ministry-specific permits/approvals required for the project in question. Proponents are encouraged to seek input from all involved Crown ministries sooner rather than later.

Andrew Smale

From:	Leclerc, Erika (MCM) <erika.leclerc@ontario.ca></erika.leclerc@ontario.ca>
Sent: To:	Monday, March 18, 2024 4:43 PM Nicolas Bialik
Cc:	Susan Jingmiao Shi; Andrew Smale; dlauzon@cornwall.ca; Barboza, Karla (She/Her) (MCM)
Subject:	MCM Response - City of Cornwall Biosolids, Organics and Septage Master Plan - Notice of Virtual Public Information Centre - February 28, 2024
Attachments:	2024-03-18 Cornwall_BioosolidsOrganicsSeptage_MasterPlan_MCMInitialLetter.pdf; Cornwall BOSMP_Notice of PIC_2024-02-28.pdf

You don't often get email from erika.leclerc@ontario.ca. Learn why this is important

Dear Nicolas Bialik,

Thank you for for sending the Notice of Public Information Centre for the above-mentioned project to the Ministry of Citizenship and Multiculturalism (MCM). Please find attached MCM's initial letter on this project.

Please do not hesitate to contact us if you have any questions.

Kind regards,

Erika Leclerc

Heritage Planner | Heritage Branch | Citizenship, Inclusion and Heritage Division Ministry of Citizenship and Multiculturalism | Ontario Public Service 416-305-0757 | <u>erika.leclerc@ontario.ca</u>



Taking pride in strengthening Ontario, its places and its people

From: Nicolas Bialik <<u>nbialik@jlrichards.ca</u>>

Sent: February 21, 2024 2:07 PM

Cc: Susan Jingmiao Shi <<u>sshi@jlrichards.ca</u>>; <u>Andrew.Smale@ghd.com</u>; <u>dlauzon@cornwall.ca</u> Subject: City of Cornwall Biosolids, Organics and Septage Master Plan - Notice of Virtual Public Information Centre -February 28, 2024

CAUTION -- EXTERNAL E-MAIL - Do not click links or open attachments unless you recognize the sender. Good afternoon,

You have been copied on this email because you were identified as a stakeholder for the City of Cornwall Biosolids, Organics and Septage Master Plan (BOSMP) study.

You are invited to attend a Public Information Centre (PIC), which will be undertaken virtually on **February 28, 2024**, **starting at 7:00 p.m**. Additional details on the PIC are provided in the attached notice.

Note that the City of Cornwall created a webpage for this Master Plan study on the City of Cornwall website. This webpage will be updated with pertinent information at key study milestones. You may access this webpage through the following link: <u>Biosolids</u>, <u>Organics and Septage Master Plan - City of Cornwall</u>.

Should you have any questions or feedback, please do not hesitate to respond to this email or contact either of the two (2) project contacts found in the attached notice.

We look forward to hearing from you.

Regards,

Nicolas Bialik, P.Eng. Environmental Engineer

J.L. Richards & Associates Limited 1000-343 Preston Street, Ottawa, ON K1S 1N4 Direct: 343-804-5346





Ministry of Citizenship and Multiculturalism

Heritage Planning Unit Heritage Branch Citizenship, Inclusion and Heritage Division 5th Flr, 400 University Ave Tel.: 416-305-0757

Ministère des Affaires civiques et du Multiculturalisme



Unité de la planification relative au patrimoine Direction du patrimoine Division des affaires civiques, de l'inclusion et du patrimoine Tél.: 416-305-0757

March 18, 2024

EMAIL ONLY

Andrew Smale, P.Eng. Project Manager GHD Limited 179 Colonnade Road South, Suite 400 Ottawa, ON K2E 7J4 andrew.smale@ghd.com

MCM File	:	0021068
Proponent	:	City of Cornwall
Subject	:	Municipal Class Environmental Assessment – Notice of Public
		Information Centre – Master Plan Approach No. 2
Project	:	Biosolids, Organics and Septage Master Plan
Location	:	City of Cornwall

Dear Andrew Smale:

Thank you for providing the Ministry of Citizenship and Multiculturalism (MCM) with the Notice of Public Information Centre for the above-referenced project.

MCM's interest in this master plan relates to its mandate of conserving Ontario's cultural heritage, which includes archaeological resources, built heritage resources, and cultural heritage landscapes.

MCM understands that master plans are long range plans which integrate infrastructure requirements for existing and future land use with environmental assessment planning principles. The Municipal Class Environmental Assessment (MCEA) outlines a framework for master plans and associated studies which should recognize the planning and design Process of this Class EA and should incorporate the key principles of successful environmental assessment planning identified in Section A.1.1. The master planning process will, at minimum, address Phases 1 and 2 of the Planning and Design Process of the MCEA.

This letter provides advice on how to incorporate consideration of cultural heritage in the abovementioned master planning process by outlining the technical cultural heritage studies and the level of detail required to address cultural heritage in master plans. In accordance with the MCEA, cultural heritage resources should be identified early in the process in order to determine known and potential resources and potential impacts.

Master Plan Summary

The City of Cornwall (the City) has initiated a Master Planning process in accordance with Approach 2 of the Municipal Engineers Association (MEA) Class EA to develop a Management of Biosolids, Organics and Septage Master Plan.

The Master Plan study is assessing various options to improve the management of two key waste streams currently handled at the municipal landfill: wastewater biosolids and hauled septage. This study is also reviewing options for managing the material from the City's organics collection program, set to begin in January 2025. The preferred solution is to receive and treat hauled septage at the Cornwall Wastewater Treatment Plant, divert the biosolids offsite to be processed by a third party, and transport organics materials offsite to be processed by a third party.

Identifying Cultural Heritage Resources

MCM understands that the level of investigation, consultation, and documentation in this master plan is sufficient to fulfill the requirements for Schedule B MCEA undertakings and would provide the basis for future investigations for the specific Schedule C MCEA undertakings identified within it. In regard to cultural heritage resources the master plan document should:

- identify existing baseline environmental conditions;
- identify expected environmental impacts; and
- Include measures to mitigate potential negative impacts.

Archaeological Resources

Schedule B MCEA undertakings included as part of the master plan should be screened using the Ministry's <u>Criteria for Evaluating Archaeological Potential</u> and <u>Criteria for Evaluating Marine</u> <u>Archaeological Potential</u> (if shoreline or in-water works are proposed) to determine if an archaeological assessment is needed. If the EA project area exhibits archaeological potential, then an archaeological assessment (AA) should be undertaken by an archaeologist licensed under the Ontario Heritage Act and submitted for MCM review prior to the completion of the master plan.

Built Heritage Resources and Cultural Heritage Landscapes

A Cultural Heritage Report: Existing Conditions and Preliminary Impact Assessment shall be undertaken for the entire study area during the planning phase and be summarized in the EA Report. This study will:

- <u>Describe the existing baseline cultural heritage conditions</u> within the study area by identifying all known or potential built heritage resources and cultural heritage landscapes, including a historical summary of the study area. The Ministry has developed screening criteria that may assist with this exercise: <u>Criteria for Evaluating for Potential Built Heritage</u> <u>Resources and Cultural Heritage Landscapes</u>.
- 2. <u>Identify preliminary potential project-specific impacts</u> on the known and potential built heritage resources and cultural heritage landscapes that have been identified. The report should include a description of the anticipated impact to each known or potential built heritage resource or cultural heritage landscape that has been identified.
- 3. <u>Recommend measures to avoid or mitigate potential negative impacts</u> to known or potential built heritage resources and cultural heritage landscapes. The proposed mitigation measures are to inform the next steps of project planning and design.

Given that this project covers a large study area, MCM recommends that the Cultural Heritage Report is carried out so that step 1 described above is undertaken early in the planning process. Then, steps 2 and 3 can be undertaken once the preferred alternatives have been selected.

For Schedule B MCEAs undertaken as part of the master plan, where a known or potential built heritage resource or cultural heritage landscape may be directly and adversely impacted, and where it has not yet been evaluated for Cultural Heritage Value or Interest (CHVI), completion of a Cultural Heritage Evaluation Report (CHER) is required to fully understand its CHVI and level of significance. The CHER must be completed as part of the final EA report. If a potential resource is found to be of CHVI, then a Heritage Impact Assessment (HIA) will need to be undertaken and included in the final EA report. Please send the HIA to MCM for review and make it available to local organizations or individuals who have expressed interest in review.

While some cultural heritage landscapes are contained within individual property boundaries, others span across multiple properties. For certain cultural heritage landscapes, it will be more appropriate for the CHER and HIA to include multiple properties, in order to reflect the extent of that cultural heritage landscape in its entirety.

Community input should be sought to identify locally recognized and potential cultural heritage resources. Sources include, but are not limited to, municipal heritage committees, community heritage registers, historical societies and other local heritage organizations.

Cultural heritage resources are often of critical importance to Indigenous communities. Indigenous communities may have knowledge that can contribute to the identification of cultural heritage resources, and we suggest that any engagement with Indigenous communities includes a discussion about known or potential cultural heritage resources that are of value to them.

Environmental Assessment Reporting

Technical cultural heritage studies are to be undertaken by a qualified person who has expertise, recent experience, and knowledge relevant to the type of cultural heritage resources being considered and the nature of the activity being proposed. Please advise MCM whether any technical heritage studies will be completed for this master plan and provide them to MCM before issuing a Notice of Completion.

Please note that the responsibility for administration of the *Ontario Heritage Act* and matters related to cultural heritage have been transferred from the Ministry of Tourism, Culture and Sport (MTCS) to the Ministry of Citizenship and Multiculturalism (MCM). Individual staff roles and contact information remain unchanged. Please continue to send any notices, report and/or documentation to both Karla Barboza and myself.

- Karla Barboza, Team Lead Heritage | Heritage Planning Unit (Citizenship and Multiculturalism) | 416-660-1027 | <u>karla.barboza@ontario.ca</u>
- Erika Leclerc, Heritage Planner | Heritage Planning Unit (Citizenship and Multiculturalism) | 416-305-0757 | erika.leclerc@ontario.ca

Thank you for consulting MCM on this project. Please continue to do so through the master plan process and contact me for any questions or clarification.

Sincerely,

Erika Leclerc Heritage Planner Erika.leclerc@ontario.ca

Copied to: Nicolas Bialik, Environmental Engineer, J.L. Richards & Associates Limited Daniel Lauzon, Project Supervisor – Environmental Services, City of Cornwall Susan Jingmiao Shi, J.L. Richards & Associates Limited Karla Barboza, Team Lead – Heritage Planning, MCM

It is the sole responsibility of proponents to ensure that any information and documentation submitted as part of their EA report or file is accurate. The Ministry of Citizenship and Multiculturalism (MCM) makes no representation or warranty as to the completeness, accuracy or quality of the any checklists, reports or supporting documentation submitted as part of the EA process, and in no way shall MCM be liable for any harm, damages, costs, expenses, losses, claims or actions that may result if any checklists, reports or supporting documents are discovered to be inaccurate, incomplete, misleading or fraudulent.

Should previously undocumented archaeological resources be discovered, they may be a new archaeological site and therefore subject to Section 48(1) of the *Ontario Heritage Act*. The proponent or person discovering the archaeological resources must cease alteration of the site immediately and engage a licensed consultant archaeologist to carry out an archaeological assessment, in compliance with Section 48(1) of the *Ontario Heritage Act*.

The Funeral, Burial and Cremation Services Act, 2002, S.O. 2002, c.33 requires that any person discovering human remains must cease all activities immediately and notify the police or coroner. If the coroner does not suspect foul play in the disposition of the remains, in accordance with Ontario Regulation 30/11 the coroner shall notify the Registrar, Ontario Ministry of Public and Business Service Delivery, which administers provisions of that Act related to burial sites. In situations where human remains are associated with archaeological resources, the Ministry of Citizenship and Multiculturalism should also be notified (at archaeology@ontario.ca) to ensure that the archaeological site is not subject to unlicensed alterations which would be a contravention of the Ontario Heritage Act.

Appendix G Financial Review of Options

Assumptions and Capital Cost Estimates

APPENDIX G - City of Cornwall – Financial Model Analysis for Master Plan

Scope

- Two (2) models to evaluate options: one (1) for Biosolids, one (1) for organics
- Options For Biosolids
 - 1. Status quo deposit at City Landfill (current estimated cost at \$210/tonne including transportation for City to self-perform this option)
 - Use average 3rd party market rates for haulage and processing of biosolids elsewhere at \$127/tonne. No capital expenditure required here as simply taking from existing truck loading bay.
 - 3. Use Thermal hydrolysis process at Plant within existing digester complex
 - 4. Use Biosolids drying process at Plant
 - 5. Initially use 3rd party (up to 5 years), and then at year 5 implement THP process (#3)
- Options For Organics:
 - 1. Status quo not a "real" option, City will not deposit to landfill at start of program. However, this must be included for a fair evaluation. There is currently no green bin program, so nothing to compare to; will have to estimate O&M from similar municipalities.
 - Local transfer station at Landfill + 3rd party processing (3rd party processing estimated at \$150-170/tonne based on current market rates in Ontario).
 - 3. Aerated static pile composting for comparison (City self performs labour, sells compost byproduct including marketing)
 - 4. Organics pre-processing important note: this was already examined for the previously completed co-digestion study and has only been included for comparison. It was ruled out early on as part of the long-list review of options. For the purposes of discussion, "Option A" was considered here as noted in the attached breakdowns.
- Capital, Operating, Revenue and haulage cost estimates have been summarized in separate spreadsheets that follow this assumptions section.

Assumptions

- 20 year study period
- Biosolids: Tonnages remain static at 4,000 tonnes per year minimum
- Organics: Tonnages remain static at 4,000 tonnes per year minimum
- Use current (2024) interest rates
- Using "typical" discount rate for 2024 (5%)
- Using "typical" escalation rate for 2024 (2%)
- Biosolids processing well understood in the wastewater industry typical values and costs have been used to estimate both CAPEX and OPEX.
- For any other data not included in supporting CAPEX and OPEX estimates for organics, have assumed costs (CAPEX and OPEX) from a similar municipality that had to process 7,000 wet tonnes/year.

Cornwall BOSMP - Estimated Revenue Generation from Byproducts

				Output	Revenue	Revenue	Re	evenue amt	
Option	Source	Output Material	Output Units	Quantity	units	unit price	ре	er year	Notes and Comments
ТНР	Lystek propsal (Table 8-1, page 28)	Liquid biosolids @ 15% TS	m3/y	7,470) \$/m3	2.00	\$		For Lystek this is not full cost - only revenue sharing that goes direct to City. But that also offsets administrative/logistics costs to Lystek. Will be much worse for CAMBI option. Will require net cost to City.
Dryer	Monterey TM7	Dry pellets (uniform) at >98% TS	dt/year	1,120) \$/dt	20	\$		Based on input of 4,000 t/y @ 25% TS. Market rate for dry pellets in bulk - must be uniform (round or cylindrical); no one wants non-uniform particles. This is also hopeful based on market in Ontario.
ASP	Oxford TM	Finished Compost product	tonnes/year	7,500	\$/tonne	30	\$		Output based on Food waste AND yard waste @ 5,500 tonnes/year inputs. Sale of Compost only - does not consider marketing of material or haulage logistics.
Organics processing and co-digestion	Cornwall Co-digestion TM Appendix F & G	Digestate at 27% TS	tonnes/year	4,989	\$/tonne	0	\$		Equivalent to 4,619 m3/year @ 27% TS. Based on "Scenario A" in final co-digestion TM. Relying on no other waste inputs other than City SSO.
	Cornwall Co-digestion TM Appendix F & G	Biogas	GJ/y	543,403	\$/GJ	0	\$		Based on "Scenario A" in final co-digestion TM where no other waste inputs received other than City SSO. No revenue generated as gas quantities would not be sufficient without external inputs. Scenario A assumes that gas produced is used on site for CHP and heating (boilers).

Note: no revenue generation from 3rd party processing options.

m3 biogas 24,320,000 /year 14,592,000 m3 NG/yr 26.853 m3 NG/GJ 543,403 GJ/year

from Estimated Finanical Summary Appendix F, Co-Digestion TM

m3/year digestate 4,619 output 1.08 tonnes/m3 dewatered digestate

4988.52 tonnes/year

APPENDIX G 1. THP Alternatives

	%s	Lystek THP		САМВІ ТНР		Comments
Equipment <u>only</u>		\$	2,521,000.00	\$	3,900,000.00	From Vendor quotations, January 2024
Existing Building retrofits	40.0%	\$	1,008,400.00	\$	1,560,000.00	Assumed based on other WWTP retrofit projects, struct+arch only
New building		\$	-	\$	5,000,000.00	New special purpose building for CAMBI - we know it won't fit based on Vendor feedback.
Subtotal A		\$	3,529,400.00	\$	10,460,000.00	
Mechanical	10.0%	\$	352,940.00	\$	1,046,000.00	Typical tender %s
Electrical	5.0%	\$	176,470.00	\$	523,000.00	Typical tender %s
Instrumentation	3.5%	\$	123,529.00	\$	366,100.00	Typical tender %s
Subtotal B		\$	4,182,339.00	\$	12,395,100.00	
Other GC costs	15.0%	\$	627,350.85	\$	1,859,265.00	Including Mobilization, bonding, markup, etc.
CAPEX Estimate Contingency	30.0%	\$	1,254,701.70	\$	3,718,530.00	
Subtotal C		\$	6,064,391.55	\$	17,972,895.00	
Engineering	10%	\$	606,439.16	\$	1,797,289.50	
TOTAL		\$	6,670,830.71	\$	19,770,184.50	Note- for "all in" Lystek Design build, it was \$8M based on their quotation.

Table 1. Estimated annual utility and chemical costs for LY6 Module operations

	Consumable Rate	Price Pe	Estimated Year One Cost		
		First 250 kWh	\$0.1863/kWh		
Electrical consumption	Avg. 38 kW-h per dry tonne	Next 12,250 kWh	\$0.1519/kWh	\$4,486 ⁱ	
		Remaining	\$0.1054/kWh		
Heat requirements	Avg. 32 m ³ per dry tonne ⁱⁱ	\$0.3356	70/m ³	\$12,030	
45 w/w% KOH solution	Avg. 50 kg per dry tonneili	\$1.155/kg ^{iv}		\$64,680	
Total estimated year one cost				\$81,196	

¹ Annual electricity costs calculated at the "Remaining" rate based upon current utility usage

^{II} Dependent upon biosolids feed temperature into the Lystek Reactor

^{III} Estimated based on average dosing rates for digested biosolids; KOH dosing estimates can be further refined with bench scale analysis of Cornwall's biosolids

^{iv} Price paid by Southgate OMRC in Fall 2023

Notes:

<- This is from Revised Lystek proposal in January 2024 and based on their reference projects in Ontario.

Based on required heat and pressure inputs for the CAMBI process system to function compared to Lystek, we have to assume it will be much higher (though no KOH solution required for CAMBI).

E.g. Lystek needs 70 deg C heat, CAMBI needs 150 deg C heat via natural gas/energy inputs

For the sake of evaluation, we rounded up to \$100,000 in

APPENDIX G 2. SLUDGE DRYING ALTERNATIVES

CAPEX

	%s	Belt dryer	elt dryer Pa		Oryer Package	Comments
Equipment <u>only</u>		\$8,	000,000.00	\$	4,000,000.00	Based on Komline Sanderson (Paddle), Veolia/Kruger (Belt)
Existing Building retrofits	40.0%					
New building to house equipment		\$ 10,	000,000.00	\$	10,000,000.00	Based on other municipal biosolids projects, scaled to 4,000 tonnes/yr. Struct + Arch
Storage Silo and Truck Loading		\$2,	750,000.00	\$	2,750,000.00	
Specialty Safety Equipment		\$	100,000.00	\$	100,000.00	Scaled from existing GTA facility at 40,000 tpy
Subtotal A		\$ 20,	850,000.00	\$	16,850,000.00	
Installation of Equipment	35.0%	\$3,	797,500.00	\$	2,397,500.00	
Mechanical	10.0%	\$2,	085,000.00	\$	1,685,000.00	Typical tender %s
Electrical	5.0%	\$1,	042,500.00	\$	842,500.00	Typical tender %s
Instrumentation	3.5%	\$	729,750.00	\$	589,750.00	Typical tender %s
Subtotal B		\$28,	504,750.00	\$	22,364,750.00	
Other GC costs	15.0%	\$4,	275,712.50	\$	3,354,712.50	Including Mobilization, bonding, markup, etc.
CAPEX Estimate Contingency (Class 5)	30.0%	\$8,	551,425.00	\$	6,709,425.00	
Subtotal C		\$ 41,	331,887.50	\$	32,428,887.50	
Engineering	10%	\$ 4,	133,188.75	\$	3,242,888.75	
TOTAL		\$45,	465,076.25	\$	35,671,776.25	Note - Paddle solution was priced in Eval. Matrix

ANNUAL OPEX

Power Consumption Operating hours Cost for power Power costs	200 kW 2371.2 h 0.1519 \$/KW*h \$ 72,037.06	Based on 25,000 tonne/year belt dryer facility (scaled) - auxiliary motors, etc. Assume up to 2 days, 24 h/d per week, 95% uptime per year (to allow for some downtime maintenance) City's cost
Natural Gas consumption Cost for Natural gas Natural gas costs	1,128,489 m3/y 0.33567 \$/m3 \$ 378,799.92	Based on evaporating water from 4,000 tonnes/year to >98% dryness, 2d/wk operation City's cost
Staff required Hourly rate Hours worked Staffing cost	0.5 FTO 75 \$/h 3120 h \$ 117,000.00	Dryer facility will need more attention, assuming 0.5 staff since process not online all week Based on 5 days per week, 12 h per day, allowing for downtime and O&M that will take place
Total OPEX For drying	\$ 567,836.97 /year	Based on belt dryer power, but natural gas will be the same for both

Assumptions about operations costing

- up to 2 days per week based on annual sludge production, and a 24 hour operating day to minimize startup and shutdown
- This OPEX estimate is IN ADDITION to current operational costs at

Cornwall WWTP

- Did not assume any costs (yet) for marketing , contracting, sale and haulage of end materials to takers - this can be expensive, and may need to discuss further

APPENDIX G

3. Aerated Static Pile (ASP) for Composting

CAPEX	%s	Cost (\$)	Comments	
Site preparation and paving (civil works)		\$ 60,000.00]	CAPEX and OPEX Assumptions
Pre-processing equipment (bag shredder)		\$ 250,000.00		- Based on similarly sized project in
Compost system (including cover, leachate collection, controls, blowers, wetting system, etc.)		\$ 2,600,000.00	Installation included	- FEEDSTOCK includes food waste
Post-processing equipment (rotary screen) and compost materials management		\$ 500,000.00		(based on 2019 collection tonnage
Receiving/buffer building and floor slab (pre-engineered)		\$ 500,000.00		- Even though City currently self-p
Odour capture system		\$ 750,000.00	Allowance for biofilter - can look at other options	system as bulking agent to make t
Subtotal A		\$ 4,660,000.00		- Did not incorporate any costs (ye
Misc. Electrical work	5%	\$ 233,000.00		takers - this can be expensive, and
Machinery and materials handling (front end loader)		\$ 400,000.00	Purchase of new loader truck, assume carry in GC	
Subtotal B		\$ 5,293,000.00		
Other GC costs	15%	\$ 793,950.00		
CAPEX Estimate Contingency (Class 5)	30%	\$ 1,587,900.00		
Subtotal C		\$ 7,674,850.00		
Engineering and Permitting	12%	\$ 920,982.00	Will require special permitting process for compost operations and	materials generation
TOTAL		\$ 8,595,832.00]	

ANNUAL OPEX

\$ 850,000.00 based on another Ontario project of similar size. Fixed facility O&M

This includes electricity and fuel costs to manage materials and operate the facility, and labour to support the facility (up to 3 full time operators).

OTHER COSTS	
Cover repairs or replacement and concrete pad maintenance at year 5	\$ 1,750,000.00
Cover repairs or replacement and concrete pad maintenance at year 10	\$ 1,750,000.00
Cover repairs or replacement and concrete pad maintenance at year 15	\$ 1,750,000.00
Cover repairs or replacement and concrete pad maintenance at year 20	\$ 1,750,000.00

Based on typical GORE-based composting system, spending a total of \$7,000,000 over a 20 year operating period- this may not be evenly distributed as shown above.

ed project in Ontario that wanted to pursue ASP solution in 2023 ood waste (SSO) input of 4,000 wt/year, PLUS 1,500 tonnes/year of L&YW on tonnages in TetraTech report)

ently self-processes L&YW, it will be beneficial to incorporate L&YW into ASP t to make things easier/balance nutrients for output material

ny costs (yet) for marketing, contracting, sale and haulage of end materials to ensive, and may need to discuss further

APPENDIX G

4. Organics Pre-Processing and Co-Digestion

Note: This information is used from GHD's previous report "Co-Digestion, Energy Generation, and Biosolids Feasibility Study" Appendix F, provided through OCWA in 2021. All financial information is still sound and can be used as a basis of estimate, adjusting for inflation.

Scenario A - pre-processing of SSO off-site, and haul slurry to Cornwall WWTP for digestion.

Scenario B - co-digestion of the City's SSO as well as IC&I organics, FOG, and hauled septage via a co-digestion arrangement at Cornwall WWTP Scenario C - relies on more outside input, i.e. a regional solution from other municipalities, commercial and industrial providers. (up to 20,000 tonnes/year)

Scenario A and B were more "feasible" for the City, as it would only rely on City inputs (public or private), processing about 3,000 - 4,000 total tonnes/year of material. Scenario C not realistic at this time. For the purposes of estimating CAPEX in the Master Plan, Scenario A was used. Under Scenario A, the biogas quantities geenrated were to be used as part of a CHP system (electricity generation) or heating on site at Cornwall WWTP. In below numbers, no tip fee or sale of RNG numbers were carried to offset OPEX to compare to be able to compare to other alternatives. If required, this potential Revenue data under Scenario C is all in Appendix F of study as noted above.

 CAPEX (2021)
 OPEX (2021)

 Scenario A
 \$ 18,360,000.00
 \$ 441,000.00

 Scenario B
 \$ 18,360,000.00
 \$ 624,000.00

Using Current infation/CPI... https://www.bankofcanada.ca/rates/related/inflation-calculator/

	CAPEX	(2024)	OPEX (2024)
Scenario A	\$	21,030,303.91	\$ 505,139.65
Scenario B	\$	21,030,303.91	\$ 714,755.43

APPENDIX G 5. Organics Transfer Station

CAPEX									
	units	qty	un	it price	sub	total	Assumptions about building dimensions		
Steel Plate	m2		225 \$	500.00	\$	112,500.00	Depth of building	15 m	
Concrete	m3		125 \$	500.00	\$	62,500.00	Width	15 m	*Assume 2 trucks, 5 m width, side by side
Pre-Eng Roof/arch structure	m2		225 \$	2,152.85	\$	484,391.82	Bldg Footprint	225 m2	
Misc civil works	LS		1\$	18,000.00	\$	18,000.00			
Subtotal 1					\$	677,391.82			
Division 1+GC costs	159	%			\$	101,608.77			
Total					\$	779,000.59			
Contingency (Class 5)	309	%			\$	233,700.18			
Subtotal 2					\$	1,012,700.77			
Design and Permitting	109	%			\$	101,270.08			
GRAND TOTAL					\$	1,113,970.85	<< Used \$1.2M in Master plan (rounded up)		

<u>OPEX</u>

Cost of the City's Organics collections contract plus an estimated cost of \$150/tonne to \$170/tonne for organics to be processed by others at a Facility in the Region, based on current market rates.

Financial Model and Lifecycle Costing

Biosolids



City of Cornwall Management of Biosolids, Organics and Septage Master Plan Economic Assessment of Biosolids Options

		Version Control
La	ast Update	7/5/2024
	pdated By	JH

GHD Advisory

City of Cornwall Management of Biosolids, Organics and Septage Master Plan Economic Assessment of Biosolids Options

Summary - Base Scenario

Economics Sumn	nary	Third Party Haulage and Processing	Thermal hydrolysis process	Biosolids Drying Process	Third Party for 5 years & then THP	Status Quo
Project Upfront Cost	\$	0	6,671,000	35,671,800	6,671,000	0
Internal Rate of Return	%	N/A	N/A	N/A	N/A	0%
Net Present Value	\$	-7,180,181	-9,920,830	-41,663,999	-9,457,320	-12,565,316
Payback Period	Year	0.00	0.00	0.00	0.00	0.00
Lifecycle Cost	\$/tonne	90	124	521	118	157

Third Party Haulage and Processing

Economics Sumn	nary	Base Scenario	Alternative A	Alternative B	Alternative C	Alternative D
Project Upfront Cost	\$	0				
Internal Rate of Return	%	N/A				
Net Present Value	\$	-7,180,181				
Payback Period	Year	0				
Lifecycle Cost	\$/tonne	90				
Economic Indicator #3						
Economic Indicator #4						
Economic Indicator #5						

Thermal hydrolysis process

Economics Sumr	nary	Base Scenario	Alternative A	Alternative B	Alternative C	Alternative D
Project Upfront Cost	\$	6,671,000				
Internal Rate of Return	%	N/A				
Net Present Value	\$	-9,920,830				
Payback Period	Year	0				
Lifecycle Cost	\$/tonne	124				
Economic Indicator #3						
Economic Indicator #4						
Economic Indicator #5						

Biosolids Drying Process

Economics Summ	nary	Base Scenario	Alternative A	Alternative B	Alternative C	Alternative D
Project Upfront Cost	\$	35,671,800				
Internal Rate of Return	%	N/A				
Net Present Value	\$	-41,663,999				
Payback Period	Year	0.00				
Lifecycle Cost	\$/tonne	521				
Economic Indicator #3						
Economic Indicator #4						
Economic Indicator #5						

Third Party for 5 years & then THP

Economics Sumn	nary	Base Scenario	Alternative A	Alternative B	Alternative C	Alternative D
Project Upfront Cost	\$	6,671,000				
Internal Rate of Return	%	N/A				
Net Present Value	\$	-9,457,320				
Payback Period	Year	0.00				
Lifecycle Cost	\$/tonne	118				
Economic Indicator #3						
Economic Indicator #4						
Economic Indicator #5						

GHD Advisory City of Cornwall Management of Biosolids, Organics and Septage Master Plan Economic Assessment of Biosolids Options

Project Assumptions

First Year of Analysis	Year	2024
Month of Investment	#	13
Total Years of Analysis From Investment	#	20
Discount Rate	%	5%
Escalation Rate	%	2%
Biosolids tonnage	Tonne	4000
Dry Tonnage % of Total Tonnage	%	27%
Construction Escalation Rate	%	2%

Status Quo

Price Assumptions		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Landfill Fees & Transportation	\$/tonne		210.00	210.00	210.00	210.00	210.00	210.00	210.00	210.00	210.00	210.00	210.00	210.00	210.00	210.00	210.00	210.00	210.00	210.00	210.00	210.00
Third Party Haulage and Processing																						
Price Assumptions		2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044
Processing & Transportation Cost	\$/tonne		120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00
Thermal hydrolysis process																						
Price Assumptions		2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044
Electricity Rate	\$/kWh						0.1519	0.1519	0.1519	0.1519	0.1519	0.1519	0.1519	0.1519	0.1519	0.1519	0.1519	0.1519	0.1519	0.1519	0.1519	0.1519
Electricity Consumption	kWh/dry tonne						38.00	38.00	38.00	38.00	38.00	38.00	38.00	38.00	38.00	38.00	38.00	38.00	38.00	38.00	38.00	38.00
Total Electricity Consumption	kWh						41,040.00	41,040.00	41,040.00	41,040.00	41,040.00	41,040.00	41,040.00	41,040.00	41,040.00	41,040.00	41,040.00	41,040.00	41,040.00	41,040.00	41,040.00	41,040.00
NG cost	\$/m3						0.33567	0.33567	0.33567	0.33567	0.33567	0.33567	0.33567	0.33567	0.33567	0.33567	0.33567	0.33567	0.33567	0.33567	0.33567	0.33567
Heat Requirement	m3/dry tonne						32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00
Total NG Consumption	m3						34,560.00	34,560.00	34,560.00	34,560.00	34,560.00	34,560.00	34,560.00	34,560.00	34,560.00	34,560.00	34,560.00	34,560.00	34,560.00	34,560.00	34,560.00	34,560.00
KOH Solution Cost	\$/kg						1.155	1.155	1.155	1.155	1.155	1.155	1.155	1.155	1.155	1.155	1.155	1.155	1.155	1.155	1.155	1.155
KOH Solution Requirement	kg/dry tonne						50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00
Total KOH Solution Consumption	kg						54,000.00	54,000.00	54,000.00	54,000.00	54,000.00	54,000.00	54,000.00	54,000.00	54,000.00	54,000.00	54,000.00	54,000.00	54,000.00	54,000.00	54,000.00	54,000.00
Byproduct - Liquid Biosolids 15% TS Quantity	m3/year						7,470.00	7,470.00	7,470.00	7,470.00	7,470.00	7,470.00	7,470.00	7,470.00	7,470.00	7,470.00	7,470.00	7,470.00	7,470.00	7,470.00	7,470.00	7,470.00
Byproduct - Liquid Biosolids Rate	\$/m3						2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00

Price Assumptions		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Landfill Fees & Transportation	\$/tonne		210.00	210.00	210.00	210.00	210.00	210.00	210.00	210.00	210.00	210.00	210.00	210.00	210.00	210.00	210.00	210.00	210.00	210.00	210.00	210.00
Third Party Haulage and Processing																						
		0004	0005		0007	0000		0000	0004			0004	0005		0007		0000	0040	0044	0040	00.40	0044
Price Assumptions		2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044
Processing & Transportation Cost	\$/tonne		120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00
Thermal hydrolysis process																						
Drive Assumptions		0004	0005	0000	0007	0000	0000	0000	0004	0000	0000	0004	0005	0000	0007	0000	0000	0040	00.44	0040	0040	0044
Price Assumptions		2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044
Electricity Rate	\$/kWh						0.1519	0.1519	0.1519	0.1519	0.1519	0.1519	0.1519	0.1519	0.1519	0.1519	0.1519	0.1519	0.1519	0.1519	0.1519	0.1519
Electricity Consumption	kWh/dry tonne						38.00	38.00	38.00	38.00	38.00	38.00	38.00	38.00	38.00	38.00	38.00	38.00	38.00	38.00	38.00	38.00
Total Electricity Consumption	kWh						41,040.00	41,040.00	41,040.00	41,040.00	41,040.00	41,040.00	41,040.00	41,040.00	41,040.00	41,040.00	41,040.00	41,040.00	41,040.00	41,040.00	41,040.00	41,040.00
NG cost	\$/m3						0.33567	0.33567	0.33567	0.33567	0.33567	0.33567	0.33567	0.33567	0.33567	0.33567	0.33567	0.33567	0.33567	0.33567	0.33567	0.33567
Heat Requirement	m3/dry tonne						32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00
Total NG Consumption	m3						34,560.00	34,560.00	34,560.00	34,560.00	34,560.00	34,560.00	34,560.00	34,560.00	34,560.00	34,560.00	34,560.00	34,560.00	34,560.00	34,560.00	34,560.00	34,560.00
KOH Solution Cost	\$/kg						1.155	1.155	1.155	1.155	1.155	1.155	1.155	1.155	1.155	1.155	1.155	1.155	1.155	1.155	1.155	1.155
KOH Solution Requirement	kg/dry tonne						50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00
Total KOH Solution Consumption	kg						54,000.00	54,000.00	54,000.00	54,000.00	54,000.00	54,000.00	54,000.00	54,000.00	54,000.00	54,000.00	54,000.00	54,000.00	54,000.00	54,000.00	54,000.00	54,000.00
Byproduct - Liquid Biosolids 15% TS Quantity	m3/year						7,470.00	7,470.00	7,470.00	7,470.00	7,470.00	7,470.00	7,470.00	7,470.00	7,470.00	7,470.00	7,470.00	7,470.00	7,470.00	7,470.00	7,470.00	7,470.00
Byproduct - Liquid Biosolids Rate	\$/m3						2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00

Price Assumptions		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Landfill Fees & Transportation	\$/tonne		210.00	210.00	210.00	210.00	210.00	210.00	210.00	210.00	210.00	210.00	210.00	210.00	210.00	210.00	210.00	210.00	210.00	210.00	210.00	210.00
Third Party Haulage and Processing																						
		0004	0005		0007	0000		0000	0004			0004	0005		0007		0000	0040	0044	0040	00.40	0044
Price Assumptions		2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044
Processing & Transportation Cost	\$/tonne		120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00
Thermal hydrolysis process																						
Drive Assumptions		0004	0005	0000	0007	0000	0000	0000	0004	0000	0000	0004	0005	0000	0007	0000	0000	0040	00.44	0040	0040	0044
Price Assumptions		2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044
Electricity Rate	\$/kWh						0.1519	0.1519	0.1519	0.1519	0.1519	0.1519	0.1519	0.1519	0.1519	0.1519	0.1519	0.1519	0.1519	0.1519	0.1519	0.1519
Electricity Consumption	kWh/dry tonne						38.00	38.00	38.00	38.00	38.00	38.00	38.00	38.00	38.00	38.00	38.00	38.00	38.00	38.00	38.00	38.00
Total Electricity Consumption	kWh						41,040.00	41,040.00	41,040.00	41,040.00	41,040.00	41,040.00	41,040.00	41,040.00	41,040.00	41,040.00	41,040.00	41,040.00	41,040.00	41,040.00	41,040.00	41,040.00
NG cost	\$/m3						0.33567	0.33567	0.33567	0.33567	0.33567	0.33567	0.33567	0.33567	0.33567	0.33567	0.33567	0.33567	0.33567	0.33567	0.33567	0.33567
Heat Requirement	m3/dry tonne						32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00
Total NG Consumption	m3						34,560.00	34,560.00	34,560.00	34,560.00	34,560.00	34,560.00	34,560.00	34,560.00	34,560.00	34,560.00	34,560.00	34,560.00	34,560.00	34,560.00	34,560.00	34,560.00
KOH Solution Cost	\$/kg						1.155	1.155	1.155	1.155	1.155	1.155	1.155	1.155	1.155	1.155	1.155	1.155	1.155	1.155	1.155	1.155
KOH Solution Requirement	kg/dry tonne						50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00
Total KOH Solution Consumption	kg						54,000.00	54,000.00	54,000.00	54,000.00	54,000.00	54,000.00	54,000.00	54,000.00	54,000.00	54,000.00	54,000.00	54,000.00	54,000.00	54,000.00	54,000.00	54,000.00
Byproduct - Liquid Biosolids 15% TS Quantity	m3/year						7,470.00	7,470.00	7,470.00	7,470.00	7,470.00	7,470.00	7,470.00	7,470.00	7,470.00	7,470.00	7,470.00	7,470.00	7,470.00	7,470.00	7,470.00	7,470.00
Byproduct - Liquid Biosolids Rate	\$/m3						2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00

Biosolids Drying Process

Facility Assumptions

	Tonnage per	
Facility Design Size Only (Drying Equipment)	year	25000
Operations	days/week	2
	hours/day	24
Facility Uptime per year	%	95%
Staff Required	FTO	0.5
Staff Hourly Rate	\$/hr	75
Working days	days/week	5
Working hours	hours/day	12

Price Assumptions		2024	2025	20)26	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044
Electricity Rate	\$/kwh							0.1519	0.1519	0.1519	0.1519	0.1519	0.1519	0.1519	0.1519	0.1519	0.1519	0.1519	0.1519	0.1519	0.1519	0.1519	0.1519
Power Consumption	kW							200	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200
Operating Hours	hr							2371.20	2371.20	2371.20	2371.20	2371.20	2371.20	2371.20	2371.20	2371.20	2371.20	2371.20	2371.20	2371.20	2371.20	2371.20	2371.20
NG cost	\$/m3							0.33567	0.33567	0.33567	0.33567	0.33567	0.33567	0.33567	0.33567	0.33567	0.33567	0.33567	0.33567	0.33567	0.33567	0.33567	0.33567
NG Consumption	m3/year							1,128,489.00	1,128,489.00	1,128,489.00	1,128,489.00	1,128,489.00	1,128,489.00	1,128,489.00	1,128,489.00	1,128,489.00	1,128,489.00	1,128,489.00	1,128,489.00	1,128,489.00	1,128,489.00	1,128,489.00	1,128,489.00
Staff total hours worked in a year	hr/year							3,120.00	3,120.00	3,120.00	3,120.00	3,120.00	3,120.00	3,120.00	3,120.00	3,120.00	3,120.00	3,120.00	3,120.00	3,120.00	3,120.00	3,120.00	3,120.00
Byproduct - Dry Pellets >98% TS Quantity	dry tonne/year							1,120.00	1,120.00	1,120.00	1,120.00	1,120.00	1,120.00	1,120.00	1,120.00	1,120.00	1,120.00	1,120.00	1,120.00	1,120.00	1,120.00	1,120.00	1,120.00
Byproduct - Dry Pellets Rate	\$/dry tonne							20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00

GHD Advisory

City of Cornwall Management of Biosolids, Organics and Septage Master Plan Economic Assessment of Biosolids Options

Thermal hydrolysis process

Year	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044
Upfront Capital, \$ Engineering Cost		303,250	303,250																		
Construction Cost Total Upfront Capital		303,250		3,032,250 3,032,250		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30000000000000000000000000000000000000			505,250	5,052,250	5,052,250		Y								V		Ŭ				
Sustaining Capital, \$	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual Sustaining Capital Total Sustaining Capital	0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30000000000000000000000000000000000000				0 000 050		•	•	•	•	•	•	•	•	•	•	•	•		•	•	•
Annual CAPEX, \$	0	303,250	303,250	3,032,250	3,032,250	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total CAPEX, \$	6,671,000																				
Biosolids Drying Process																					
Year	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044
Upfront Capital, \$ Engineering Cost		1,621,500	1,621,500																		
Construction Cost Total Upfront Capital		1 621 500		16,214,400 16,214,400		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		1,021,500	1,021,500	10,214,400	10,214,400	V <u>i</u>	V	<u> </u>	V	V	U	.	U	U	V	<u> </u>	V	V	V	V	V
Sustaining Capital, \$																					
Annual Sustaining Capital Total Sustaining Capital	0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual CAPEX, \$	0	1 621 500	1 621 500	16,214,400	16 21/ /00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			1,021,000	10,214,400	10,214,400	U	Ū	Ū	U	Ū	U	U	Ū	Ū	Ū	Ū	Ū	Ū	Ū	Ū	v
Total CAPEX, \$	35,671,800																				
Third Party for 5 years & then THP																					
Year Upfront Capital, \$	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044
Engineering Cost							303,250	303,250													
Construction Cost Total Upfront Capital		0	0	0	0	0	303,250		3,032,250 3,032,250	3,032,250 3,032,250	0	0	0	0	0	0	0	0	0	0	0
Sustaining Capital, \$																					
Annual Sustaining Capital Total Sustaining Capital	0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual CAPEX, \$	0	0	0	0	0	0	303,250	303,250	3,032,250	3,032,250	0	0	0	0	0	0	0	0	0	0	0
Total CAPEX, \$	6,671,000																				

GHD Advisory

City of Cornwall Management of Biosolids, Organics and Septage Master Plan Economic Assessment of Biosolids Options

Status Quo

Note Note <t< th=""><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th></t<>																							
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $			2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044
Display Figure 2 Control 1 Sector 1 Sector 2		- <u>-</u>		0.10.000						0.10.000	0.10.000			0.10.000		0.10.000		0.40.000	0.10.000	0.10.000		0.10.000	
Year 2024 2025 2026 2027 2028 2038 2031 2031 2032 2033 2034 2035 2036 2037 2038 2048 2044			0					ມຫຼືບາກການການການການກໍ່ມາການການການການຫຼື				ຍູ້ການການການການການກຳການການການການການການການການການການການການການກ					ບໍ່ການການການການການການການການການການ	ບບ້ານການການການການບໍ່ການການການການການການ					
New 2024 2025 2025 2026 2020	I otal Net Revenue	\$/Year	U	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000
Gram Operating in any boot Operating in	Third Party Haulage and Process	sing																					
International of a manufacture in a status Attract	Year		2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044
Market Reserve TetTer: T Headbert <	Cost																						
Nerral hydrolyte procest 2024 2025 2024 2025 2024 2025 2024 2025 2024 2025 2024 2025 2024 2025 2024 2025 2024 2025 2024 2025 2024 2025 2024 2025 2024 2025 2024 2025 2024 2025 2024 2025 2026 2024 2025 2026 2026 2026 2026 2026 2026 2026 2026 2026 2026 1226 1	Processing & Transportation Cost	\$/Year	0	480,000	480,000	480,000	480,000	480,000	480,000	480,000	480,000	480,000	480,000	480,000	480,000	480,000	480,000	480,000	480,000	480,000	480,000	480,000	480,000
New yood 2024 2025 2027 2029 2020 2031 2033 2034 2037 2038 2037 2038 2037 2038 2037 2038 2037 2038 2037 2038 2037 2038 2037 2038 2037 2038 2039 2040	Total Net Revenue	\$/Year	0	-480,000	-480,000	-480,000	-480,000	-480,000	-480,000	-480,000	-480,000	-480,000	-480,000	-480,000	-480,000	-480,000	-480,000	-480,000	-480,000	-480,000	-480,000	-480,000	-480,000
New Processor Strate	Thermal hydrolysis process																						
Under Norden Series D D CARP LARD CARP LARD CARP LARD LARD <thlard< th=""> LARD <thlard< th=""> LARD <thlard< th=""></thlard<></thlard<></thlard<>			2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044
Construint Prior BRUDO						-	-																
Teal Mer Recenue Street <	Cost		0	0	0	0	[0	14,940	14,940	14,940	14,940	14,940	14,940	14,940	14,940	14,940	14,940	14,940	14,940	14,940	14,940	14,940	14,940
OPEX Strate Strate <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>มกับหมายและและกับหมายและเล</td> <td>-0</td> <td></td>							มกับหมายและและกับหมายและเล	-0															
Element Cold More in the intervent of the intervent	Total Net Revenue	\$/Year		-840,000	-840,000	-840,000	-840,000	14,940	14,940	14,940	14,940	14,940	14,940	14,940	14,940	14,940	14,940	14,940	14,940	14,940	14,940	14,940	14,940
Since Since <th< td=""><td>OPEX</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></th<>	OPEX																						
Chi Shullon Cost SYvest SYvest SYvest SYvest SVest SVest </td <td>Electricity Cost</td> <td>\$/Year</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>6,234</td>	Electricity Cost	\$/Year						6,234	6,234	6,234	6,234	6,234	6,234	6,234	6,234	6,234	6,234	6,234	6,234	6,234	6,234	6,234	6,234
Trial OPEX Stream 0		\$/Year						11,601	11,601	11,601	11,601	11,601	11,601	11,601	11,601	11,601	11,601	11,601	11,601	11,601	11,601	11,601	11,601
Biosolids Drying Process Year 2024 2025 2026 2027 2028 2029 2030 2031 2022 2033 2036 2037 2038 2039 2040 22.400 20.40 20.400										ຕໍ່ການການການການກໍ່ການການການການການການການການການການການການການກ							<u> </u>		7	7		7	
Verr 2024 2025 2026 2027 2028 2029 2030 2031 2032 2033 2034 2035 2036 2037 2038 2039 2040 22.400	Total OPEX	\$/Year	0	0	0	0	0	80,205	80,205	80,205	80,205	80,205	80,205	80,205	80,205	80,205	80,205	80,205	80,205	80,205	80,205	80,205	80,205
Revenue Stream	Biosolids Drying Process																						
Cost Unified Revenue SVrear 840,000																							
Landfill Fees & Transportation Sivear 840,000 840,000 840,000 840,000 840,000 2400,000 22,400			2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044
Stylear 940,000 940,000 940,000 940,000 940,000 940,000 940,000 940,000 92,400 23,600 376,800 376,800 376,800 376,800 376,800	Revenue																						
OPEX Electricity Cost S/Year 0 0 0 72.037	Revenue Dry Pellets Sales																						
Electricity Cost \$/Year 0 0 0 0 72.037	Revenue Dry Pellets Sales Cost			0 840,000	0	0	0	22,400							22,400 0			<u>22,400</u> 0	22,400 0	22,400 0	22,400 0	22,400 0	22,400
NG Cost SYPear 0 0 0 0 0 378,800 <th< td=""><td>Revenue Dry Pellets Sales Cost Landfill Fees & Transportation</td><td></td><td></td><td>0 840,000</td><td>0 840,000</td><td>0 840,000</td><td>0 840,000</td><td>22,400 0</td><td>22,400 0</td><td>22,400 0</td><td>22,400 0</td><td>22,400 0</td><td>22,400 0</td><td>22,400 0</td><td>22,400 0</td><td>22,400 0</td><td>22,400 0</td><td><u>22,400</u> 0</td><td>22,400 0</td><td>22,400 0</td><td>22,400 0</td><td>22,400 0</td><td>22,400 0</td></th<>	Revenue Dry Pellets Sales Cost Landfill Fees & Transportation			0 840,000	0 840,000	0 840,000	0 840,000	22,400 0	22,400 0	22,400 0	22,400 0	22,400 0	22,400 0	22,400 0	22,400 0	22,400 0	22,400 0	<u>22,400</u> 0	22,400 0	22,400 0	22,400 0	22,400 0	22,400 0
NG Cost \$Year 0 0 0 0 0 378,800	Revenue Dry Pellets Sales Cost Landfill Fees & Transportation Total Net Revenue			0 840,000	0 840,000	0 840,000	0 840,000	22,400 0	22,400 0	22,400 0	22,400 0	22,400 0	22,400 0	22,400 0	22,400 0	22,400 0	22,400 0	<u>22,400</u> 0	22,400 0	22,400 0	22,400 0	22,400 0	22,400 0
Stating Cost \$/Year 0 0 0 0 0 117.000 <th< td=""><td>Revenue Dry Pellets Sales Cost Landfill Fees & Transportation Total Net Revenue OPEX</td><td>\$/Year</td><td>0</td><td>0 840,000 -840,000</td><td>0 840,000 -840,000</td><td>0 840,000</td><td>0 840,000</td><td>22,400 0 22,400</td><td>22,400 0 22,400</td><td>22,400 0 22,400</td><td>22,400 0 22,400</td><td>22,400 0 22,400</td><td>22,400 0 22,400</td><td>22,400 0 22,400</td><td>0 22,400 22,400</td><td>22,400 0 22,400</td><td>22,400 0 22,400</td><td>22,400 0 22,400</td><td>22,400 0 22,400</td><td>22,400 0 22,400</td><td>22,400 0 22,400</td><td>22,400 0 22,400</td><td>0 22,400 22,400</td></th<>	Revenue Dry Pellets Sales Cost Landfill Fees & Transportation Total Net Revenue OPEX	\$/Year	0	0 840,000 -840,000	0 840,000 -840,000	0 840,000	0 840,000	22,400 0 22,400	22,400 0 22,400	22,400 0 22,400	22,400 0 22,400	22,400 0 22,400	22,400 0 22,400	22,400 0 22,400	0 22,400 22,400	22,400 0 22,400	22,400 0 22,400	22,400 0 22,400	22,400 0 22,400	22,400 0 22,400	22,400 0 22,400	22,400 0 22,400	0 22,400 22,400
Third Party for 5 years & then THP Year 2024 2025 2026 2027 2028 2029 2030 2031 2032 2033 2034 2035 2036 2037 2038 2039 2040 2041 2042 2043 2044 Liquid Biocilids Sales 0 0 0 0 0 0 14,940	Revenue Dry Pellets Sales Cost Landfill Fees & Transportation Total Net Revenue OPEX Electricity Cost	\$/Year \$/Year	0	0 840,000 -840,000	0 840,000 -840,000	0 840,000	0 840,000	22,400 0 22,400 72,037	22,400 0 22,400 72,037	22,400 0 22,400 72,037	22,400 0 22,400 72,037	22,400 0 22,400 72,037	22,400 0 22,400 72,037	22,400 0 22,400 72,037	0 22,400 22,400 72,037	22,400 0 22,400 72,037	22,400 0 22,400 72,037	22,400 0 22,400 72,037	22,400 0 22,400 72,037	22,400 0 22,400 72,037	22,400 0 22,400 72,037	22,400 0 22,400 72,037	22,400 0 22,400 72,037
Year 2024 2025 2026 2027 2028 2029 2030 2031 2032 2033 2035 2036 2037 2038 2039 2040 2041 2042 2043 2044 Revenue Liquid Biosolids Sales 0 0 0 0 0 0 0 0 14,94	Revenue Dry Pellets Sales Cost Landfill Fees & Transportation Total Net Revenue OPEX Electricity Cost NG Cost Staffing Cost	\$/Year \$/Year \$/Year	0 0 0 0	0 840,000 -840,000 0	0 840,000 -840,000	0 840,000	0 840,000	22,400 0 22,400 72,037 378,800	22,400 0 22,400 72,037 378,800	22,400 0 22,400 72,037 378,800	22,400 0 22,400 72,037 378,800	22,400 0 22,400 72,037 378,800	22,400 0 22,400 72,037 378,800	22,400 0 22,400 72,037 378,800	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800	22,400 0 22,400 72,037 378,800	22,400 0 22,400 72,037 378,800
Revenue Sevenue Sevenue <t< th=""><th>Revenue Dry Pellets Sales Cost Landfill Fees & Transportation Total Net Revenue OPEX Electricity Cost NG Cost Staffing Cost</th><th>\$/Year \$/Year \$/Year \$/Year</th><th>0 0 0 0</th><th>0 840,000 -840,000 0 0 0</th><th>0 840,000 -840,000</th><th>0 840,000</th><th>0 840,000</th><th>22,400 0 22,400 72,037 378,800 117,000</th><th>22,400 0 22,400 72,037 378,800 117,000</th><th>22,400 0 22,400 72,037 378,800 117,000</th><th>22,400 0 22,400 72,037 378,800 117,000</th><th>22,400 0 22,400 72,037 378,800 117,000</th><th>22,400 0 22,400 72,037 378,800 117,000</th><th>22,400 0 22,400 72,037 378,800 117,000</th><th>22,400 0 22,400 72,037 378,800 117,000</th><th>22,400 0 22,400 72,037 378,800 117,000</th><th>22,400 0 22,400 72,037 378,800 117,000</th><th>22,400 0 22,400 72,037 378,800 117,000</th><th>22,400 0 22,400 72,037 378,800 117,000</th><th>22,400 0 22,400 72,037 378,800 117,000</th><th>22,400 0 22,400 72,037 378,800 117,000</th><th>22,400 0 22,400 72,037 378,800 117,000</th><th>22,400 0 22,400 72,037 378,800 117,000</th></t<>	Revenue Dry Pellets Sales Cost Landfill Fees & Transportation Total Net Revenue OPEX Electricity Cost NG Cost Staffing Cost	\$/Year \$/Year \$/Year \$/Year	0 0 0 0	0 840,000 -840,000 0 0 0	0 840,000 -840,000	0 840,000	0 840,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000
Liquid Blosolids Sales 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 14,940 <th< td=""><td>Revenue Dry Pellets Sales Cost Landfill Fees & Transportation Total Net Revenue OPEX Electricity Cost NG Cost Staffing Cost Total OPEX</td><td>\$/Year \$/Year \$/Year \$/Year \$/Year</td><td>0 0 0 0</td><td>0 840,000 -840,000 0 0 0</td><td>0 840,000 -840,000</td><td>0 840,000</td><td>0 840,000</td><td>22,400 0 22,400 72,037 378,800 117,000</td><td>22,400 0 22,400 72,037 378,800 117,000</td><td>22,400 0 22,400 72,037 378,800 117,000</td><td>22,400 0 22,400 72,037 378,800 117,000</td><td>22,400 0 22,400 72,037 378,800 117,000</td><td>22,400 0 22,400 72,037 378,800 117,000</td><td>22,400 0 22,400 72,037 378,800 117,000</td><td>22,400 0 22,400 72,037 378,800 117,000</td><td>22,400 0 22,400 72,037 378,800 117,000</td><td>22,400 0 22,400 72,037 378,800 117,000</td><td>22,400 0 22,400 72,037 378,800 117,000</td><td>22,400 0 22,400 72,037 378,800 117,000</td><td>22,400 0 22,400 72,037 378,800 117,000</td><td>22,400 0 22,400 72,037 378,800 117,000</td><td>22,400 0 22,400 72,037 378,800 117,000</td><td>0 22,400 22,400 72,037 378,800 117,000</td></th<>	Revenue Dry Pellets Sales Cost Landfill Fees & Transportation Total Net Revenue OPEX Electricity Cost NG Cost Staffing Cost Total OPEX	\$/Year \$/Year \$/Year \$/Year \$/Year	0 0 0 0	0 840,000 -840,000 0 0 0	0 840,000 -840,000	0 840,000	0 840,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	0 22,400 22,400 72,037 378,800 117,000
Cost Processing & Transportation Cost \$/Year 480,000 48	Revenue Dry Pellets Sales Cost Landfill Fees & Transportation Total Net Revenue OPEX Electricity Cost NG Cost Staffing Cost Total OPEX Third Party for 5 years & then TH	\$/Year \$/Year \$/Year \$/Year \$/Year	0 0 0 0 0 0	0 840,000 -840,000 0 0 0 0	0 840,000 -840,000 0 0 0	0 840,000 -840,000 0 0 0	0 840,000 -840,000 0 0 0 0	22,400 0 22,400 72,037 378,800 117,000 567,837	22,400 0 22,400 72,037 378,800 117,000 567,837	22,400 0 22,400 72,037 378,800 117,000 567,837	22,400 0 22,400 72,037 378,800 117,000 567,837	22,400 0 22,400 72,037 378,800 117,000 567,837	22,400 0 22,400 72,037 378,800 117,000 567,837	22,400 0 22,400 72,037 378,800 117,000 567,837	22,400 0 22,400 72,037 378,800 117,000 567,837	22,400 0 22,400 72,037 378,800 117,000 567,837	22,400 0 22,400 72,037 378,800 117,000 567,837	22,400 0 22,400 72,037 378,800 117,000 567,837	22,400 0 22,400 72,037 378,800 117,000 567,837	22,400 0 22,400 72,037 378,800 117,000 567,837	22,400 0 22,400 72,037 378,800 117,000 567,837	22,400 0 22,400 72,037 378,800 117,000 567,837	22,400 0 22,400 72,037 378,800 117,000 567,837
Processing & Transportation Cost \$/Year 480,000 <th< td=""><td>Revenue Dry Pellets Sales Cost Landfill Fees & Transportation Total Net Revenue OPEX Electricity Cost NG Cost Staffing Cost Total OPEX Third Party for 5 years & then TH Year</td><td>\$/Year \$/Year \$/Year \$/Year \$/Year</td><td>0 0 0 0 0 0</td><td>0 840,000 -840,000 0 0 0 0</td><td>0 840,000 -840,000 0 0 0</td><td>0 840,000 -840,000 0 0 0</td><td>0 840,000 -840,000 0 0 0 0</td><td>22,400 0 22,400 72,037 378,800 117,000 567,837</td><td>22,400 0 22,400 72,037 378,800 117,000 567,837</td><td>22,400 0 22,400 72,037 378,800 117,000 567,837</td><td>22,400 0 22,400 72,037 378,800 117,000 567,837</td><td>22,400 0 22,400 72,037 378,800 117,000 567,837</td><td>22,400 0 22,400 72,037 378,800 117,000 567,837</td><td>22,400 0 22,400 72,037 378,800 117,000 567,837</td><td>22,400 0 22,400 72,037 378,800 117,000 567,837</td><td>22,400 0 22,400 72,037 378,800 117,000 567,837</td><td>22,400 0 22,400 72,037 378,800 117,000 567,837</td><td>22,400 0 22,400 72,037 378,800 117,000 567,837</td><td>22,400 0 22,400 72,037 378,800 117,000 567,837</td><td>22,400 0 22,400 72,037 378,800 117,000 567,837</td><td>22,400 0 22,400 72,037 378,800 117,000 567,837</td><td>22,400 0 22,400 72,037 378,800 117,000 567,837</td><td>22,400 0 22,400 72,037 378,800 117,000 567,837</td></th<>	Revenue Dry Pellets Sales Cost Landfill Fees & Transportation Total Net Revenue OPEX Electricity Cost NG Cost Staffing Cost Total OPEX Third Party for 5 years & then TH Year	\$/Year \$/Year \$/Year \$/Year \$/Year	0 0 0 0 0 0	0 840,000 -840,000 0 0 0 0	0 840,000 -840,000 0 0 0	0 840,000 -840,000 0 0 0	0 840,000 -840,000 0 0 0 0	22,400 0 22,400 72,037 378,800 117,000 567,837	22,400 0 22,400 72,037 378,800 117,000 567,837	22,400 0 22,400 72,037 378,800 117,000 567,837	22,400 0 22,400 72,037 378,800 117,000 567,837	22,400 0 22,400 72,037 378,800 117,000 567,837	22,400 0 22,400 72,037 378,800 117,000 567,837	22,400 0 22,400 72,037 378,800 117,000 567,837	22,400 0 22,400 72,037 378,800 117,000 567,837	22,400 0 22,400 72,037 378,800 117,000 567,837	22,400 0 22,400 72,037 378,800 117,000 567,837	22,400 0 22,400 72,037 378,800 117,000 567,837	22,400 0 22,400 72,037 378,800 117,000 567,837	22,400 0 22,400 72,037 378,800 117,000 567,837	22,400 0 22,400 72,037 378,800 117,000 567,837	22,400 0 22,400 72,037 378,800 117,000 567,837	22,400 0 22,400 72,037 378,800 117,000 567,837
Total Net Revenue \$/Year -480,000	Revenue Dry Pellets Sales Cost Landfill Fees & Transportation Total Net Revenue OPEX Electricity Cost NG Cost Staffing Cost Total OPEX Third Party for 5 years & then The Year Revenue Liquid Biosolids Sales	\$/Year \$/Year \$/Year \$/Year \$/Year	0 0 0 0 0 0 2024	0 840,000 -840,000 0 0 0 0 2025	0 840,000 -840,000 0 0 0 2026	0 840,000 -840,000 0 0 0 2027	0 840,000 -840,000 0 0 0 0 2028	22,400 0 22,400 72,037 378,800 117,000 567,837 2029	22,400 0 22,400 72,037 378,800 117,000 567,837 2030	22,400 0 22,400 72,037 378,800 117,000 567,837 2031	22,400 0 22,400 72,037 378,800 117,000 567,837 2032	22,400 0 22,400 72,037 378,800 117,000 567,837 2033	22,400 0 22,400 72,037 378,800 117,000 567,837 2034	22,400 0 22,400 72,037 378,800 117,000 567,837 2035	22,400 0 22,400 72,037 378,800 117,000 567,837 2036	22,400 0 22,400 72,037 378,800 117,000 567,837 2037	22,400 0 22,400 72,037 378,800 117,000 567,837 2038	22,400 0 22,400 72,037 378,800 117,000 567,837 2039	22,400 0 22,400 72,037 378,800 117,000 567,837 2040	22,400 0 22,400 72,037 378,800 117,000 567,837 2041	22,400 0 22,400 72,037 378,800 117,000 567,837 2042	22,400 0 22,400 72,037 378,800 117,000 567,837 2043	22,400 0 22,400 72,037 378,800 117,000 567,837 2044
Electricity Cost \$/Year 0 0 0 0 0 0 0 0 6,234	Revenue Dry Pellets Sales Cost Landfill Fees & Transportation Total Net Revenue OPEX Electricity Cost NG Cost Staffing Cost Total OPEX Third Party for 5 years & then TH Year Revenue Liquid Biosolids Sales Cost	\$/Year \$/Year \$/Year \$/Year \$/Year	0 0 0 0 0 0 2024	0 840,000 -840,000 0 0 0 0 0 2025 0	0 840,000 -840,000 0 0 0 0 0 2026	0 840,000 -840,000 0 0 0 0 2027 2027	0 840,000 -840,000 0 0 0 0 0 2028	22,400 0 22,400 72,037 378,800 117,000 567,837 2029 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2030 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2031 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2032 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2033 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2034 14,940	22,400 0 22,400 72,037 378,800 117,000 567,837 2035	22,400 0 22,400 72,037 378,800 117,000 567,837 2036	22,400 0 22,400 72,037 378,800 117,000 567,837 2037 14,940	22,400 0 22,400 72,037 378,800 117,000 567,837 2038 14,940	22,400 0 22,400 72,037 378,800 117,000 567,837 2039 14,940	22,400 0 22,400 72,037 378,800 117,000 567,837 2040	22,400 0 22,400 72,037 378,800 117,000 567,837 2041 14,940	22,400 0 22,400 72,037 378,800 117,000 567,837 2042 14,940	22,400 0 22,400 72,037 378,800 117,000 567,837 2043 14,940	22,400 0 22,400 72,037 378,800 117,000 567,837 2044 14,940
Electricity Cost \$/Year 0 0 0 0 0 0 0 0 6,234	Revenue Dry Pellets Sales Cost Landfill Fees & Transportation Total Net Revenue OPEX Electricity Cost NG Cost Staffing Cost Total OPEX Third Party for 5 years & then TH Year Revenue Liquid Biosolids Sales Cost Processing & Transportation Cost	\$/Year \$/Year \$/Year \$/Year IP	0 0 0 0 0 0 2024	0 840,000 -840,000 0 0 0 0 0 2025 0 480,000	0 840,000 -840,000 0 0 0 0 2026 2026	0 840,000 -840,000 0 0 0 0 2027 2027	0 840,000 -840,000 0 0 0 0 2028 2028 0 480,000	22,400 0 22,400 72,037 378,800 117,000 567,837 2029 0 480,000	22,400 0 22,400 72,037 378,800 117,000 567,837 2030 0 480,000	22,400 0 22,400 72,037 378,800 117,000 567,837 2031 0 480,000	22,400 0 22,400 72,037 378,800 117,000 567,837 2032 0 480,000	22,400 0 22,400 72,037 378,800 117,000 567,837 2033 0 480,000	22,400 0 22,400 72,037 378,800 117,000 567,837 2034 14,940 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2035 14,940 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2036 14,940 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2037 14,940 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2038 14,940 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2039 14,940 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2040 14,940 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2041 14,940 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2042 14,940 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2043 14,940 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2044 14,940 0
NG Cost \$/Year 0 0 0 0 0 0 0 0 11,601 <t< td=""><td>Revenue Dry Pellets Sales Cost Landfill Fees & Transportation Total Net Revenue OPEX Electricity Cost NG Cost Staffing Cost Total OPEX Third Party for 5 years & then TH Year Revenue Liquid Biosolids Sales Cost Processing & Transportation Cost Total Net Revenue</td><td>\$/Year \$/Year \$/Year \$/Year IP</td><td>0 0 0 0 0 0 2024</td><td>0 840,000 -840,000 0 0 0 0 0 2025 0 480,000</td><td>0 840,000 -840,000 0 0 0 0 2026 2026</td><td>0 840,000 -840,000 0 0 0 0 2027 2027</td><td>0 840,000 -840,000 0 0 0 0 2028 2028 0 480,000</td><td>22,400 0 22,400 72,037 378,800 117,000 567,837 2029 0 480,000</td><td>22,400 0 22,400 72,037 378,800 117,000 567,837 2030 0 480,000</td><td>22,400 0 22,400 72,037 378,800 117,000 567,837 2031 0 480,000</td><td>22,400 0 22,400 72,037 378,800 117,000 567,837 2032 0 480,000</td><td>22,400 0 22,400 72,037 378,800 117,000 567,837 2033 0 480,000</td><td>22,400 0 22,400 72,037 378,800 117,000 567,837 2034 14,940 0</td><td>22,400 0 22,400 72,037 378,800 117,000 567,837 2035 14,940 0</td><td>22,400 0 22,400 72,037 378,800 117,000 567,837 2036 14,940 0</td><td>22,400 0 22,400 72,037 378,800 117,000 567,837 2037 14,940 0</td><td>22,400 0 22,400 72,037 378,800 117,000 567,837 2038 14,940 0</td><td>22,400 0 22,400 72,037 378,800 117,000 567,837 2039 14,940 0</td><td>22,400 0 22,400 72,037 378,800 117,000 567,837 2040 14,940 0</td><td>22,400 0 22,400 72,037 378,800 117,000 567,837 2041 14,940 0</td><td>22,400 0 22,400 72,037 378,800 117,000 567,837 2042 14,940 0</td><td>22,400 0 22,400 72,037 378,800 117,000 567,837 2043 14,940 0</td><td>22,400 0 22,400 72,037 378,800 117,000 567,837 2044 14,940 0</td></t<>	Revenue Dry Pellets Sales Cost Landfill Fees & Transportation Total Net Revenue OPEX Electricity Cost NG Cost Staffing Cost Total OPEX Third Party for 5 years & then TH Year Revenue Liquid Biosolids Sales Cost Processing & Transportation Cost Total Net Revenue	\$/Year \$/Year \$/Year \$/Year IP	0 0 0 0 0 0 2024	0 840,000 -840,000 0 0 0 0 0 2025 0 480,000	0 840,000 -840,000 0 0 0 0 2026 2026	0 840,000 -840,000 0 0 0 0 2027 2027	0 840,000 -840,000 0 0 0 0 2028 2028 0 480,000	22,400 0 22,400 72,037 378,800 117,000 567,837 2029 0 480,000	22,400 0 22,400 72,037 378,800 117,000 567,837 2030 0 480,000	22,400 0 22,400 72,037 378,800 117,000 567,837 2031 0 480,000	22,400 0 22,400 72,037 378,800 117,000 567,837 2032 0 480,000	22,400 0 22,400 72,037 378,800 117,000 567,837 2033 0 480,000	22,400 0 22,400 72,037 378,800 117,000 567,837 2034 14,940 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2035 14,940 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2036 14,940 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2037 14,940 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2038 14,940 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2039 14,940 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2040 14,940 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2041 14,940 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2042 14,940 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2043 14,940 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2044 14,940 0
KOH Solution Cost \$/Year 0 0 0 0 0 0 62,370 62	Revenue Dry Pellets Sales Cost Landfill Fees & Transportation Total Net Revenue OPEX Electricity Cost NG Cost Staffing Cost Total OPEX Third Party for 5 years & then TH Year Revenue Liquid Biosolids Sales Cost Processing & Transportation Cost Total Net Revenue OPEX	\$/Year \$/Year \$/Year \$/Year IP \$/Year \$/Year \$/Year \$/Year	0 0 0 0 0 0 2024	0 840,000 -840,000 0 0 0 0 0 2025 2025 0 480,000 -480,000	0 840,000 -840,000 0 0 0 0 0 2026 2026 2026 480,000 -480,000	0 840,000 -840,000 0 0 0 0 2027 2027 0 480,000 -480,000	0 840,000 -840,000 0 0 0 0 0 0 2028 2028 2028 0 480,000 -480,000	22,400 0 22,400 72,037 378,800 117,000 567,837 2029 0 480,000 -480,000	22,400 0 22,400 72,037 378,800 117,000 567,837 2030 0 480,000 -480,000	22,400 0 22,400 72,037 378,800 117,000 567,837 2031 0 480,000 -480,000	22,400 0 22,400 72,037 378,800 117,000 567,837 2032 0 480,000 -480,000	22,400 0 22,400 72,037 378,800 117,000 567,837 2033 0 480,000 -480,000	0 22,400 72,037 378,800 117,000 567,837 2034 14,940 0 14,940	22,400 0 22,400 72,037 378,800 117,000 567,837 2035 14,940 0 14,940	0 22,400 72,037 378,800 117,000 567,837 2036 14,940 0 14,940	22,400 0 22,400 72,037 378,800 117,000 567,837 2037 2037 14,940 0 14,940	22,400 0 22,400 72,037 378,800 117,000 567,837 2038 14,940 0 14,940	22,400 0 22,400 72,037 378,800 117,000 567,837 2039 14,940 0 14,940	22,400 0 22,400 72,037 378,800 117,000 567,837 2040 14,940 0 14,940	0 22,400 72,037 378,800 117,000 567,837 2041 14,940 0 14,940	22,400 0 22,400 72,037 378,800 117,000 567,837 2042 14,940 0 14,940	22,400 0 22,400 72,037 378,800 117,000 567,837 2043 14,940 0 14,940	22,400 0 22,400 72,037 378,800 117,000 567,837 2044 14,940 0 14,940
	Revenue Dry Pellets Sales Cost Landfill Fees & Transportation Total Net Revenue OPEX Electricity Cost NG Cost Staffing Cost Total OPEX Third Party for 5 years & then TH Year Revenue Liquid Biosolids Sales Cost Processing & Transportation Cost Total Net Revenue OPEX Electricity Cost	\$/Year \$/Year \$/Year \$/Year IP \$/Year \$/Year \$/Year \$/Year	0 0 0 0 0 0 2024	0 840,000 -840,000 0 0 0 0 0 2025 0 2025 0 480,000 -480,000	0 840,000 -840,000 0 0 0 2026 2026 0 480,000 -480,000	0 840,000 -840,000 0 0 0 2027 0 2027 0 480,000 -480,000	0 840,000 -840,000 0 0 0 0 2028 0 2028 0 480,000 -480,000	22,400 0 22,400 72,037 378,800 117,000 567,837 2029 0 480,000 -480,000 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2030 0 480,000 -480,000 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2031 0 480,000 -480,000	22,400 0 22,400 72,037 378,800 117,000 567,837 2032 0 480,000 -480,000 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2033 0 480,000 -480,000	22,400 0 22,400 72,037 378,800 117,000 567,837 2034 2034 14,940 0 14,940 6,234	22,400 0 22,400 72,037 378,800 117,000 567,837 2035 2035 14,940 0 14,940 6,234	22,400 0 22,400 72,037 378,800 117,000 567,837 2036 14,940 0 14,940	22,400 0 22,400 72,037 378,800 117,000 567,837 2037 2037 14,940 0 14,940 6,234	22,400 0 22,400 72,037 378,800 117,000 567,837 2038 2038 14,940 0 14,940 6,234	22,400 0 22,400 72,037 378,800 117,000 567,837 2039 14,940 0 14,940 6,234	22,400 0 22,400 72,037 378,800 117,000 567,837 2040 14,940 0 14,940 6,234	22,400 0 22,400 72,037 378,800 117,000 567,837 2041 14,940 0 14,940 6,234	22,400 0 22,400 72,037 378,800 117,000 567,837 2042 2042 14,940 0 14,940 6,234	22,400 0 22,400 72,037 378,800 117,000 567,837 2043 14,940 0 14,940 6,234	22,400 0 22,400 72,037 378,800 117,000 567,837 2044 14,940 0 14,940 6,234
	Revenue Dry Pellets Sales Cost Landfill Fees & Transportation Total Net Revenue OPEX Electricity Cost NG Cost Staffing Cost Total OPEX Third Party for 5 years & then TH Year Revenue Liquid Biosolids Sales Cost Processing & Transportation Cost Total Net Revenue OPEX Electricity Cost NG Cost	\$/Year \$/Year \$/Year \$/Year \$/Year IP \$/Year \$/Year \$/Year \$/Year \$/Year	0 0 0 0 0 0 2024	0 840,000 -840,000 0 0 0 0 0 2025 0 2025 0 480,000 -480,000 -480,000	0 840,000 -840,000 0 0 0 0 2026 2026 0 480,000 -480,000	0 840,000 -840,000 0 0 0 0 2027 2027 0 480,000 -480,000 -480,000	0 840,000 -840,000 0 0 0 0 2028 0 2028 0 480,000 -480,000	22,400 0 22,400 72,037 378,800 117,000 567,837 2029 0 480,000 480,000 -480,000 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2030 0 480,000 -480,000 0 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2031 0 480,000 -480,000	22,400 0 22,400 72,037 378,800 117,000 567,837 2032 0 480,000 -480,000 0 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2033 0 480,000 -480,000 -480,000	22,400 0 22,400 72,037 378,800 117,000 567,837 2034 14,940 0 14,940 0 14,940 6,234 11,601	22,400 0 22,400 72,037 378,800 117,000 567,837 2035 14,940 0 14,940 0 14,940 6,234 11,601	22,400 0 22,400 72,037 378,800 117,000 567,837 2036 14,940 0 14,940 0 14,940 6,234 11,601	22,400 0 22,400 72,037 378,800 117,000 567,837 2037 14,940 0 14,940 0 14,940 6,234 11,601	22,400 0 22,400 72,037 378,800 117,000 567,837 2038 14,940 0 14,940 0 14,940 6,234 11,601	22,400 0 22,400 72,037 378,800 117,000 567,837 2039 14,940 0 14,940 0 14,940 6,234 11,601	22,400 0 22,400 72,037 378,800 117,000 567,837 2040 14,940 0 14,940 0 14,940 6,234 11,601	22,400 0 22,400 72,037 378,800 117,000 567,837 2041 14,940 0 14,940 6,234 11,601	22,400 0 22,400 72,037 378,800 117,000 567,837 2042 14,940 0 14,940 0 14,940 6,234 11,601	22,400 0 22,400 72,037 378,800 117,000 567,837 2043 14,940 0 14,940 0 14,940 6,234 11,601	22,400 0 22,400 72,037 378,800 117,000 567,837 2044 14,940 0 14,940 6,234 11,601

Year		2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044
Cost Landfill Fees & Transportation	\$/Year	0	840,000	840,000	840,000	840,000	840,000	840,000	840,000	840,000	840,000	840,000	840,000	840,000	840,000	840,000	840,000	840,000	840,000	840,000	840,000	840,000
Total Net Revenue	\$/Year	Û	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000
Third Party Haulage and Process	sing																					
Year		2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044
Cost Processing & Transportation Cost	\$/Year	0	480,000	480,000	480,000	480,000	480,000	480,000	480.000	480,000	480,000	480,000	480,000	480,000	480.000	480,000	480,000	480,000	480,000	480,000	480,000	480,000
Total Net Revenue	\$/Year	0 0	-480,000	-480,000	-480,000	-480,000 -480,000	-480,000	-480,000	-480,000	-480,000	-480,000	-480,000	-480,000	480,000 -480,000	-480,000	-480,000	-480,000	-480,000	-480,000	-480,000	-480,000	-480,000
Thermal hydrolysis process																						
Year		2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044
Revenue		-												<u>.</u>								
Liquid Biosolids Sales Cost		0	0	0	0	0	14,940	14,940	14,940	14,940	14,940	14,940	14,940	14,940	14,940	14,940	14,940	14,940	14,940	14,940	14,940	14,940
Landfill Fees & Transportation	\$/Year		840,000	840,000	840,000	840,000							<u>.</u>									
Total Net Revenue	\$/Year		-840,000	-840,000	-840,000	-840,000	14,940	14,940	14,940	14,940	14,940	14,940	14,940	14,940	14,940	14,940	14,940	14,940	14,940	14,940	14,940	14,940
OPEX																						
Electricity Cost	\$/Year						6,234	6,234	6,234	6,234	6,234	6,234	6,234	6,234	6,234	6,234	6,234	6,234	6,234	6,234	6,234	6,234
NG Cost KOH Solution Cost	\$/Year \$/Year						11,601 62,370	11,601 62,370	11,601 62,370	11,601 62,370	11,601 62,370	11,601 62,370	11,601 62,370	11,601 62,370	11,601 62,370	11,601 62,370	11,601 62,370	11,601 62,370	11,601 62,370	11,601 62,370	11,601 62,370	11,601 62,370
Total OPEX	\$/Year	0	0	0	0	0	80,205	80,205	80,205	80,205	80,205	80,205	80,205	80,205	80,205	80,205	80,205	80,205	80,205	80,205	80,205	80,205
Biosolids Drying Process																						
Year		2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044
Revenue		2024	2025	2026	2027	2028																
		2024 0	2025	2026	2027	2028	2029 22,400	2030 22,400	2031 22,400	2032 22,400	2033	2034 22,400	2035	2036	2037 22,400	2038 22,400	2039 22,400	2040 22,400	2041 22,400	2042 22,400	2043 22,400	2044 22,400
Revenue Dry Pellets Sales Cost Landfill Fees & Transportation	\$/Year	2024 0	0 840,000	0	0	0	22,400 0	22,400 0	22,400 0	22,400 0	22,400 0	22,400 0	22,400 0	22,400 0	22,400 0	22,400 0	22,400 0	22,400 0	22,400 0	22,400 0	22,400 0	<mark>22,400</mark> 0
Revenue Dry Pellets Sales Cost	\$/Year \$/Year	2024 0	0	0	0	0	22,400	22,400		22,400	22,400	22,400		22,400		22,400	22,400	22,400	22,400	22,400	22,400	22,400
Revenue Dry Pellets Sales Cost Landfill Fees & Transportation Total Net Revenue OPEX	\$/Year	0	0 840,000	0	0	0	22,400 0 22,400	22,400 0 22,400	22,400 0 22,400	22,400 0 22,400	22,400 0 22,400	22,400 0 22,400	22,400 0 22,400	22,400 0 22,400	22,400 0 22,400	22,400 0 22,400	22,400 0 22,400	22,400 0 22,400	22,400 0 22,400	22,400 0 22,400	22,400 0 22,400	22,400 0 22,400
Revenue Dry Pellets Sales Cost Landfill Fees & Transportation Total Net Revenue OPEX Electricity Cost	\$/Year \$/Year	0	0 840,000 -840,000	0	0	0 840,000 -840,000	22,400 0 22,400 72,037	22,400 0 22,400 72,037	22,400 0 22,400 72,037	22,400 0 22,400 72,037	22,400 0 22,400 72,037	22,400 0 22,400 72,037	22,400 0 22,400 72,037	22,400 0 22,400 72,037	22,400 0 22,400 72,037	22,400 0 22,400 72,037	22,400 0 22,400 72,037	22,400 0 22,400 72,037	22,400 0 22,400 72,037	22,400 0 22,400 72,037	22,400 0 22,400 72,037	22,400 0 22,400 72,037
Revenue Dry Pellets Sales Cost Landfill Fees & Transportation Total Net Revenue OPEX Electricity Cost NG Cost	\$/Year \$/Year \$/Year	2024 0 0 0 0 0	0 840,000 -840,000	0 840,000 -840,000	0	0 840,000 -840,000	22,400 0 22,400 72,037 378,800	22,400 0 22,400 72,037 378,800	22,400 0 22,400 72,037 378,800	22,400 0 22,400 72,037 378,800	22,400 0 22,400 72,037 378,800	22,400 0 22,400 72,037 378,800	22,400 0 22,400 72,037 378,800	22,400 0 22,400 72,037 378,800	22,400 0 22,400 72,037 378,800	22,400 0 22,400 72,037 378,800	22,400 0 22,400 72,037 378,800	22,400 0 22,400 72,037 378,800	22,400 0 22,400 72,037 378,800	22,400 0 22,400 72,037 378,800	22,400 0 22,400 72,037 378,800	22,400 0 22,400 72,037 378,800
Revenue Dry Pellets Sales Cost Landfill Fees & Transportation Total Net Revenue OPEX Electricity Cost	\$/Year \$/Year	0	0 840,000 -840,000 0 0	0 840,000 -840,000	0	0 840,000 -840,000	22,400 0 22,400 72,037	22,400 0 22,400 72,037	22,400 0 22,400 72,037	22,400 0 22,400 72,037	22,400 0 22,400 72,037	22,400 0 22,400 72,037	22,400 0 22,400 72,037	22,400 0 22,400 72,037	22,400 0 22,400 72,037	22,400 0 22,400 72,037	22,400 0 22,400 72,037	22,400 0 22,400 72,037	22,400 0 22,400 72,037	22,400 0 22,400 72,037	22,400 0 22,400 72,037	22,400 0 22,400 72,037
Revenue Dry Pellets Sales Cost Landfill Fees & Transportation Total Net Revenue OPEX Electricity Cost NG Cost Staffing Cost	\$/Year \$/Year \$/Year \$/Year \$/Year	0	0 840,000 -840,000 0 0	0 840,000 -840,000	0	0 840,000 -840,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000
Revenue Dry Pellets Sales Cost Landfill Fees & Transportation Total Net Revenue OPEX Electricity Cost NG Cost Staffing Cost Total OPEX	\$/Year \$/Year \$/Year \$/Year \$/Year	0	0 840,000 -840,000 0 0	0 840,000 -840,000	0	0 840,000 -840,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000
RevenueDry Pellets SalesCostLandfill Fees & TransportationTotal Net RevenueOPEXElectricity CostNG CostStaffing CostTotal OPEXThird Party for 5 years & then THYearRevenue	\$/Year \$/Year \$/Year \$/Year \$/Year	0 0 0 0 0 0 2024	0 840,000 -840,000 0 0 0 0 0 2025	0 840,000 -840,000 0 0 0 0 0	0 840,000 -840,000 0 0 0 0 0	0 840,000 -840,000	22,400 0 22,400 72,037 378,800 117,000 567,837 2029	22,400 0 22,400 72,037 378,800 117,000 567,837 2030	22,400 0 22,400 72,037 378,800 117,000 567,837	22,400 0 22,400 72,037 378,800 117,000 567,837	22,400 0 22,400 72,037 378,800 117,000 567,837 2033	22,400 0 22,400 72,037 378,800 117,000 567,837 2034	22,400 0 22,400 72,037 378,800 117,000 567,837 2035	22,400 0 22,400 72,037 378,800 117,000 567,837 2036	22,400 0 22,400 72,037 378,800 117,000 567,837 2037	22,400 0 22,400 72,037 378,800 117,000 567,837 2038	22,400 0 22,400 72,037 378,800 117,000 567,837 2039	22,400 0 22,400 72,037 378,800 117,000 567,837 2040	22,400 0 22,400 72,037 378,800 117,000 567,837 2041	22,400 0 22,400 72,037 378,800 117,000 567,837 2042	22,400 0 22,400 72,037 378,800 117,000 567,837 2043	22,400 0 22,400 72,037 378,800 117,000 567,837 2044
Revenue Dry Pellets Sales Cost Landfill Fees & Transportation Total Net Revenue OPEX Electricity Cost NG Cost Staffing Cost Total OPEX Third Party for 5 years & then TH Year Revenue Liquid Biosolids Sales Cost	\$/Year \$/Year \$/Year \$/Year \$/Year	0 0 0 0 0 0	0 840,000 -840,000 0 0 0 0 0	0 840,000 -840,000 0 0 0 0 0	0 840,000 -840,000 0 0 0 0	0 840,000 -840,000	22,400 0 22,400 72,037 378,800 117,000 567,837	22,400 0 22,400 72,037 378,800 117,000 567,837	22,400 0 22,400 72,037 378,800 117,000 567,837	22,400 0 22,400 72,037 378,800 117,000 567,837	22,400 0 22,400 72,037 378,800 117,000 567,837	22,400 0 22,400 72,037 378,800 117,000 567,837	22,400 0 22,400 72,037 378,800 117,000 567,837	22,400 0 22,400 72,037 378,800 117,000 567,837	22,400 0 22,400 72,037 378,800 117,000 567,837	22,400 0 22,400 72,037 378,800 117,000 567,837	22,400 0 22,400 72,037 378,800 117,000 567,837	22,400 0 22,400 72,037 378,800 117,000 567,837	22,400 0 22,400 72,037 378,800 117,000 567,837	22,400 0 22,400 72,037 378,800 117,000 567,837	22,400 0 22,400 72,037 378,800 117,000 567,837	22,400 0 22,400 72,037 378,800 117,000 567,837
Revenue Dry Pellets Sales Cost Landfill Fees & Transportation Total Net Revenue OPEX Electricity Cost NG Cost Staffing Cost Total OPEX Third Party for 5 years & then TH Year Revenue Liquid Biosolids Sales Cost Processing & Transportation Cost	\$/Year \$/Year \$/Year \$/Year \$/Year	0 0 0 0 0 0 2024	0 840,000 -840,000 0 0 0 0 0 2025 0 480,000	0 840,000 -840,000 0 0 0 0 0 2026 2026 0 480,000	0 840,000 -840,000 0 0 0 0 0 2027 2027 0 480,000	0 840,000 -840,000 0 0 0 0 0 2028 2028 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2029 0 480,000	22,400 0 22,400 72,037 378,800 117,000 567,837 2030 0 480,000	22,400 0 22,400 72,037 378,800 117,000 567,837 2031 0 480,000	22,400 0 22,400 72,037 378,800 117,000 567,837 2032 0 480,000	22,400 0 22,400 72,037 378,800 117,000 567,837 2033 0 480,000	22,400 0 22,400 72,037 378,800 117,000 567,837 2034 14,940 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2035 14,940 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2036 14,940 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2037 14,940 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2038 14,940 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2039 14,940 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2040 14,940 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2041 14,940 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2042 14,940 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2043 14,940 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2044 14,940 0
Revenue Dry Pellets Sales Cost Landfill Fees & Transportation Total Net Revenue OPEX Electricity Cost NG Cost Staffing Cost Total OPEX Third Party for 5 years & then TH Year Revenue Liquid Biosolids Sales Cost	\$/Year \$/Year \$/Year \$/Year \$/Year	0 0 0 0 0 0 2024	0 840,000 -840,000 0 0 0 0 0 0 2025	0 840,000 -840,000 0 0 0 0 2026	0 840,000 -840,000 0 0 0 0 0 2027 2027	0 840,000 -840,000 0 0 0 0 0 2028	22,400 0 22,400 72,037 378,800 117,000 567,837 2029 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2030 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2031 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2032 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2033 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2034 14,940	22,400 0 22,400 72,037 378,800 117,000 567,837 2035	22,400 0 22,400 72,037 378,800 117,000 567,837 2036 14,940	22,400 0 22,400 72,037 378,800 117,000 567,837 2037 14,940	22,400 0 22,400 72,037 378,800 117,000 567,837 2038	22,400 0 22,400 72,037 378,800 117,000 567,837 2039 14,940	22,400 0 22,400 72,037 378,800 117,000 567,837 2040 14,940	22,400 0 22,400 72,037 378,800 117,000 567,837 2041 14,940	22,400 0 22,400 72,037 378,800 117,000 567,837 2042 14,940	22,400 0 22,400 72,037 378,800 117,000 567,837 2043 14,940	22,400 0 22,400 72,037 378,800 117,000 567,837 2044 14,940
Revenue Dry Pellets Sales Cost Landfill Fees & Transportation Total Net Revenue OPEX Electricity Cost NG Cost Staffing Cost Total OPEX Third Party for 5 years & then TH Year Revenue Liquid Biosolids Sales Cost Processing & Transportation Cost	\$/Year \$/Year \$/Year \$/Year \$/Year	0 0 0 0 0 0 2024	0 840,000 -840,000 0 0 0 0 0 2025 0 480,000	0 840,000 -840,000 0 0 0 0 0 2026 2026 0 480,000	0 840,000 -840,000 0 0 0 0 0 2027 2027 0 480,000	0 840,000 -840,000 0 0 0 0 0 2028 2028 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2029 0 480,000	22,400 0 22,400 72,037 378,800 117,000 567,837 2030 0 480,000	22,400 0 22,400 72,037 378,800 117,000 567,837 2031 0 480,000	22,400 0 22,400 72,037 378,800 117,000 567,837 2032 0 480,000	22,400 0 22,400 72,037 378,800 117,000 567,837 2033 0 480,000	22,400 0 22,400 72,037 378,800 117,000 567,837 2034 14,940 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2035 14,940 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2036 14,940 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2037 14,940 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2038 14,940 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2039 14,940 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2040 14,940 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2041 14,940 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2042 14,940 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2043 14,940 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2044 14,940 0
Revenue Dry Pellets Sales Cost Landfill Fees & Transportation Total Net Revenue OPEX Electricity Cost NG Cost Staffing Cost Total OPEX Third Party for 5 years & then TH Year Revenue Liquid Biosolids Sales Cost Processing & Transportation Cost Total Net Revenue OPEX Electricity Cost	\$/Year \$/Year \$/Year \$/Year IP \$/Year \$/Year \$/Year	0 0 0 0 0 0 2024	0 840,000 -840,000 0 0 0 0 0 2025 0 2025 0 480,000 -480,000	0 840,000 -840,000 0 0 0 0 0 2026 2026 0 480,000	0 840,000 -840,000 0 0 0 0 0 2027 2027 0 480,000	0 840,000 -840,000 0 0 0 0 0 2028 2028 0 480,000 480,000	22,400 0 22,400 72,037 378,800 117,000 567,837 2029 0 480,000 -480,000 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2030 0 480,000	22,400 0 22,400 72,037 378,800 117,000 567,837 2031 0 480,000 -480,000 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2032 0 480,000 -480,000 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2033 0 480,000 -480,000	22,400 0 22,400 72,037 378,800 117,000 567,837 2034 14,940 0 14,940 6,234	22,400 0 22,400 72,037 378,800 117,000 567,837 2035 2035 14,940 0 14,940 6,234	22,400 0 22,400 72,037 378,800 117,000 567,837 2036 14,940 0 14,940 6,234	22,400 0 22,400 72,037 378,800 117,000 567,837 2037 14,940 0 14,940 6,234	22,400 0 22,400 72,037 378,800 117,000 567,837 2038 2038 14,940 0 14,940 6,234	22,400 0 22,400 72,037 378,800 117,000 567,837 2039 14,940 0 14,940 6,234	22,400 0 22,400 72,037 378,800 117,000 567,837 2040 14,940 0 14,940 6,234	22,400 0 22,400 72,037 378,800 117,000 567,837 2041 14,940 0 14,940 6,234	22,400 0 22,400 72,037 378,800 117,000 567,837 2042 14,940 0 14,940 6,234	22,400 0 22,400 72,037 378,800 117,000 567,837 2043 14,940 0 14,940 6,234	22,400 0 22,400 72,037 378,800 117,000 567,837 2044 14,940 0 14,940 6,234
RevenueDry Pellets SalesCostLandfill Fees & TransportationTotal Net RevenueOPEXElectricity CostNG CostStaffing CostTotal OPEXThird Party for 5 years & then THYearRevenueLiquid Biosolids SalesCostProcessing & Transportation CostTotal Net RevenueOPEXElectricity CostNG Cost	\$/Year \$/Year \$/Year \$/Year \$/Year \$/Year \$/Year \$/Year \$/Year \$/Year	0 0 0 0 0 0 2024	0 840,000 -840,000 0 0 0 0 0 2025 2025 0 480,000 -480,000 -480,000	0 840,000 -840,000 0 0 0 0 0 2026 2026 0 480,000	0 840,000 -840,000 0 0 0 0 0 2027 2027 0 480,000	0 840,000 -840,000 0 0 0 0 0 0 0 0 0 0 0 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2029 0 480,000 480,000 0 0 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2030 0 480,000 -480,000 0 0 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2031 0 480,000 -480,000	22,400 0 22,400 72,037 378,800 117,000 567,837 2032 0 480,000 -480,000 0 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2033 2033 0 480,000 -480,000 -480,000	22,400 0 22,400 72,037 378,800 117,000 567,837 2034 14,940 0 14,940 0 14,940 6,234 11,601	22,400 0 22,400 72,037 378,800 117,000 567,837 2035 14,940 0 14,940 6,234 11,601	22,400 0 22,400 72,037 378,800 117,000 567,837 2036 14,940 0 14,940 0 14,940 6,234 11,601	22,400 0 22,400 72,037 378,800 117,000 567,837 2037 14,940 0 14,940 0 14,940 6,234 11,601	22,400 0 22,400 72,037 378,800 117,000 567,837 2038 2038 14,940 0 14,940 6,234 11,601	22,400 0 22,400 72,037 378,800 117,000 567,837 2039 14,940 0 14,940 0 14,940 0 14,940	22,400 0 22,400 72,037 378,800 117,000 567,837 2040 14,940 0 14,940 0 14,940 6,234 11,601	22,400 0 22,400 72,037 378,800 117,000 567,837 2041 14,940 0 14,940 0 14,940	22,400 0 22,400 72,037 378,800 117,000 567,837 2042 14,940 0 14,940 0 14,940	22,400 0 22,400 72,037 378,800 117,000 567,837 2043 14,940 0 14,940 0 14,940 6,234 11,601	22,400 0 22,400 72,037 378,800 117,000 567,837 2044 14,940 0 14,940 6,234 11,601
Revenue Dry Pellets Sales Cost Landfill Fees & Transportation Total Net Revenue OPEX Electricity Cost NG Cost Staffing Cost Total OPEX Third Party for 5 years & then TH Year Revenue Liquid Biosolids Sales Cost Processing & Transportation Cost Total Net Revenue OPEX Electricity Cost	\$/Year \$/Year \$/Year \$/Year IP \$/Year \$/Year \$/Year	0 0 0 0 0 0 2024	0 840,000 -840,000 0 0 0 0 0 2025 0 2025 0 480,000 -480,000	0 840,000 -840,000 0 0 0 0 0 2026 2026 0 480,000	0 840,000 -840,000 0 0 0 0 0 2027 2027 0 480,000	0 840,000 -840,000 0 0 0 0 0 2028 2028 0 480,000 480,000	22,400 0 22,400 72,037 378,800 117,000 567,837 2029 0 480,000 -480,000 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2030 0 480,000 -480,000 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2031 0 480,000 -480,000 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2032 0 480,000 -480,000 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2033 0 480,000 -480,000	22,400 0 22,400 72,037 378,800 117,000 567,837 2034 14,940 0 14,940 6,234	22,400 0 22,400 72,037 378,800 117,000 567,837 2035 2035 14,940 0 14,940 6,234	22,400 0 22,400 72,037 378,800 117,000 567,837 2036 14,940 0 14,940 6,234	22,400 0 22,400 72,037 378,800 117,000 567,837 2037 14,940 0 14,940 6,234	22,400 0 22,400 72,037 378,800 117,000 567,837 2038 2038 14,940 0 14,940 6,234	22,400 0 22,400 72,037 378,800 117,000 567,837 2039 14,940 0 14,940 6,234	22,400 0 22,400 72,037 378,800 117,000 567,837 2040 14,940 0 14,940 6,234	22,400 0 22,400 72,037 378,800 117,000 567,837 2041 14,940 0 14,940 6,234	22,400 0 22,400 72,037 378,800 117,000 567,837 2042 14,940 0 14,940 6,234	22,400 0 22,400 72,037 378,800 117,000 567,837 2043 14,940 0 14,940 6,234	22,400 0 22,400 72,037 378,800 117,000 567,837 2044 14,940 0 14,940 6,234

Year		2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044
Cost																						
Landfill Fees & Transportation	\$/Year	0	840,000	840,000	840,000	840,000	840,000	840,000	840,000	840,000	840,000	840,000	840,000	840,000	840,000	840,000	840,000	840,000	840,000	840,000	840,000	840,000
Total Net Revenue	\$/Year	U	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000
Third Party Haulage and Processi	ing																					
Year		2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044
Cost	Φ Δ(2,2,2,1)	~	100.000	100.000	400.000	100.000	100.000	100.000	400.000	100.000	400.000	400.000	400.000	100.000	400.000	400.000	100.000	100.000	100.000	400.000	400.000	400.000
Processing & Transportation Cost Total Net Revenue	\$/Year \$/Year	0 0	480,000 -480,000	480,000 -480,000	480,000 -480,000	480,000 -480,000	480,000 -480,000	480,000 -480,000	480,000 -480,000	480,000 -480,000	480,000 -480,000	480,000 -480,000	480,000 -480,000	480,000 -480,000	480,000 -480,000	480,000 -480,000	480,000 -480,000	480,000 -480,000	480,000 -480,000	480,000 -480,000	480,000 -480,000	480,000 -480,000
Thermal hydrolysis process																						
Year		2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044
Revenue																						
Liquid Biosolids Sales Cost		0	0	0	0	0	14,940	14,940	14,940	14,940	14,940	14,940	14,940	14,940	14,940	14,940	14,940	14,940	14,940	14,940	14,940	14,940
Landfill Fees & Transportation	\$/Year		840,000	840,000	840,000	840,000																
Total Net Revenue	\$/Year		-840,000	-840,000	-840,000	-840,000	14,940	14,940	14,940	14,940	14,940	14,940	14,940	14,940	14,940	14,940	14,940	14,940	14,940	14,940	14,940	14,940
OPEX																						
Electricity Cost	\$/Year			Ĩ			6,234	6,234	6,234	6,234	6,234	6,234	6,234	6,234	6,234	6,234	6,234	6,234	6,234	6,234	6,234	6,234
NG Cost	\$/Year						11,601	11,601	11,601	11,601	11,601	11,601	11,601	11,601	11,601	11,601	11,601	11,601	11,601	11,601	11,601	11,601
KOH Solution Cost	\$/Year						62,370	62,370	62,370	62,370	62,370	62,370	62,370	62,370	62,370	62,370	62,370	62,370	62,370	62,370	62,370	62,370
Total OPEX	\$/Year	0	0	0	0	0	80,205	80,205	80,205	80,205	80,205	80,205	80,205	80,205	80,205	80,205	80,205	80,205	80,205	80,205	80,205	80,205
Biosolids Drying Process																						
Year		2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044
Year Revenue	1	2024	2025	2026	2027	2028																
Year Revenue Dry Pellets Sales			2025	2026	2027 0	2028	2029 22,400	2030 22,400	2031 22,400	2032 22,400	2033 22,400	2034 22,400	2035 22,400	2036 22 ,400	2037 22,400	2038 2 2,400	2039	2040 22,400	2041 2 2,400	2042 22,400	2043 2 2,400	2044
Year Revenue	\$/Year		2025 0 840,000	2026	2027 0 840,000	2028																
Year Revenue Dry Pellets Sales Cost	\$/Year \$/Year		0	0	0	0		22,400	22,400			22,400	22,400			22,400		22,400	22,400	22,400	22,400	22,400
Year Revenue Dry Pellets Sales Cost Landfill Fees & Transportation Total Net Revenue	//		0 840,000	0	0 840,000	0	22,400 0	22,400 0	22,400 0	22,400 0	22,400 0	22,400 0	22,400 0	22,400 0	22,400 0	22,400 0	22,400 0	22,400 0	22,400 0	22,400 0	22,400 0	22,400 0
Year Revenue Dry Pellets Sales Cost Landfill Fees & Transportation	//		0 840,000	0	0 840,000	0	22,400 0	22,400 0	22,400 0	22,400 0	22,400 0	22,400 0	22,400 0	22,400 0	22,400 0	22,400 0	22,400 0	22,400 0	22,400 0	22,400 0	22,400 0	22,400 0 22,400
Year Revenue Dry Pellets Sales Cost Landfill Fees & Transportation Total Net Revenue OPEX	\$/Year \$/Year \$/Year	0	0 840,000 -840,000	0 840,000 -840,000	0 840,000 -840,000	0	22,400 0 22,400	22,400 0 22,400	22,400 0 22,400 72,037 378,800	22,400 0 22,400 72,037 378,800	22,400 0 22,400 72,037 378,800	22,400 0 22,400 72,037 378,800	22,400 0 22,400 72,037 378,800	22,400 0 22,400 72,037 378,800	22,400 0 22,400 72,037 378,800	22,400 0 22,400 72,037 378,800	22,400 0 22,400 72,037 378,800	22,400 0 22,400 72,037 378,800	22,400 0 22,400 72,037 378,800	22,400 0 22,400 72,037 378,800	22,400 0 22,400	22,400 0
Year Revenue Dry Pellets Sales Cost Landfill Fees & Transportation Total Net Revenue OPEX Electricity Cost NG Cost Staffing Cost	\$/Year \$/Year \$/Year \$/Year	0	0 840,000 -840,000	0 840,000 -840,000	0 840,000 -840,000 0	0	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000
Year Revenue Dry Pellets Sales Cost Landfill Fees & Transportation Total Net Revenue OPEX Electricity Cost NG Cost	\$/Year \$/Year \$/Year	0 0 0	0 840,000 -840,000 0 0	0 840,000 -840,000	0 840,000 -840,000 0 0	0	22,400 0 22,400 72,037 378,800	22,400 0 22,400 72,037 378,800	22,400 0 22,400 72,037 378,800	22,400 0 22,400 72,037 378,800	22,400 0 22,400 72,037 378,800	22,400 0 22,400 72,037 378,800	22,400 0 22,400 72,037 378,800	22,400 0 22,400 72,037 378,800	22,400 0 22,400 72,037 378,800	22,400 0 22,400 72,037 378,800	22,400 0 22,400 72,037 378,800	22,400 0 22,400 72,037 378,800	22,400 0 22,400 72,037 378,800	22,400 0 22,400 72,037 378,800	22,400 0 22,400 72,037 378,800	22,400 0 22,400 72,037 378,800
Year Revenue Dry Pellets Sales Cost Landfill Fees & Transportation Total Net Revenue OPEX Electricity Cost NG Cost Staffing Cost	\$/Year \$/Year \$/Year \$/Year \$/Year	0 0 0	0 840,000 -840,000 0 0	0 840,000 -840,000	0 840,000 -840,000 0 0	0	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000
Year Revenue Dry Pellets Sales Cost Landfill Fees & Transportation Total Net Revenue OPEX Electricity Cost NG Cost Staffing Cost Total OPEX	\$/Year \$/Year \$/Year \$/Year \$/Year	0 0 0	0 840,000 -840,000 0 0	0 840,000 -840,000	0 840,000 -840,000 0 0	0	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000
Year Revenue Dry Pellets Sales Cost Landfill Fees & Transportation Total Net Revenue OPEX Electricity Cost NG Cost Staffing Cost Total OPEX Third Party for 5 years & then THF	\$/Year \$/Year \$/Year \$/Year \$/Year	0 0 0 0 0 0	0 840,000 -840,000 0 0 0 0 0	0 840,000 -840,000 0 0 0	0 840,000 -840,000 0 0 0 0 0	0 840,000 -840,000	22,400 0 22,400 72,037 378,800 117,000 567,837	22,400 0 22,400 72,037 378,800 117,000 567,837	22,400 0 22,400 72,037 378,800 117,000 567,837	22,400 0 22,400 72,037 378,800 117,000 567,837	22,400 0 22,400 72,037 378,800 117,000 567,837	22,400 0 22,400 72,037 378,800 117,000 567,837	22,400 0 22,400 72,037 378,800 117,000 567,837	22,400 0 22,400 72,037 378,800 117,000 567,837	22,400 0 22,400 72,037 378,800 117,000 567,837	22,400 0 22,400 72,037 378,800 117,000 567,837	22,400 0 22,400 72,037 378,800 117,000 567,837	22,400 0 22,400 72,037 378,800 117,000 567,837	22,400 0 22,400 72,037 378,800 117,000 567,837	22,400 0 22,400 72,037 378,800 117,000 567,837	22,400 0 22,400 72,037 378,800 117,000 567,837	22,400 0 22,400 72,037 378,800 117,000 567,837
Year Revenue Dry Pellets Sales Cost Landfill Fees & Transportation Total Net Revenue OPEX Electricity Cost NG Cost Staffing Cost Total OPEX Total OPEX Third Party for 5 years & then THF Year	\$/Year \$/Year \$/Year \$/Year \$/Year	0 0 0 0 0 0	0 840,000 -840,000 0 0 0 0 0	0 840,000 -840,000 0 0 0	0 840,000 -840,000 0 0 0 0 0	0 840,000 -840,000	22,400 0 22,400 72,037 378,800 117,000 567,837	22,400 0 22,400 72,037 378,800 117,000 567,837	22,400 0 22,400 72,037 378,800 117,000 567,837	22,400 0 22,400 72,037 378,800 117,000 567,837	22,400 0 22,400 72,037 378,800 117,000 567,837	22,400 0 22,400 72,037 378,800 117,000 567,837	22,400 0 22,400 72,037 378,800 117,000 567,837	22,400 0 22,400 72,037 378,800 117,000 567,837	22,400 0 22,400 72,037 378,800 117,000 567,837	22,400 0 22,400 72,037 378,800 117,000 567,837	22,400 0 22,400 72,037 378,800 117,000 567,837	22,400 0 22,400 72,037 378,800 117,000 567,837	22,400 0 22,400 72,037 378,800 117,000 567,837	22,400 0 22,400 72,037 378,800 117,000 567,837	22,400 0 22,400 72,037 378,800 117,000 567,837	22,400 0 22,400 72,037 378,800 117,000 567,837
Year Revenue Dry Pellets Sales Cost Landfill Fees & Transportation Total Net Revenue OPEX Electricity Cost NG Cost Staffing Cost Total OPEX Third Party for 5 years & then THF Year Revenue Liquid Biosolids Sales	\$/Year \$/Year \$/Year \$/Year \$/Year	0 0 0 0 0 0 0 2024	0 840,000 -840,000 0 0 0 0 0 2025	0 840,000 -840,000 0 0 0	0 840,000 -840,000 0 0 0 0 0 2027	0 840,000 -840,000	22,400 0 22,400 72,037 378,800 117,000 567,837	22,400 0 22,400 72,037 378,800 117,000 567,837 2030	22,400 0 22,400 72,037 378,800 117,000 567,837 2031	22,400 0 22,400 72,037 378,800 117,000 567,837	22,400 0 22,400 72,037 378,800 117,000 567,837	22,400 0 22,400 72,037 378,800 117,000 567,837 2034	22,400 0 22,400 72,037 378,800 117,000 567,837 2035	22,400 0 22,400 72,037 378,800 117,000 567,837 2036	22,400 0 22,400 72,037 378,800 117,000 567,837 2037	22,400 0 22,400 72,037 378,800 117,000 567,837 2038	22,400 0 22,400 72,037 378,800 117,000 567,837 2039	22,400 0 22,400 72,037 378,800 117,000 567,837 2040	22,400 0 22,400 72,037 378,800 117,000 567,837 2041	22,400 0 22,400 72,037 378,800 117,000 567,837 2042	22,400 0 22,400 72,037 378,800 117,000 567,837 2043	22,400 0 22,400 72,037 378,800 117,000 567,837 2044
Year Revenue Dry Pellets Sales Cost Landfill Fees & Transportation Total Net Revenue OPEX Electricity Cost NG Cost Staffing Cost Total OPEX Third Party for 5 years & then THF Year Revenue Liquid Biosolids Sales Cost	\$/Year \$/Year \$/Year \$/Year \$/Year	0 0 0 0 0 0 0 2024	0 840,000 -840,000 0 0 0 0 0 0 2025 0	0 840,000 -840,000 0 0 0 0 2026	0 840,000 -840,000 0 0 0 0 0 2027 0	0 840,000 -840,000 0 0 0 0 2028	22,400 0 22,400 72,037 378,800 117,000 567,837 2029 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2030 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2031 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2032 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2033 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2034 14,940	22,400 0 22,400 72,037 378,800 117,000 567,837 2035 14,940	22,400 0 22,400 72,037 378,800 117,000 567,837 2036	22,400 0 22,400 72,037 378,800 117,000 567,837 2037 14,940	22,400 0 22,400 72,037 378,800 117,000 567,837 2038	22,400 0 22,400 72,037 378,800 117,000 567,837 2039	22,400 0 22,400 72,037 378,800 117,000 567,837 2040 14,940	22,400 0 22,400 72,037 378,800 117,000 567,837 2041 14,940	22,400 0 22,400 72,037 378,800 117,000 567,837 2042 14,940	22,400 0 22,400 72,037 378,800 117,000 567,837 2043 14,940	22,400 0 22,400 72,037 378,800 117,000 567,837 2044 14,940
Year Revenue Dry Pellets Sales Cost Landfill Fees & Transportation Total Net Revenue OPEX Electricity Cost NG Cost Staffing Cost Total OPEX Third Party for 5 years & then THF Year Revenue Liquid Biosolids Sales Cost Processing & Transportation Cost Total Net Revenue	\$/Year \$/Year \$/Year \$/Year \$/Year P \$/Year	0 0 0 0 0 0 0 2024	0 840,000 -840,000 0 0 0 0 0 2025 0 480,000	0 840,000 -840,000 0 0 0 0 0 2026 2026	0 840,000 -840,000 0 0 0 0 0 2027 0 480,000	0 840,000 -840,000 0 0 0 0 0 2028 2028 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2029 0 480,000	22,400 0 22,400 72,037 378,800 117,000 567,837 2030 0 480,000	22,400 0 22,400 72,037 378,800 117,000 567,837 2031 0 480,000	22,400 0 22,400 72,037 378,800 117,000 567,837 2032 0 480,000	22,400 0 22,400 72,037 378,800 117,000 567,837 2033 0 480,000	22,400 0 22,400 72,037 378,800 117,000 567,837 2034 14,940 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2035 14,940 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2036 14,940 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2037 14,940 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2038 14,940 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2039 14,940 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2040 14,940 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2041 14,940 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2042 14,940 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2043 14,940 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2044 14,940 0
Year Revenue Dry Pellets Sales Cost Landfill Fees & Transportation Total Net Revenue OPEX Electricity Cost NG Cost Staffing Cost Total OPEX Third Party for 5 years & then THF Year Revenue Liquid Biosolids Sales Cost Processing & Transportation Cost	\$/Year \$/Year \$/Year \$/Year \$/Year P \$/Year	0 0 0 0 0 0 0 2024	0 840,000 -840,000 0 0 0 0 0 2025 0 480,000	0 840,000 -840,000 0 0 0 0 0 2026 2026	0 840,000 -840,000 0 0 0 0 0 2027 0 480,000	0 840,000 -840,000 0 0 0 0 0 2028 2028 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2029 0 480,000	22,400 0 22,400 72,037 378,800 117,000 567,837 2030 0 480,000	22,400 0 22,400 72,037 378,800 117,000 567,837 2031 0 480,000	22,400 0 22,400 72,037 378,800 117,000 567,837 2032 0 480,000	22,400 0 22,400 72,037 378,800 117,000 567,837 2033 0 480,000	22,400 0 22,400 72,037 378,800 117,000 567,837 2034 14,940 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2035 14,940 0 14,940	22,400 0 22,400 72,037 378,800 117,000 567,837 2036 14,940 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2037 14,940 0 14,940	22,400 0 22,400 72,037 378,800 117,000 567,837 2038 14,940 0 14,940	22,400 0 22,400 72,037 378,800 117,000 567,837 2039 14,940 0 14,940	22,400 0 22,400 72,037 378,800 117,000 567,837 2040 14,940 0 14,940	22,400 0 22,400 72,037 378,800 117,000 567,837 2041 14,940 0 14,940	22,400 0 22,400 72,037 378,800 117,000 567,837 2042 14,940 0 14,940	22,400 0 22,400 72,037 378,800 117,000 567,837 2043 14,940 0 14,940	22,400 0 22,400 72,037 378,800 117,000 567,837 2044 14,940 0 14,940
Year Revenue Dry Pellets Sales Cost Landfill Fees & Transportation Total Net Revenue OPEX Electricity Cost NG Cost Staffing Cost Total OPEX Third Party for 5 years & then THF Year Revenue Liquid Biosolids Sales Cost Processing & Transportation Cost Total Net Revenue OPEX	\$/Year \$/Year \$/Year \$/Year \$/Year \$/Year \$/Year \$/Year	0 0 0 0 0 0 0 2024	0 840,000 -840,000 0 0 0 0 0 0 2025 2025 0 480,000 -480,000	0 840,000 -840,000 0 0 0 0 2026 0 480,000 -480,000	0 840,000 -840,000 0 0 0 0 0 2027 0 480,000 -480,000	0 840,000 -840,000 0 0 0 0 0 2028 2028 2028 480,000	22,400	22,400 0 22,400 72,037 378,800 117,000 567,837 2030 0 480,000 -480,000	22,400 0 22,400 72,037 378,800 117,000 567,837 2031 0 480,000 -480,000	22,400 0 22,400 72,037 378,800 117,000 567,837 2032 0 480,000 -480,000	22,400 0 22,400 72,037 378,800 117,000 567,837 2033 0 2033 0 480,000 -480,000	22,400 0 22,400 72,037 378,800 117,000 567,837 2034 14,940 0 14,940	22,400 0 22,400 72,037 378,800 117,000 567,837 2035 14,940 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2036 14,940 0 14,940	22,400 0 22,400 72,037 378,800 117,000 567,837 2037 14,940 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2038 14,940 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2039 14,940 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2040 14,940 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2041 14,940 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2042 14,940 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2043 14,940 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2044 2044 14,940
Year Revenue Dry Pellets Sales Cost Landfill Fees & Transportation Total Net Revenue OPEX Electricity Cost NG Cost Staffing Cost Total OPEX Third Party for 5 years & then THF Year Revenue Liquid Biosolids Sales Cost Processing & Transportation Cost Total Net Revenue OPEX Electricity Cost	\$/Year \$/Year \$/Year \$/Year \$/Year \$/Year \$/Year \$/Year	0 0 0 0 0 0 0 2024	0 840,000 -840,000 0 0 0 0 0 2025 0 2025 0 480,000 -480,000	0 840,000 -840,000 0 0 0 0 2026 0 480,000 -480,000	0 840,000 -840,000 0 0 0 0 0 2027 0 480,000 -480,000 0	0 840,000 -840,000 0 0 0 0 0 2028 2028 2028 480,000	22,400	22,400 0 22,400 72,037 378,800 117,000 567,837 2030 0 480,000 -480,000 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2031 0 480,000 -480,000 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2032 0 480,000 -480,000 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2033 0 2033 0 480,000 -480,000	22,400 0 22,400 72,037 378,800 117,000 567,837 2034 14,940 0 14,940 6,234	22,400 0 22,400 72,037 378,800 117,000 567,837 2035 14,940 0 14,940 6,234	22,400 0 22,400 72,037 378,800 117,000 567,837 2036 14,940 0 14,940 6,234	22,400 0 22,400 72,037 378,800 117,000 567,837 2037 2037 14,940 0 14,940 6,234	22,400 0 22,400 72,037 378,800 117,000 567,837 2038 14,940 0 14,940 6,234	22,400 0 22,400 72,037 378,800 117,000 567,837 2039 2039 14,940 0 14,940 6,234	22,400 0 22,400 72,037 378,800 117,000 567,837 2040 14,940 0 14,940 6,234	22,400 0 22,400 72,037 378,800 117,000 567,837 2041 14,940 0 14,940 6,234	22,400 0 22,400 72,037 378,800 117,000 567,837 2042 14,940 0 14,940 6,234	22,400 0 22,400 72,037 378,800 117,000 567,837 2043 14,940 0 14,940 6,234	22,400 0 22,400 72,037 378,800 117,000 567,837 2044 2044 14,940 0 14,940 6,234

Year		2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044
Cost																						
Landfill Fees & Transportation	\$/Year	0	840,000	840,000	840,000	840,000	840,000	840,000	840,000	840,000	840,000	840,000	840,000	840,000	840,000	840,000	840,000	840,000	840,000	840,000	840,000	840,000
Total Net Revenue	\$/Year	0	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000
Third Party Haulage and Processi	ng																					
Year		2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044
Cost	<u>Φ</u> Δ(~	100.000	100.000	100.000	100.000	100.000	100.000	100.000	400.000	100.000	400.000	100.000	400.000	400.000	100.000	100.000	400.000	100.000	400.000	100.000	100.000
Processing & Transportation Cost Total Net Revenue	\$/Year \$/Year	0 0	480,000 -480,000	480,000 -480,000	480,000 -480,000	480,000 -480,000	480,000 -480,000	480,000 -480,000	480,000 -480,000	480,000 -480,000	480,000 -480,000	480,000 -480,000	480,000 -480,000	480,000 -480,000	480,000 -480,000	480,000 -480,000	480,000 -480,000	480,000 -480,000	480,000 -480,000	480,000 -480,000	480,000 -480,000	480,000 -480,000
Thermal hydrolysis process																						
Year		2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044
Revenue																						
Liquid Biosolids Sales Cost		0	0	0	0	0	14,940	14,940	14,940	14,940	14,940	14,940	14,940	14,940	14,940	14,940	14,940	14,940	14,940	14,940	14,940	14,940
Landfill Fees & Transportation	\$/Year		840,000	840,000	840,000	840,000								Ĩ								
Total Net Revenue	\$/Year		-840,000	-840,000	-840,000	-840,000	14,940	14,940	14,940	14,940	14,940	14,940	14,940	14,940	14,940	14,940	14,940	14,940	14,940	14,940	14,940	14,940
OPEX																						
Electricity Cost	\$/Year						6,234	6,234	6,234	6,234	6,234	6,234	6,234	6,234	6,234	6,234	6,234	6,234	6,234	6,234	6,234	6,234
NG Cost	\$/Year					ā	11,601	11,601	11,601	11,601	11,601	11,601	11,601	11,601	11,601	11,601	11,601	11,601	11,601	11,601	11,601	11,601
KOH Solution Cost	\$/Year						62,370	62,370	62,370	62,370	62,370	62,370	62,370	62,370	62,370	62,370	62,370	62,370	62,370	62,370	62,370	62,370
Total OPEX	\$/Year	0	0	0	0	0	80,205	80,205	80,205	80,205	80,205	80,205	80,205	80,205	80,205	80,205	80,205	80,205	80,205	80,205	80,205	80,205
Biosolids Drying Process																						
Year		2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044
Year Revenue				2026	2027	2028																
Year Revenue Dry Pellets Sales		2024	2025	2026	2027	2028	2029 22,400	2030 22,400	2031 22,400	2032 22,400	2033 22,400	2034 22,400	2035 22,400	2036	2037 22,400	2038 22,400	2039 22,400	2040 22,400	2041 22,400	2042 22,400	2043 22,400	2044
Year Revenue	\$/Year			2026 0 840,000	2027 0 840,000	2028 0																
Year Revenue Dry Pellets Sales Cost	\$/Year \$/Year		0	0	0	0		22,400		22,400		22,400	22,400	22,400		22,400		22,400	22,400	22,400	22,400	22,400
Year Revenue Dry Pellets Sales Cost Landfill Fees & Transportation Total Net Revenue			840,000	0	0 840,000	0	22,400 0	22,400 0	22,400 0	22,400 0	22,400 0	22,400 0	22,400 0	22,400 0	22,400 0	22,400 0	22,400 0	22,400 0	22,400 0	22,400 0	22,400 0	22,400 0
Year Revenue Dry Pellets Sales Cost Landfill Fees & Transportation Total Net Revenue OPEX	\$/Year		840,000	0	0 840,000	0	22,400 0 22,400	22,400 0 22,400	22,400 0 22,400	22,400 0 22,400	22,400 0 22,400	22,400 0 22,400	22,400 0 22,400	22,400 0 22,400	22,400 0 22,400	22,400 0 22,400	22,400 0 22,400	22,400 0 22,400	22,400 0 22,400	22,400 0 22,400	22,400 0 22,400	22,400 0 22,400
Year Revenue Dry Pellets Sales Cost Landfill Fees & Transportation Total Net Revenue			0 840,000 -840,000	0 840,000 -840,000	0 840,000 -840,000	0 840,000 -840,000	22,400 0	22,400 0	22,400 0	22,400 0	22,400 0	22,400 0	22,400 0	22,400 0	22,400 0	22,400 0	22,400 0	<mark>22,400</mark> 0	22,400 0	22,400 0	22,400 0	22,400 0
Year Revenue Dry Pellets Sales Cost Landfill Fees & Transportation Total Net Revenue OPEX Electricity Cost NG Cost Staffing Cost	\$/Year \$/Year \$/Year \$/Year	0	0 840,000 -840,000	0 840,000 -840,000	0 840,000 -840,000	0 840,000 -840,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000
Year Revenue Dry Pellets Sales Cost Landfill Fees & Transportation Total Net Revenue OPEX Electricity Cost NG Cost	\$/Year \$/Year \$/Year	0	0 840,000 -840,000 0	0 840,000 -840,000	0 840,000 -840,000	0 840,000 -840,000	22,400 0 22,400 72,037 378,800	22,400 0 22,400 72,037 378,800	22,400 0 22,400 72,037 378,800	22,400 0 22,400 72,037 378,800	22,400 0 22,400 72,037 378,800	22,400 0 22,400 72,037 378,800	22,400 0 22,400 72,037 378,800	22,400 0 22,400 72,037 378,800	22,400 0 22,400 72,037 378,800	22,400 0 22,400 72,037 378,800	22,400 0 22,400 72,037 378,800	22,400 0 22,400 72,037 378,800	22,400 0 22,400 72,037 378,800	22,400 0 22,400 72,037 378,800	22,400 0 22,400 72,037 378,800	22,400 0 22,400 72,037 378,800
Year Revenue Dry Pellets Sales Cost Landfill Fees & Transportation Total Net Revenue OPEX Electricity Cost NG Cost Staffing Cost	\$/Year \$/Year \$/Year \$/Year \$/Year	0	0 840,000 -840,000 0	0 840,000 -840,000	0 840,000 -840,000	0 840,000 -840,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000
Year Revenue Dry Pellets Sales Cost Landfill Fees & Transportation Total Net Revenue OPEX Electricity Cost NG Cost Staffing Cost Total OPEX Total OPEX Third Party for 5 years & then THF	\$/Year \$/Year \$/Year \$/Year \$/Year	0 0 0 0 0 0	0 840,000 -840,000 0 0 0 0	0 840,000 -840,000 0 0 0 0	0 840,000 -840,000 0 0 0 0	0 840,000 -840,000 0 0 0	22,400 0 22,400 72,037 378,800 117,000 567,837	22,400 0 22,400 72,037 378,800 117,000 567,837	22,400 0 22,400 72,037 378,800 117,000 567,837	22,400 0 22,400 72,037 378,800 117,000 567,837	22,400 0 22,400 72,037 378,800 117,000 567,837	22,400 0 22,400 72,037 378,800 117,000 567,837	22,400 0 22,400 72,037 378,800 117,000 567,837	22,400 0 22,400 72,037 378,800 117,000 567,837	22,400 0 22,400 72,037 378,800 117,000 567,837	22,400 0 22,400 72,037 378,800 117,000 567,837	22,400 0 22,400 72,037 378,800 117,000 567,837	22,400 0 22,400 72,037 378,800 117,000 567,837	22,400 0 22,400 72,037 378,800 117,000 567,837	22,400 0 22,400 72,037 378,800 117,000 567,837	22,400 0 22,400 72,037 378,800 117,000 567,837	22,400 0 22,400 72,037 378,800 117,000 567,837
Year Revenue Dry Pellets Sales Cost Landfill Fees & Transportation Total Net Revenue OPEX Electricity Cost NG Cost Staffing Cost Total OPEX	\$/Year \$/Year \$/Year \$/Year \$/Year	0	0 840,000 -840,000 0	0 840,000 -840,000	0 840,000 -840,000	0 840,000 -840,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000
Year Revenue Dry Pellets Sales Cost Landfill Fees & Transportation Total Net Revenue OPEX Electricity Cost NG Cost Staffing Cost Total OPEX Third Party for 5 years & then THF Year	\$/Year \$/Year \$/Year \$/Year \$/Year	0 0 0 0 0 0	0 840,000 -840,000 0 0 0 0	0 840,000 -840,000 0 0 0 0	0 840,000 -840,000 0 0 0 0	0 840,000 -840,000 0 0 0	22,400 0 22,400 72,037 378,800 117,000 567,837	22,400 0 22,400 72,037 378,800 117,000 567,837	22,400 0 22,400 72,037 378,800 117,000 567,837	22,400 0 22,400 72,037 378,800 117,000 567,837	22,400 0 22,400 72,037 378,800 117,000 567,837	22,400 0 22,400 72,037 378,800 117,000 567,837	22,400 0 22,400 72,037 378,800 117,000 567,837	22,400 0 22,400 72,037 378,800 117,000 567,837	22,400 0 22,400 72,037 378,800 117,000 567,837	22,400 0 22,400 72,037 378,800 117,000 567,837	22,400 0 22,400 72,037 378,800 117,000 567,837	22,400 0 22,400 72,037 378,800 117,000 567,837	22,400 0 22,400 72,037 378,800 117,000 567,837	22,400 0 22,400 72,037 378,800 117,000 567,837	22,400 0 22,400 72,037 378,800 117,000 567,837	22,400 0 22,400 72,037 378,800 117,000 567,837
Year Revenue Dry Pellets Sales Cost Landfill Fees & Transportation Total Net Revenue OPEX Electricity Cost NG Cost Staffing Cost Total OPEX Third Party for 5 years & then THF Year Revenue Liquid Biosolids Sales	\$/Year \$/Year \$/Year \$/Year \$/Year	0 0 0 0 0 0 2024	0 840,000 -840,000 0 0 0 0 2025	0 840,000 -840,000 0 0 0 0 0 2026	0 840,000 -840,000 0 0 0 0 0 2027	0 840,000 -840,000 0 0 0 0 0 2028	22,400 0 22,400 72,037 378,800 117,000 567,837	22,400 0 22,400 72,037 378,800 117,000 567,837 2030	22,400 0 22,400 72,037 378,800 117,000 567,837 2031	22,400 0 22,400 72,037 378,800 117,000 567,837 2032	22,400 0 22,400 72,037 378,800 117,000 567,837	22,400 0 22,400 72,037 378,800 117,000 567,837 2034	22,400 0 22,400 72,037 378,800 117,000 567,837 2035	22,400 0 22,400 72,037 378,800 117,000 567,837 2036	22,400 0 22,400 72,037 378,800 117,000 567,837 2037	22,400 0 22,400 72,037 378,800 117,000 567,837 2038	22,400 0 22,400 72,037 378,800 117,000 567,837 2039	22,400 0 22,400 72,037 378,800 117,000 567,837 2040	22,400 0 22,400 72,037 378,800 117,000 567,837 2041	22,400 0 22,400 72,037 378,800 117,000 567,837 2042	22,400 0 22,400 72,037 378,800 117,000 567,837 2043	22,400 0 22,400 72,037 378,800 117,000 567,837 2044
Year Revenue Dry Pellets Sales Cost Landfill Fees & Transportation Total Net Revenue OPEX Electricity Cost NG Cost Staffing Cost Total OPEX Third Party for 5 years & then THF Year Revenue Liquid Biosolids Sales Cost	\$/Year \$/Year \$/Year \$/Year	0 0 0 0 0 0 2024	0 840,000 -840,000 0 0 0 0 0 2025	0 840,000 -840,000 0 0 0 0 0 2026	0 840,000 -840,000 0 0 0 0 0 2027 0	0 840,000 -840,000 0 0 0 0 0 2028	22,400 0 22,400 72,037 378,800 117,000 567,837 2029 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2030 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2031 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2032 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2033 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2034 14,940	22,400 0 22,400 72,037 378,800 117,000 567,837 2035 14,940	22,400 0 22,400 72,037 378,800 117,000 567,837 2036 14,940	22,400 0 22,400 72,037 378,800 117,000 567,837 2037 14,940	22,400 0 22,400 72,037 378,800 117,000 567,837 2038 14,940	22,400 0 22,400 72,037 378,800 117,000 567,837 2039	22,400 0 22,400 72,037 378,800 117,000 567,837 2040 14,940	22,400 0 22,400 72,037 378,800 117,000 567,837 2041 14,940	22,400 0 22,400 72,037 378,800 117,000 567,837 2042 14,940	22,400 0 22,400 72,037 378,800 117,000 567,837 2043 14,940	22,400 0 22,400 72,037 378,800 117,000 567,837 2044 14,940
Year Revenue Dry Pellets Sales Cost Landfill Fees & Transportation Total Net Revenue OPEX Electricity Cost NG Cost Staffing Cost Total OPEX Third Party for 5 years & then THF Year Revenue Liquid Biosolids Sales Cost Processing & Transportation Cost	\$/Year \$/Year \$/Year \$/Year \$/Year	0 0 0 0 0 0 2024	0 840,000 -840,000 0 0 0 0 0 2025 0 480,000	0 840,000 -840,000 0 0 0 0 0 2026 0 480,000	0 840,000 -840,000 0 0 0 0 0 2027 0 480,000	0 840,000 -840,000 0 0 0 0 0 2028 2028 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2029 0 480,000	22,400 0 22,400 72,037 378,800 117,000 567,837 2030 0 480,000	22,400 0 22,400 72,037 378,800 117,000 567,837 2031 0 480,000	22,400 0 22,400 72,037 378,800 117,000 567,837 2032 0 480,000	22,400 0 22,400 72,037 378,800 117,000 567,837 2033 0 480,000	22,400 0 22,400 72,037 378,800 117,000 567,837 2034 14,940 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2035 14,940 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2036 14,940 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2037 14,940 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2038 14,940 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2039 14,940 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2040 14,940 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2041 14,940 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2042 14,940 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2043 14,940 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2044 14,940 0
Year Revenue Dry Pellets Sales Cost Landfill Fees & Transportation Total Net Revenue OPEX Electricity Cost NG Cost Staffing Cost Total OPEX Third Party for 5 years & then THF Year Revenue Liquid Biosolids Sales Cost Processing & Transportation Cost Total Net Revenue	\$/Year \$/Year \$/Year \$/Year \$/Year	0 0 0 0 0 0 2024	0 840,000 -840,000 0 0 0 0 0 2025 0 480,000	0 840,000 -840,000 0 0 0 0 0 2026 0 480,000	0 840,000 -840,000 0 0 0 0 0 2027 0 480,000	0 840,000 -840,000 0 0 0 0 0 2028 2028 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2029 0 480,000	22,400 0 22,400 72,037 378,800 117,000 567,837 2030 0 480,000	22,400 0 22,400 72,037 378,800 117,000 567,837 2031 0 480,000	22,400 0 22,400 72,037 378,800 117,000 567,837 2032 0 480,000	22,400 0 22,400 72,037 378,800 117,000 567,837 2033 0 480,000	22,400 0 22,400 72,037 378,800 117,000 567,837 2034 14,940 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2035 14,940 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2036 14,940 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2037 14,940 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2038 14,940 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2039 14,940 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2040 14,940 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2041 14,940 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2042 14,940 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2043 14,940 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2044 14,940 0
Year Revenue Dry Pellets Sales Cost Landfill Fees & Transportation Total Net Revenue OPEX Electricity Cost NG Cost Staffing Cost Total OPEX Third Party for 5 years & then THF Year Revenue Liquid Biosolids Sales Cost Processing & Transportation Cost Total Net Revenue OPEX Electricity Cost NG Cost	\$/Year \$/Year \$/Year \$/Year \$/Year \$/Year \$/Year \$/Year \$/Year	0 0 0 0 0 0 2024	0 840,000 -840,000 0 0 0 0 0 0 2025 2025 0 480,000 -480,000	0 840,000 -840,000 0 0 0 0 0 2026 0 480,000 -480,000	0 840,000 -840,000 0 0 0 0 0 2027 2027 0 480,000 -480,000	0 840,000 -840,000 0 0 0 0 0 0 0 0 480,000 480,000	22,400 0 22,400 72,037 378,800 117,000 567,837 2029 0 480,000	22,400 0 22,400 72,037 378,800 117,000 567,837 2030 0 480,000 -480,000	22,400 0 22,400 72,037 378,800 117,000 567,837 2031 0 480,000 -480,000	22,400 0 22,400 72,037 378,800 117,000 567,837 2032 0 480,000 -480,000	22,400 0 22,400 72,037 378,800 117,000 567,837 2033 0 2033 0 480,000 -480,000	22,400 0 22,400 72,037 378,800 117,000 567,837 2034 14,940 0 14,940 0 14,940 6,234 11,601	22,400 0 22,400 72,037 378,800 117,000 567,837 2035 14,940 0 14,940 0 14,940 6,234 11,601	22,400 0 22,400 72,037 378,800 117,000 567,837 2036 14,940 0 14,940 0 14,940 6,234 11,601	22,400 0 22,400 72,037 378,800 117,000 567,837 2037 14,940 0 14,940 0 14,940 6,234 11,601	22,400 0 22,400 72,037 378,800 117,000 567,837 2038 14,940 0 14,940 0 14,940 6,234 11,601	22,400 0 22,400 72,037 378,800 117,000 567,837 2039 14,940 0 14,940 0 14,940 6,234 11,601	22,400 0 22,400 72,037 378,800 117,000 567,837 2040 14,940 0 14,940 0 14,940 6,234 11,601	22,400 0 22,400 72,037 378,800 117,000 567,837 2041 14,940 0 14,940 6,234 11,601	22,400 0 22,400 72,037 378,800 117,000 567,837 2042 14,940 0 14,940 0 14,940	22,400 0 22,400 72,037 378,800 117,000 567,837 2043 14,940 0 14,940 0 14,940 6,234 11,601	22,400 0 22,400 72,037 378,800 117,000 567,837 2044 14,940 0 14,940 6,234 11,601
Year Revenue Dry Pellets Sales Cost Landfill Fees & Transportation Total Net Revenue OPEX Electricity Cost NG Cost Staffing Cost Total OPEX Third Party for 5 years & then THF Year Revenue Liquid Biosolids Sales Cost Processing & Transportation Cost Total Net Revenue OPEX Electricity Cost	\$/Year \$/Year \$/Year \$/Year \$/Year \$/Year \$/Year	0 0 0 0 0 0 2024	0 840,000 -840,000 0 0 0 0 0 0 2025 0 2025 0 480,000 -480,000	0 840,000 -840,000 0 0 0 0 2026 0 480,000 -480,000	0 840,000 -840,000 0 0 0 0 0 2027 0 480,000 -480,000	0 840,000 -840,000 0 0 0 0 0 2028 0 480,000 -480,000	22,400 0 22,400 72,037 378,800 117,000 567,837 2029 0 480,000	22,400 0 22,400 72,037 378,800 117,000 567,837 2030 0 480,000 -480,000 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2031 0 480,000 -480,000 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2032 0 480,000 -480,000 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2033 0 2033 0 480,000 -480,000	22,400 0 22,400 72,037 378,800 117,000 567,837 2034 14,940 0 14,940 6,234	22,400 0 22,400 72,037 378,800 117,000 567,837 2035 14,940 0 14,940 6,234	22,400 0 22,400 72,037 378,800 117,000 567,837 2036 14,940 0 14,940 6,234	22,400 0 22,400 72,037 378,800 117,000 567,837 2037 2037 14,940 0 14,940 6,234	22,400 0 22,400 72,037 378,800 117,000 567,837 2038 14,940 0 14,940 6,234	22,400 0 22,400 72,037 378,800 117,000 567,837 2039 14,940 0 14,940 6,234	22,400 0 22,400 72,037 378,800 117,000 567,837 2040 14,940 0 14,940 6,234	22,400 0 22,400 72,037 378,800 117,000 567,837 2041 14,940 0 14,940 6,234	22,400 0 22,400 72,037 378,800 117,000 567,837 2042 14,940 0 14,940 6,234	22,400 0 22,400 72,037 378,800 117,000 567,837 2043 14,940 0 14,940 6,234	22,400 0 22,400 72,037 378,800 117,000 567,837 2044 2044 14,940 0 14,940 6,234

Year		2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044
Cost Landfill Fees & Transportation	\$/Year	0	840,000	840,000	840,000	840,000	840,000	840,000	840,000	840,000	840,000	840,000	840,000	840,000	840,000	840,000	840,000	840,000	840,000	840,000	840,000	840,000
Total Net Revenue	\$/Year	0.	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000
Third Party Haulage and Process	sing																					
Year		2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044
Cost Processing & Transportation Cost	\$/Year	0	480,000	480,000	480,000	480,000	480,000	480,000	480,000	480,000	480,000	480,000	480,000	480,000	480,000	480,000	480,000	480,000	480,000	480,000	480,000	480,000
Total Net Revenue	\$/Year	0.	-480,000	-480,000	-480,000	-480,000	-480,000	-480,000	-480,000	-480,000	-480,000	-480,000	-480,000	-480,000	-480,000	-480,000	-480,000	-480,000	-480,000	-480,000	-480,000	-480,000
Thermal hydrolysis process																						
Year		2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044
Revenue Liquid Biosolids Sales		0	0	0	Ο	0	14,940	14,940	14,940	14,940	14,940	14,940	14,940	14,940	14,940	14,940	14,940	14,940	14,940	14,940	14,940	14,940
Cost										,					,		,				,	
Landfill Fees & Transportation Total Net Revenue	\$/Year \$/Year		840,000 -840,000	840,000 -840,000	840,000 -840,000	840,000 -840,000	14,940	14,940	14,940	14,940	14,940	14,940	14,940	14,940	14,940	14,940	14,940	14,940	14,940	14,940	14,940	14,940
					,					,		,				,						
OPEX Electricity Cost	\$/Year						6,234	6,234	6,234	6,234	6,234	6,234	6,234	6,234	6,234	6,234	6,234	6,234	6,234	6,234	6,234	6,234
NG Cost	\$/Year						11,601	11,601	11,601	11,601	11,601	11,601	11,601	11,601	11,601	11,601	11,601	11,601	11,601	11,601	11,601	11,601
KOH Solution Cost Total OPEX	\$/Year \$/Year	0	0	0	0	0	62,370 80,205	62,370 80,205	62,370 80,205	62,370 80,205	62,370 80,205	62,370 80,205	62,370 80,205	62,370 80,205	62,370 80,205	62,370 80,205	62,370 80,205	62,370 80,205	62,370 80,205	62,370 80,205	62,370 80,205	62,370 80,205
3					ÿ	.ă				00,200					00,200							
Biosolids Drying Process																						
Year		2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044
Year Revenue Dry Pellets Sales		2024	2025	2026	2027 0	2028	2029 22,400	2030 22,400	2031 22,400	2032 22,400	2033 22,400	2034 22,400	2035 22,400	2036	2037 22,400	2038 22,400	2039 22,400	2040 22,400	2041 22,400	2042 22,400	2043 22,400	2044 22,400
Revenue Dry Pellets Sales Cost		0	0	0	0	0	22,400				22,400	22,400						22,400	22,400	22,400	22,400	22,400
Revenue Dry Pellets Sales	\$/Year \$/Year	0	2025 0 840,000 -840,000	2026 0 840,000 -840,000	2027 0 840,000 -840,000	2028 0 840,000 -840,000										22,400	22,400					
RevenueDry Pellets SalesCostLandfill Fees & TransportationTotal Net Revenue	\$/Year	0	0	0	0 840,000	840,000	22,400 0	22,400 0	22,400 0	22,400 0	22,400 0	22,400 0	22,400 0	22,400 0	22,400 0	22,400 0	22,400 0	22,400 0	22,400 0	22,400 0	22,400 0	22,400 0
Revenue Dry Pellets Sales Cost Landfill Fees & Transportation Total Net Revenue OPEX Electricity Cost	\$/Year \$ /Year \$/Year	0	0	0	0 840,000	840,000	22,400 0	22,400 0 22,400 72,037	22,400 0 22,400 72,037	22,400 0 22,400 72,037	22,400 0 22,400 72,037	22,400 0 22,400 72,037	22,400 0 22,400 72,037	22,400 0 22,400 72,037	22,400 0 22,400 72,037	22,400 0 22,400 72,037	22,400 0 22,400 72,037	22,400 0 22,400 72,037	22,400 0 22,400 72,037	22,400 0 22,400 72,037	22,400 0 22,400 72,037	22,400 0
Revenue Dry Pellets Sales Cost Landfill Fees & Transportation Total Net Revenue OPEX Electricity Cost NG Cost	\$/Year \$/Year \$/Year \$/Year \$/Year	0	0 840,000 -840,000	0 840,000 -840,000 0	0 840,000	840,000	22,400 0 22,400 72,037 378,800	22,400 0 22,400 72,037 378,800	22,400 0 22,400 72,037 378,800	22,400 0 22,400 72,037 378,800	22,400 0 22,400 72,037 378,800	22,400 0 22,400 72,037 378,800	22,400 0 22,400 72,037 378,800	22,400 0 22,400 72,037 378,800	22,400 0 22,400 72,037 378,800	22,400 0 22,400 72,037 378,800	22,400 0 22,400 72,037 378,800	22,400 0 22,400 72,037 378,800	22,400 0 22,400 72,037 378,800	22,400 0 22,400 72,037 378,800	22,400 0 22,400 72,037 378,800	22,400 0 22,400 72,037 378,800
Revenue Dry Pellets Sales Cost Landfill Fees & Transportation Total Net Revenue OPEX Electricity Cost	\$/Year \$ /Year \$/Year	0	0 840,000 -840,000	0 840,000 -840,000	0 840,000	840,000	22,400 0 22,400 72,037	22,400 0 22,400 72,037	22,400 0 22,400 72,037	22,400 0 22,400 72,037	22,400 0 22,400 72,037	22,400 0 22,400 72,037	22,400 0 22,400 72,037	22,400 0 22,400 72,037	22,400 0 22,400 72,037	22,400 0 22,400 72,037	22,400 0 22,400 72,037	22,400 0 22,400 72,037	22,400 0 22,400 72,037	22,400 0 22,400 72,037	22,400 0 22,400 72,037	22,400 0 22,400 72,037
Revenue Dry Pellets Sales Cost Landfill Fees & Transportation Total Net Revenue OPEX Electricity Cost NG Cost Staffing Cost	\$/Year \$/Year \$/Year \$/Year \$/Year \$/Year	0	0 840,000 -840,000	0 840,000 -840,000 0	0 840,000	840,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000
Revenue Dry Pellets Sales Cost Landfill Fees & Transportation Total Net Revenue OPEX Electricity Cost NG Cost Staffing Cost Total OPEX	\$/Year \$/Year \$/Year \$/Year \$/Year \$/Year	0	0 840,000 -840,000	0 840,000 -840,000 0	0 840,000	840,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000	22,400 0 22,400 72,037 378,800 117,000
Revenue Dry Pellets Sales Cost Landfill Fees & Transportation Total Net Revenue OPEX Electricity Cost NG Cost Staffing Cost Total OPEX Third Party for 5 years & then TH Year Revenue	\$/Year \$/Year \$/Year \$/Year \$/Year \$/Year	0 0 0 0 0 0 2024	0 840,000 -840,000 0 0 0 0 2025	0 840,000 -840,000 0 0 0 0	0 840,000 -840,000 0 0 0 0 0	0 840,000 -840,000 0 0 0 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2029	22,400 0 22,400 72,037 378,800 117,000 567,837 2030	22,400 0 22,400 72,037 378,800 117,000 567,837	22,400 0 22,400 72,037 378,800 117,000 567,837	22,400 0 22,400 72,037 378,800 117,000 567,837 2033	22,400 0 22,400 72,037 378,800 117,000 567,837 2034	22,400 0 22,400 72,037 378,800 117,000 567,837 2035	22,400 0 22,400 72,037 378,800 117,000 567,837 2036	22,400 0 22,400 72,037 378,800 117,000 567,837 2037	22,400 0 22,400 72,037 378,800 117,000 567,837 2038	22,400 0 22,400 72,037 378,800 117,000 567,837 2039	22,400 0 22,400 72,037 378,800 117,000 567,837 2040	22,400 0 22,400 72,037 378,800 117,000 567,837 2041	22,400 0 22,400 72,037 378,800 117,000 567,837 2042	22,400 0 22,400 72,037 378,800 117,000 567,837 2043	22,400 0 22,400 72,037 378,800 117,000 567,837 2044
RevenueDry Pellets SalesCostLandfill Fees & TransportationTotal Net RevenueOPEXElectricity CostNG CostStaffing CostTotal OPEXThird Party for 5 years & then THYear	\$/Year \$/Year \$/Year \$/Year \$/Year \$/Year	0 	0 840,000 -840,000 0 0 0	0 840,000 -840,000 0 0 0 0	0 840,000 -840,000 0 0 0 0 0	0 840,000 -840,000 0 0 0 0	22,400 0 22,400 72,037 378,800 117,000 567,837	22,400 0 22,400 72,037 378,800 117,000 567,837	22,400 0 22,400 72,037 378,800 117,000 567,837	22,400 0 22,400 72,037 378,800 117,000 567,837	22,400 0 22,400 72,037 378,800 117,000 567,837	22,400 0 22,400 72,037 378,800 117,000 567,837	22,400 0 22,400 72,037 378,800 117,000 567,837	22,400 0 22,400 72,037 378,800 117,000 567,837	22,400 0 22,400 72,037 378,800 117,000 567,837	22,400 0 22,400 72,037 378,800 117,000 567,837	22,400 0 22,400 72,037 378,800 117,000 567,837	22,400 0 22,400 72,037 378,800 117,000 567,837	22,400 0 22,400 72,037 378,800 117,000 567,837	22,400 0 22,400 72,037 378,800 117,000 567,837	22,400 0 22,400 72,037 378,800 117,000 567,837	22,400 0 22,400 72,037 378,800 117,000 567,837
Revenue Dry Pellets Sales Cost Landfill Fees & Transportation Total Net Revenue OPEX Electricity Cost NG Cost Staffing Cost Total OPEX Third Party for 5 years & then TH Year Revenue Liquid Biosolids Sales Cost Processing & Transportation Cost	\$/Year \$/Year \$/Year \$/Year \$/Year \$/Year P \$/Year	0 0 0 0 0 0 0 2024 0	0 840,000 -840,000 0 0 0 0 2025 0 480,000	0 840,000 -840,000 0 0 0 0 0 2026 0 480,000	0 840,000 -840,000 0 0 0 0 0 0 2027 0 480,000	0 840,000 -840,000 0 0 0 0 0 2028 2028 0 480,000	22,400 0 22,400 72,037 378,800 117,000 567,837 2029 0 480,000	22,400 0 22,400 72,037 378,800 117,000 567,837 2030 0 480,000	22,400 0 22,400 72,037 378,800 117,000 567,837 2031 0 480,000	22,400 0 22,400 72,037 378,800 117,000 567,837 2032 0 480,000	22,400 0 22,400 72,037 378,800 117,000 567,837 2033 0 480,000	22,400 0 22,400 72,037 378,800 117,000 567,837 2034 14,940 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2035 14,940 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2036 14,940 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2037 14,940 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2038 14,940 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2039 14,940 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2040 14,940 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2041 14,940 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2042 14,940 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2043 14,940 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2044 14,940 0
Revenue Dry Pellets Sales Cost Landfill Fees & Transportation Total Net Revenue OPEX Electricity Cost NG Cost Staffing Cost Total OPEX Third Party for 5 years & then The Year Revenue Liquid Biosolids Sales Cost	\$/Year \$/Year \$/Year \$/Year \$/Year \$/Year \$/Year	0 0 0 0 0 0 0 2024 0	0 840,000 -840,000 0 0 0 0 2025 0	0 840,000 -840,000 0 0 0 0 0 2026	0 840,000 -840,000 0 0 0 0 0 2027 0	0 840,000 -840,000 0 0 0 0 0 2028 2028	22,400 0 22,400 72,037 378,800 117,000 567,837 2029 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2030 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2031 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2032 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2033 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2034 14,940	22,400 0 22,400 72,037 378,800 117,000 567,837 2035	22,400 0 22,400 72,037 378,800 117,000 567,837 2036	22,400 0 22,400 72,037 378,800 117,000 567,837 2037 14,940	22,400 0 22,400 72,037 378,800 117,000 567,837 2038	22,400 0 22,400 72,037 378,800 117,000 567,837 2039 14,940	22,400 0 22,400 72,037 378,800 117,000 567,837 2040 14,940	22,400 0 22,400 72,037 378,800 117,000 567,837 2041 14,940	22,400 0 22,400 72,037 378,800 117,000 567,837 2042 14,940	22,400 0 22,400 72,037 378,800 117,000 567,837 2043 14,940	22,400 0 22,400 72,037 378,800 117,000 567,837 2044 14,940
Revenue Dry Pellets Sales Cost Landfill Fees & Transportation Total Net Revenue OPEX Electricity Cost NG Cost Staffing Cost Total OPEX Third Party for 5 years & then The Year Revenue Liquid Biosolids Sales Cost Processing & Transportation Cost Total Net Revenue OPEX	\$/Year \$/Year \$/Year \$/Year \$/Year \$/Year P P	0 0 0 0 0 0 0 2024 0	0 840,000 -840,000 0 0 0 0 2025 0 480,000 -480,000	0 840,000 -840,000 0 0 0 0 0 2026 0 480,000 -480,000	0 840,000 -840,000 0 0 0 0 0 0 2027 0 480,000	0 840,000 -840,000 0 0 0 0 0 2028 2028 0 480,000 -480,000	22,400 0 22,400 72,037 378,800 117,000 567,837 2029 0 480,000 -480,000	22,400 0 22,400 72,037 378,800 117,000 567,837 2030 0 480,000 -480,000	22,400 0 22,400 72,037 378,800 117,000 567,837 2031 0 480,000 -480,000	22,400 0 22,400 72,037 378,800 117,000 567,837 2032 0 480,000 -480,000	22,400 0 22,400 72,037 378,800 117,000 567,837 2033 0 2033 0 480,000 -480,000	22,400 0 22,400 72,037 378,800 117,000 567,837 2034 14,940 0 14,940	22,400 0 22,400 72,037 378,800 117,000 567,837 2035 14,940 0 14,940	22,400 0 22,400 72,037 378,800 117,000 567,837 2036 14,940 0 14,940	22,400 0 22,400 72,037 378,800 117,000 567,837 2037 14,940 0 14,940	22,400 0 22,400 72,037 378,800 117,000 567,837 2038 14,940 0 14,940	22,400 0 22,400 72,037 378,800 117,000 567,837 2039 14,940 0 14,940	22,400 0 22,400 72,037 378,800 117,000 567,837 2040 14,940 0 14,940	22,400 0 22,400 72,037 378,800 117,000 567,837 2041 14,940 0 14,940	22,400 0 22,400 72,037 378,800 117,000 567,837 2042 14,940 0 14,940	22,400 0 22,400 72,037 378,800 117,000 567,837 2043 14,940 0 14,940	22,400 0 22,400 72,037 378,800 117,000 567,837 2044 14,940 0 14,940
RevenueDry Pellets SalesCostLandfill Fees & TransportationTotal Net RevenueOPEXElectricity CostNG CostStaffing CostTotal OPEXThird Party for 5 years & then THYearRevenueLiquid Biosolids SalesCostProcessing & Transportation CostTotal Net RevenueOPEXElectricity Cost	\$/Year \$/Year \$/Year \$/Year \$/Year \$/Year \$/Year \$/Year \$/Year \$/Year	0 0 0 0 0 0 0 2024 0	0 840,000 -840,000 0 0 0 0 2025 0 480,000	0 840,000 -840,000 0 0 0 0 0 2026 0 480,000	0 840,000 -840,000 0 0 0 0 0 0 2027 0 480,000	0 840,000 -840,000 0 0 0 0 0 2028 2028 0 480,000	22,400 0 22,400 72,037 378,800 117,000 567,837 2029 0 480,000	22,400 0 22,400 72,037 378,800 117,000 567,837 2030 0 480,000	22,400 0 22,400 72,037 378,800 117,000 567,837 2031 0 480,000	22,400 0 22,400 72,037 378,800 117,000 567,837 2032 0 480,000	22,400 0 22,400 72,037 378,800 117,000 567,837 2033 0 480,000	22,400 0 22,400 72,037 378,800 117,000 567,837 2034 14,940 0 14,940 6,234	22,400 0 22,400 72,037 378,800 117,000 567,837 2035 14,940 0 14,940 6,234	22,400 0 22,400 72,037 378,800 117,000 567,837 2036 14,940 0 14,940 6,234	22,400 0 22,400 72,037 378,800 117,000 567,837 2037 2037 14,940 0 14,940 6,234	22,400 0 22,400 72,037 378,800 117,000 567,837 2038 14,940 0 14,940 6,234	22,400 0 22,400 72,037 378,800 117,000 567,837 2039 14,940 0 14,940 6,234	22,400 0 22,400 72,037 378,800 117,000 567,837 2040 14,940 0 14,940 6,234	22,400 0 22,400 72,037 378,800 117,000 567,837 2041 14,940 0 14,940 6,234	22,400 0 22,400 72,037 378,800 117,000 567,837 2042 14,940 0 14,940 6,234	22,400 0 22,400 72,037 378,800 117,000 567,837 2043 14,940 0 14,940 6,234	22,400 0 22,400 72,037 378,800 117,000 567,837 2044 14,940 0 14,940 6,234
Revenue Dry Pellets Sales Cost Landfill Fees & Transportation Total Net Revenue OPEX Electricity Cost NG Cost Staffing Cost Total OPEX Third Party for 5 years & then The Year Revenue Liquid Biosolids Sales Cost Processing & Transportation Cost Total Net Revenue OPEX	\$/Year \$/Year \$/Year \$/Year \$/Year \$/Year P P	0 0 0 0 0 0 0 2024	0 840,000 -840,000 0 0 0 0 2025 0 480,000 -480,000	0 840,000 -840,000 0 0 0 0 2026 0 480,000 -480,000 0	0 840,000 -840,000 0 0 0 0 0 0 2027 0 480,000	0 840,000 -840,000 0 0 0 0 0 2028 2028 0 480,000 -480,000	22,400 0 22,400 72,037 378,800 117,000 567,837 2029 0 480,000 -480,000 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2030 0 480,000 -480,000 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2031 0 480,000 -480,000 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2032 0 480,000 -480,000 0	22,400 0 22,400 72,037 378,800 117,000 567,837 2033 0 480,000 -480,000	22,400 0 22,400 72,037 378,800 117,000 567,837 2034 14,940 0 14,940	22,400 0 22,400 72,037 378,800 117,000 567,837 2035 14,940 0 14,940	22,400 0 22,400 72,037 378,800 117,000 567,837 2036 14,940 0 14,940	22,400 0 22,400 72,037 378,800 117,000 567,837 2037 14,940 0 14,940	22,400 0 22,400 72,037 378,800 117,000 567,837 2038 14,940 0 14,940	22,400 0 22,400 72,037 378,800 117,000 567,837 2039 14,940 0 14,940	22,400 0 22,400 72,037 378,800 117,000 567,837 2040 14,940 0 14,940	22,400 0 22,400 72,037 378,800 117,000 567,837 2041 14,940 0 14,940	22,400 0 22,400 72,037 378,800 117,000 567,837 2042 14,940 0 14,940	22,400 0 22,400 72,037 378,800 117,000 567,837 2043 14,940 0 14,940	22,400 0 22,400 72,037 378,800 117,000 567,837 2044 14,940 0 14,940

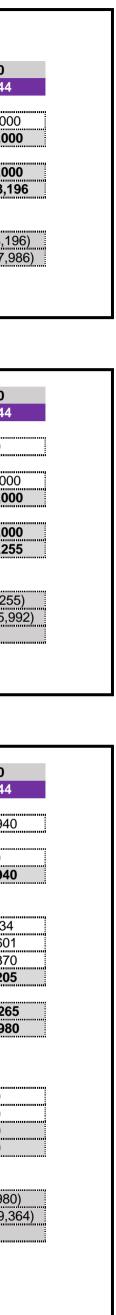
omic Assessment of Biosolids Options																				
Status Quo																				
DCF Model	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
Year	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043
Cost, \$																				
Landfill Fees & Transportation	0	840,000	840,000	840,000	840,000	840,000	840,000	840,000	840,000	840,000	840,000	840,000	840,000	840,000	840,000	840,000	840,000	840,000	840,000	840,00
Total Net Revenue	0	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,0
Total Profit	0	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,0
Total Escalated Profit	0	-856,800		-891,415	-909,243	-927,428	-945,976	-964,896	-984,194	-1,003,878	-1,023,955	-1,044,434	-1,065,323	-1,086,630	-1,108,362	-1,130,529	-1,153,140	-1,176,203	-1,199,727	-1,223,7
Cash Flow, \$																				
Annual Free Cash Flow	0	(856,800)	(873,936)	(891,415)	(909.243)	(927,428)	(945,976)	(964,896)	(984,194)	(1,003,878)	(1,023,955)	(1,044,434)	(1,065,323)	(1.086.630)	(1,108,362)	(1,130,529)	(1,153,140)	(1,176,203)	(1,199,727)	(1,223,
Cumulative FCF	0	(856,800)		ากอี้การการการการการการการการการการการการการก	(3,531,394)	(4,458,822)	ຕູ້ການການການການການການການການການການການການການກ	ບໍ່ມາມມາກັບມາມມາກັບມາມການກຳມາມາກ		លហ៊ុំអោយសំណត់អោយអោយសំណាយអាហារ	(9,381,721)	(10,426,155)	(11,491,478)		(13,686,470)	(14,817,000)	(15,970,140)	លភ្នំពេលអភិបាលអំណាលអាល័យអោយណ៍ល		លហ្វីលាលលើលលំណាលលោលលំព
Net Present Value	-12,565,31		<u>-</u>	<u>-</u>	. <u></u>	XXXX							X							

Third Party Haulage and Processing

DCF Model	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Year	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044
Revenue, \$																					
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cost, \$																					
Processing & Transportation Cost		480,000	480,000	480,000	480,000	480,000	480,000	480,000	480,000	480,000	480,000	480,000	480,000	480,000	480,000	480,000	480,000	480,000	480,000	480,000	480,000
Fotal Net Revenue	0	-480,000	-480,000	-480,000	-480,000	-480,000	-480,000	-480,000	-480,000	-480,000	-480,000	-480,000	-480,000	-480,000	-480,000	-480,000	-480,000	-480,000	-480,000	-480,000	-480,00
Fotal Profit		-480,000	-480,000	-480,000	-480,000	-480,000	-480,000	-480,000	-480,000	-480,000	-480,000	-480,000	-480,000	-480,000	-480,000	-480,000	-480,000	-480,000	-480,000	-480,000	-480,00
Fotal Escalated Profit	0	-489,600	-499,392	-509,380	-519,567	-529,959	-540,558	-551,369	-562,397	-573,644	-585,117	-596,820	-608,756	-620,931	-633,350	-646,017	-658,937	-672,116	-685,558	-699,269	-713,25
Cash Flow, \$																					
Annual Free Cash Flow	0	(489,600)	(499,392)	(509,380)	(519,567)	(529,959)	(540,558)	(551,369)	(562,397)	(573,644)	(585,117)	(596,820)	(608,756)	(620,931)	(633,350)	(646,017)	(658,937)	(672,116)	(685,558)	(699,269)	(713,25
Cumulative FCF	0	(489,600)	(988,992)	(1,498,372)	(2,017,939)	(2,547,898)	(3,088,456)	(3,639,825)	(4,202,222)	(4,775,866)	(5,360,983)	(5,957,803)	(6,566,559)	(7,187,490)	(7,820,840)	(8,466,857)	(9,125,794)	(9,797,910)	(10,483,468)	(11,182,738)	
Payback Calcs																					
Net Present Value	-7,180,181																,				

Thermal hydrolysis process

DCF Model	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	
Year	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	
Revenue, \$																					
Liquid Biosolids Sales	0	0	0	0	0	14,940	14,940	14,940	14,940	14,940	14,940	14,940	14,940	14,940	14,940	14,940	14,940	14,940	14,940	14,940	
Cost, \$																					
Landfill Fees & Transportation	0	840,000	840,000	840,000	840,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total Net Revenue	0	-840,000	-840,000	-840,000	-840,000	14,940	14,940	14,940	14,940	14,940	14,940	14,940	14,940	14,940	14,940	14,940	14,940	14,940	14,940	14,940	
OPEX, \$																					
Electricity Cost	0	0	0	0	0	6,234	6,234	6,234	6,234	6,234	6,234	6,234	6,234	6,234	6,234	6,234	6,234	6,234	6,234	6,234	
NG Cost	0	0	0	0	0	11,601	11,601	11,601	11,601	11,601	11,601	11,601	11,601	11,601	11,601	11,601	11,601	11,601	11,601	11,601	
KOH Solution Cost	0	0	0	0	0	62,370	62,370	62,370	62,370	62,370	62,370	62,370	62,370	62,370	62,370	62,370	62,370	62.370	62,370	62,370	
Total OPEX	0	0	0	0	0	80,205	80,205	80,205	80,205	80,205	80,205	80,205	80,205	80,205	80,205	80,205	80,205	80,205	80,205	80,205	
		ā	A	ā	āā	ā	íí					ā		ā		ă			.5		
Total Profit	0	-840,000	-840,000	-840,000	-840,000	-65,265	-65,265	-65,265	-65,265	-65,265	-65,265	-65,265	-65,265	-65,265	-65,265	-65,265	-65,265	-65,265	-65,265	-65,265	
Total Escalated Profit	0	-856,800	-873,936	-891,415	-909,243	-72,058	-73,499	-74,969	-76,468	-77,997	-79,557	-81,148	-82,771	-84,427	-86,115	-87,838	-89,594	-91,386	-93,214	-95,078	
CAPEX, \$		303,250	303,250	3,032,250	3,032,250	0	0	0	0	0	0	Ξ <u>Ο</u>	0	0	0	0	0	0	0	0	
Total Sustaining CAPEX	0	000,200	000,200	0,002,200	0,002,200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	303,250	303,250	3,032,250	3,032,250	0	0		0	0	•	0	0	0	0	<u> </u>	0	0	0	0	
Total Escalated CAPEX	0	309,315	315,501	ā	3,282,205	0	0	<u> </u>	0	0	<u> </u>	U	V	0	0	0	0	0	0	0	
				5,217,040	3,202,203	v	<u> </u>		•			v		· · · · ·	<u> </u>				<u> </u>		
Cash Flow, \$																					
Annual Free Cash Flow	0	(1,166,115)	(1,189,437)	(4,109,263)	(4,191,448)	(72,058)	(73,499)	(74,969)	(76,468)	(77,997)	(79,557)	(81,148)	(82,771)	(84,427)	(86,115)	(87,838)	(89,594)	(91,386)	(93,214)	(95,078)	
Cumulative FCF	0	(1,166,115)	(2,355,552)	(6,464,815)	(10,656,263)	(10,728,320)	(10,801,819)	(10,876,788)	(10,953,256)	(11,031,253)	(11,110,811)	(11,191,959)	(11,274,731)	(11,359,157)	(11,445,273)	(11,533,111)	(11,622,705)	(11,714,091)	(11,807,306)	(11,902,384))
Payback Calcs																					
Payback Period	0.00 Years																				
Net Present Value	-9,920,830																`				
IRR	N/A																				

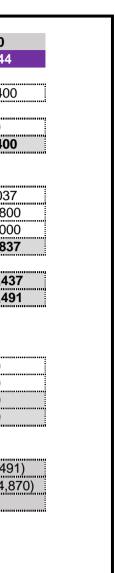


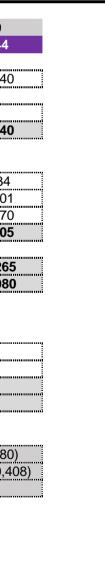
City of Cornwall Management of Biosolids, Organics and Septage Master Plan Economic Assessment of Biosolids Options

DCF Model	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	2
Year	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	20
Revenue, \$																					
Dry Pellets Sales	0	0	0	0	0	22,400	22,400	22,400	22,400	22,400	22,400	22,400	22,400	22,400	22,400	22,400	22,400	22,400	22,400	22,400	22
Cost, \$																					
Landfill Fees & Transportation	0	840,000	840,000	840,000	840,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total Net Revenue	0	-840,000	-840,000	-840,000	-840,000	22,400	22,400	22,400	22,400	22,400	22,400	22,400	22,400	22,400	22,400	22,400	22,400	22,400	22,400	22,400	2
				A			A	A						A					h		afunnin
OPEX, \$																					
Electricity Cost	0	0	0	0	0	72,037	72,037	72,037	72,037	72,037	72,037	72,037	72,037	72,037	72,037	72,037	72,037	72,037	72,037	72,037	7
NG Cost	0	0	0	0	0	378,800	378,800	378,800	378,800	378,800	378,800	378,800	378,800	378,800	378,800	378,800	378,800	378,800	378,800	378,800	37
Staffing Cost	0	0	0	0	0	117,000	117,000	117,000	117,000	117,000	117,000	117,000	117,000	117,000	117,000	117,000	117,000	117,000	117,000	117,000	1
	0	0	0	0	0	567,837	567,837	567,837	567,837	567,837	567,837	567,837	567,837	567,837	567,837	567,837	567,837	567,837	567,837	567,837	5
Total Profit	0	-840,000	-840,000	-840,000	-840,000	-545,437	-545,437	-545,437	-545,437	-545,437	-545,437	-545,437	-545,437	-545,437	-545,437	-545,437	-545,437	-545,437	-545,437	-545,437	-5
Total Escalated Profit	0	-856,800	-873,936	-891,415	-909,243	-602,206	-614,251	-626,536	-639,066	-651,848	-664,885	-678,182	-691,746	-705,581	-719,692	-734,086	-748,768	-763,743	-779,018	-794,599	-8
				A			A	A			1		F	A					F		,. F
CAPEX, \$																					
Total Upfront CAPEX	0	1,621,500	1,621,500	16,214,400	16,214,400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total Sustaining CAPEX	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	0	1,621,500	1,621,500	16,214,400	16,214,400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total Escalated CAPEX	0	1,653,930		17,206,851		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		.ă	ă	ā	ā		ā	ă			Ť		ñ	ā			č		ñ		nīn
Cash Flow, \$																					
Annual Free Cash Flow	0	(2,510,730)	(2.560.945)	(18.098.266)	(18,460,231)	(602,206)	(614,251)	(626,536)	(639,066)	(651,848)	(664,885)	(678,182)	(691,746)	(705,581)	(719,692)	(734,086)	(748,768)	(763,743)	(779,018)	(794,599)	(8
Cumulative FCF	0	ເດັບເບເດີບແມ່ນແມ່ນແມ່ນແມ່ນແມ່ນແມ່ນການກໍ່ມານ	ເດັບແມ່ນແມ່ນແມນແມ່ນແມ່ນແມນນັ້ນທ	កើតសំណារពារតែអាចអាចអាចអាចអាចអាចអាចអាចអាចអាចអាចអាចអាចអ	ທັດບ້ານການກ່ານການການການການການການການ		ā	ñar an a' an an an a' an an an a' an a	(44,112,230)		1	(46,107,145)	Terreren de concentration en concentration de concentrati	ña an a chù an an an i an an a' an an a			(49,707,019)		(51,249,780)		
Payback Calcs	Ŭ	(_,010,100)	(0,01 1,01 0)	(20,100,010)	(11,000,111)	(12,202,010)	(12,010,020)	(10,110,101/	(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	(11,701,070)	(10,120,000/		(10,100,001)	<u>, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,</u>	(10,221,101)	(10,000,201)	(10,707,010/	(00,110,102)	(01,210,100)	(02,011,070)	
Payback Period	0.00 Years		.ā	ā	.āā		ā							ā							
Net Present Value	-41,663,999																				

Third Party for 5 years & then THP

DCF Model	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	
Year	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	
Revenue, \$																					
Liquid Biosolids Sales	0	0	0	0	0	0	0	0	0	0	14,940	14,940	14,940	14,940	14,940	14,940	14,940	14,940	14,940	14,940	
Cost, \$,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
Processing & Transportation Cost	0	480,000	480,000	480,000	480,000	480,000	480,000	480,000	480,000	480,000	0	0	0	0	0	0	0	0	0	0	
Total Net Revenue	0	-480,000	-480,000	-480,000	-480,000	-480,000	-480,000	-480,000	-480,000	-480,000	14,940	14,940	14,940	14,940	14,940	14,940	14,940	14,940	14,940	14,940	
OPEX, \$																					
Electricity Cost	0	0	0	0	0	0	0	0	0	0	6,234	6,234	6,234	6,234	6,234	6,234	6,234	6,234	6,234	6,234	
NG Cost	0	0	0	0	0	0	0	0	0	0	11,601	11,601	11,601	11,601	11,601	11,601	11,601	11,601	11,601	11,601	
KOH Solution Cost	0	0	0	0	0	0	0	0	0	0	62,370	62,370	62,370	62,370	62,370	62,370	62,370	62,370	62,370	62,370	
Total OPEX	0	0	0	0	0	0	0	0	0	0	80,205	80,205	80,205	80,205	80,205	80,205	80,205	80,205	80,205	80,205	
		â	A				ă	A						1							
										100 000				~= ~~=	~= ~~=					CE OCE	
Total Profit	0	-480,000	-480,000	-480,000	-480,000	-480,000	-480,000	-480,000	-480,000	-480,000	-65,265	-65,265	-65,265	-65,265	-65,265	-65,265	-65,265	-65,265	-65,265	-65,265	
Total Escalated Profit	0	-480,000 -489,600	-480,000 -499,392	-480,000 -509,380	-480,000 -519,567	-480,000 -529,959	-480,000 -540,558	-480,000 -551,369	-480,000 -562,397	-480,000 -573,644	-65,265 -79,557	-65,265 -81,148	-65,265 -82,771	-65,265 -84,427	-65,265 -86,115	-65,265 -87,838	-65,265 -89,594	-65,265 -91,386	-65,265 -93,214	-05,265 -95,078	
Total Escalated Profit CAPEX, \$	0		-499,392	-509,380	-519,567	-529,959	-540,558	-551,369	-562,397	-573,644	-79,557	-81,148	-82,771	-84,427	-86,115	-87,838	-89,594	-91,386	-93,214	-95,078	
Total Escalated Profit CAPEX, \$ Total Upfront CAPEX	0 0	- 489,600 0	- 499,392	-509,380 0	-519,567 0	- 529,959	-540,558 303,250	-551,369 303,250	-562,397 3,032,250	-573,644 3,032,250	-79,557 0	-81,148 0			-86,115 0	-87,838 0	- 89,594 0	-91,386 0	-93,214	-95,078	
Total Escalated Profit CAPEX, \$ Total Upfront CAPEX Total Sustaining CAPEX	0 0		-499,392	-509,380	-519,567	-529,959 0	-540,558 303,250 0	-551,369 303,250 0	-562,397 3,032,250 0	-573,644 3,032,250 0	-79,557 0 0	-81,148	-82,771	-84,427	-86,115	-87,838	- 89,594 0 0	-91,386	-93,214	-95,078	
Total Escalated Profit CAPEX, \$ Total Upfront CAPEX Total Sustaining CAPEX Total CAPEX		- 489,600 0	- 499,392	-509,380 0	-519,567 0	-529,959 0 0 0	-540,558 303,250 0 303,250	-551,369 303,250 0 303,250	-562,397 3,032,250 0 3,032,250	-573,644 3,032,250 0 3,032,250	-79,557 0	-81,148 0 0 0	-82,771	-84,427	-86,115 0	-87,838 0	-89,594 0 0 0	-91,386 0	-93,214 0 0	-95,078	
Total Escalated Profit CAPEX, \$ Total Upfront CAPEX Total Sustaining CAPEX		- 489,600 0	- 499,392	-509,380 0	-519,567 0	- 529,959	-540,558 303,250 0	-551,369 303,250 0	-562,397 3,032,250 0	-573,644 3,032,250 0	-79,557 0 0	-81,148 0	-82,771	-84,427	-86,115 0	-87,838	- 89,594 0 0	-91,386 0	-93,214	-95,078	
Total Escalated Profit CAPEX, \$ Total Upfront CAPEX Total Sustaining CAPEX Total CAPEX Total Escalated CAPEX Cash Flow, \$		-489,600	-499,392 0 0 0 0	-509,380 0 0 0 0	-519,567 0 0 0 0	-529,959 0 0 0 0	-540,558 303,250 0 303,250 341,509	-551,369 303,250 0 303,250 348,339	-562,397 3,032,250 0 3,032,250	-573,644 3,032,250 0 3,032,250 3,623,819	-79,557	-81,148	-82,771 0 0 0 0	-84,427	-86,115	-87,838	-89,594	-91,386	-93,214	-95,078	
Total Escalated Profit CAPEX, \$ Total Upfront CAPEX Total Sustaining CAPEX Total CAPEX Total Escalated CAPEX Cash Flow, \$ Annual Free Cash Flow		-489,600 0 0 0 (489,600)	-499,392 0 0 0 (499,392)	-509,380 0 0 0 0 (509,380)	-519,567 0 0 0 (519,567)	-529,959 0 0 0 0 (529,959)	-540,558 303,250 0 303,250 341,509 (882,067)	-551,369 303,250 0 303,250 348,339 (899,708)	-562,397 3,032,250 0 3,032,250 3,552,764 (4,115,161)	-573,644 3,032,250 0 3,032,250 3,623,819 (4,197,464)	-79,557 0 0 0 0 (79,557)	-81,148 0 0 0 0 0 (81,148)	-82,771 0 0 0 0 (82,771)	-84,427 0 0 0 0 (84,427)	-86,115 0 0 0 0 0 (86,115)	-87,838 0 0 0 0 0 (87,838)	-89,594 0 0 0 0 (89,594)	-91,386 0 0 0 0 0 (91,386)	-93,214 0 0 0 0 (93,214)	-95,078	
Total Escalated Profit CAPEX, \$ Total Upfront CAPEX Total Sustaining CAPEX Total CAPEX Total Escalated CAPEX Cash Flow, \$ Annual Free Cash Flow Cumulative FCF		-489,600	-499,392 0 0 0 0	-509,380 0 0 0 0 (509,380)	-519,567 0 0 0 0	-529,959 0 0 0 0 (529,959)	-540,558 303,250 0 303,250 341,509 (882,067)	-551,369 303,250 0 303,250 348,339	-562,397 3,032,250 0 3,032,250 3,552,764 (4,115,161)	-573,644 3,032,250 0 3,032,250 3,623,819	-79,557	-81,148	-82,771 0 0 0 0	-84,427	-86,115	-87,838 0 0 0 0 0 (87,838)	-89,594	-91,386 0 0 0 0 0 (91,386)	-93,214	-95,078	3)
Total Escalated Profit CAPEX, \$ Total Upfront CAPEX Total Sustaining CAPEX Total CAPEX Total Escalated CAPEX Cash Flow, \$ Annual Free Cash Flow Cumulative FCF Payback Calcs	0 0 0 0	-489,600 0 0 0 (489,600)	-499,392 0 0 0 (499,392)	-509,380 0 0 0 0 (509,380)	-519,567 0 0 0 (519,567)	-529,959 0 0 0 0 (529,959)	-540,558 303,250 0 303,250 341,509 (882,067)	-551,369 303,250 0 303,250 348,339 (899,708)	-562,397 3,032,250 0 3,032,250 3,552,764 (4,115,161)	-573,644 3,032,250 0 3,032,250 3,623,819 (4,197,464)	-79,557 0 0 0 0 (79,557)	-81,148 0 0 0 0 0 (81,148)	-82,771 0 0 0 0 (82,771)	-84,427 0 0 0 0 (84,427)	-86,115 0 0 0 0 0 (86,115)	-87,838 0 0 0 0 0 (87,838)	-89,594 0 0 0 0 (89,594)	-91,386 0 0 0 0 0 (91,386)	-93,214 0 0 0 0 (93,214)	-95,078	11 11 11 11 11 11 11 11 11 11 11 11 11
Total Escalated Profit CAPEX, \$ Total Upfront CAPEX Total Sustaining CAPEX Total CAPEX Total Escalated CAPEX Cash Flow, \$ Annual Free Cash Flow Cumulative FCF Payback Calcs Payback Period	0 0 0 0 0 0 0 0.00 Years	-489,600 0 0 0 (489,600)	-499,392 0 0 0 (499,392)	-509,380 0 0 0 0 (509,380)	-519,567 0 0 0 (519,567)	-529,959 0 0 0 0 (529,959)	-540,558 303,250 0 303,250 341,509 (882,067)	-551,369 303,250 0 303,250 348,339 (899,708)	-562,397 3,032,250 0 3,032,250 3,552,764 (4,115,161)	-573,644 3,032,250 0 3,032,250 3,623,819 (4,197,464)	-79,557 0 0 0 0 (79,557)	-81,148 0 0 0 0 0 (81,148)	-82,771 0 0 0 0 (82,771)	-84,427 0 0 0 0 (84,427)	-86,115 0 0 0 0 0 (86,115)	-87,838 0 0 0 0 0 (87,838)	-89,594 0 0 0 0 (89,594)	-91,386 0 0 0 0 0 (91,386)	-93,214 0 0 0 0 (93,214)	-95,078	3)
Total Escalated Profit CAPEX, \$ Total Upfront CAPEX Total Sustaining CAPEX Total CAPEX Total Escalated CAPEX Cash Flow, \$ Annual Free Cash Flow Cumulative FCF Payback Calcs	0 0 0 0	-489,600 0 0 0 (489,600)	-499,392 0 0 0 (499,392)	-509,380 0 0 0 0 (509,380)	-519,567 0 0 0 (519,567)	-529,959 0 0 0 0 (529,959)	-540,558 303,250 0 303,250 341,509 (882,067)	-551,369 303,250 0 303,250 348,339 (899,708)	-562,397 3,032,250 0 3,032,250 3,552,764 (4,115,161)	-573,644 3,032,250 0 3,032,250 3,623,819 (4,197,464)	-79,557 0 0 0 0 (79,557)	-81,148 0 0 0 0 0 (81,148)	-82,771 0 0 0 0 (82,771)	-84,427 0 0 0 0 (84,427)	-86,115 0 0 0 0 0 (86,115)	-87,838 0 0 0 0 0 (87,838)	-89,594 0 0 0 0 (89,594)	-91,386 0 0 0 0 0 (91,386)	-93,214 0 0 0 0 (93,214)	-95,078	3)





Organics



City of Cornwall Management of Biosolids, Organics and Septage Master Plan Economic Assessment of Organics Options

	Version Control
Last Update	7/5/2024
Updated By	JH

City of Cornwall Management of Biosolids, Organics and Septage Master Plan Economic Assessment of Organics Options

Summary - Base Scenario

Economics Sumn	nary	Transfer Station + 3rd Party Processing	Organics Pre- Processing	Aerated static pile composting	Status Quo
Project Upfront Cost	\$	1,200,000	21,031,000	8,596,000	0
Internal Rate of Return	%	0%	0%	0%	0%
Net Present Value	\$	-14,183,266	-20,673,284	-21,389,264	-12,565,316
Payback Period	Year	0.00	0.00	0.00	0.00
Lifecycle Cost	\$/tonne	177	258	267	157

Transfer Station + 3rd Party Processing

Economics Summ	nary	Base Scenario	Alternative A	Alternative B	Alternative D
Project Upfront Cost	\$	1,200,000			
Internal Rate of Return	%	0%			
Net Present Value	\$	-14,183,266			
Payback Period	Year	0.00			
Lifecycle Cost	\$/tonne	177			
Economic Indicator #3					
Economic Indicator #4					
Economic Indicator #5					

Organics Pre-Processing

Economics Summ	nary	Base Scenario	Alternative A	Alternative B	Alternative D
Project Upfront Cost	\$	21,031,000			
Internal Rate of Return	%	0%			
Net Present Value	\$	-20,673,284			
Payback Period	Year	0.00			
Lifecycle Cost	\$/tonne	258			
Economic Indicator #3					
Economic Indicator #4					
Economic Indicator #5					

Aerated static pile composting

Economics Summ	nary	Base Scenario	Alternative A	Alternative B	Alternative D
Project Upfront Cost	\$	8,596,000			
Internal Rate of Return	%	0%			
Net Present Value	\$	-21,389,264			
Payback Period	Year	0.00			
Lifecycle Cost	\$/tonne	267			
Economic Indicator #3					
Economic Indicator #4					
Economic Indicator #5					

GHD Advisory City of Cornwall Management of Biosolids, Organics and Septage Master Plan Economic Assessment of Organics Options

Project Assumptions

4
,
,
0
,
, , 0

Assumptions

*Cost of the City's Organics collections contract is the same for all options, thus it is not considered in this analysis *Transfer Station OPEX based on Oxford Project (pro-rated to match the size of facility) *Assume Status Quo is deposit at landfill and cost is the same as biosolids option *Electricity unit cost assumed in model 0.1519 \$/kWh *Natural gas unit cost assumed in model 0.37 \$/m3

Status Quo

Price Assumptions		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Landfill Fees & Transportation	\$/tonne		210.00	210.00	210.00	210.00	210.00	210.00	210.00	210.00	210.00	210.00	210.00	210.00	210.00	210.00	210.00	210.00	210.00	210.00	210.00	210.00
Transfer Station + 3rd Party Processing																						
Price Assumptions		2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044
Processing & Transportation Cost	\$/tonne						160.00	160.00	160.00	160.00	160.00	160.00	160.00	160.00	160.00	160.00	160.00	160.00	160.00	160.00	160.00	160.00
Transfer Station OPEX	\$/year						247,000.00	247,000.00	247,000.00	247,000.00	247,000.00	247,000.00	247,000.00	247,000.00	247,000.00	247,000.00	247,000.00	247,000.00	247,000.00	247,000.00	247,000.00	247,000.00
Organics Pre-Processing		I																				
Price Assumptions		2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044
Pre-processing OPEX	\$/year						505,200.00	505,200.00	505,200.00	505,200.00	505,200.00	505,200.00	505,200.00	505,200.00	505,200.00	505,200.00	505,200.00	505,200.00	505,200.00	505,200.00	505,200.00	505,200.00
CHP Electricity and NG Savings	\$/year					(645,000.00	645,000.00	645,000.00	645,000.00	645,000.00	645,000.00	645,000.00	645,000.00	645,000.00	645,000.00	645,000.00	645,000.00	645,000.00	645,000.00	645,000.00	645,000.00

Price Assumptions		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Landfill Fees & Transportation	\$/tonne		210.00	210.00	210.00	210.00	210.00	210.00	210.00	210.00	210.00	210.00	210.00	210.00	210.00	210.00	210.00	210.00	210.00	210.00	210.00	210.00
Transfer Station + 3rd Party Processing																						
Drive Accounting		0004	0005	0000	0007	0000	0000	0000	0004	0000	0000	0004	0005	0000	0007	0000	0000	0040	0044	0040	0040	0044
Price Assumptions		2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044
Processing & Transportation Cost	\$/tonne						160.00	160.00	160.00	160.00	160.00	160.00	160.00	160.00	160.00	160.00	160.00	160.00	160.00	160.00	160.00	160.00
Transfer Station OPEX	\$/year						247,000.00	247,000.00	247,000.00	247,000.00	247,000.00	247,000.00	247,000.00	247,000.00	247,000.00	247,000.00	247,000.00	247,000.00	247,000.00	247,000.00	247,000.00	247,000.00
Organics Pre-Processing																						
Price Assumptions		2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044
Pre-processing OPEX	\$/year						505,200.00	505,200.00	505,200.00	505,200.00	505,200.00	505,200.00	505,200.00	505,200.00	505,200.00	505,200.00	505,200.00	505,200.00	505,200.00	505,200.00	505,200.00	505,200.00
CHP Electricity and NG Savings	\$/year						645,000.00	645,000.00	645,000.00	645,000.00	645,000.00	645,000.00	645,000.00	645,000.00	645,000.00	645,000.00	645,000.00	645,000.00	645,000.00	645,000.00	645,000.00	645,000.00
		9								Ĭ												

Price Assumptions		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Landfill Fees & Transportation	\$/tonne		210.00	210.00	210.00	210.00	210.00	210.00	210.00	210.00	210.00	210.00	210.00	210.00	210.00	210.00	210.00	210.00	210.00	210.00	210.00	210.00
Transfer Station + 3rd Party Processing																						
Price Accumptions		2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044
Price Assumptions		2024	CUZ3	2020	2021	2020				2032		2034									2043	
Processing & Transportation Cost	\$/tonne						160.00	160.00	160.00	160.00	160.00	160.00	160.00	160.00	160.00	160.00	160.00	160.00	160.00	160.00	160.00	160.00
Transfer Station OPEX	\$/year						247,000.00	247,000.00	247,000.00	247,000.00	247,000.00	247,000.00	247,000.00	247,000.00	247,000.00	247,000.00	247,000.00	247,000.00	247,000.00	247,000.00	247,000.00	247,000.00
Organics Pre-Processing																						
Price Assumptions		2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044
Pre-processing OPEX	\$/year						505,200.00	505,200.00	505,200.00	505,200.00	505,200.00	505,200.00	505,200.00	505,200.00	505,200.00	505,200.00	505,200.00	505,200.00	505,200.00	505,200.00	505,200.00	505,200.00
CHP Electricity and NG Savings	\$/year						645,000.00	645,000.00	645,000.00	645,000.00	645,000.00	645,000.00	645,000.00	645,000.00	645,000.00	645,000.00	645,000.00	645,000.00	645,000.00	645,000.00	645,000.00	645,000.00

Aerated static pile composting

Price Assumptions	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044
Facility O&M \$/year						850,000.00	850,000.00	850,000.00	850,000.00	850,000.00	850,000.00	850,000.00	850,000.00	850,000.00	850,000.00	850,000.00	850,000.00	850,000.00	850,000.00	850,000.00	850,000.00
Byproduct - Finished Compost Product Qua tonne/year						7,500.00	7,500.00	7,500.00	7,500.00	7,500.00	7,500.00	7,500.00	7,500.00	7,500.00	7,500.00	7,500.00	7,500.00	7,500.00	7,500.00	7,500.00	7,500.00
Byproduct - Finished Compost Rate \$/tonne						30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00

City of Cornwall Management of Biosolids, Organics and Septage Master Plan Economic Assessment of Organics Options

Transfer Station + 3rd Party Processing

Year	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044
Upfront Capital, \$ Engineering Cost		51,000	51,000																		
Construction Cost Total Upfront Capital		51,000	51,000	549,000 549,000	549,000 549,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sustaining Capital, \$			5					1	1	5											
Annual Sustaining Capital	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Sustaining Capital	0					-															
Annual CAPEX, \$	0	51,000	51,000	549,000	549,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total CAPEX, \$	1,200,000																				
Organics Pre-Processing																					
Year	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044
Upfront Capital, \$ Pre-processing Eq Engineering Cost		1,051,550	1,051,550																		
Pre-processing Eq Construction Cost Total Upfront Capital		1,051,550	1,051,550	9,463,950 9,463,950	9,463,950 9,463,950	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sustaining Capital, \$																					
Annual Sustaining Capital	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Ο	0	0	0	0
Total Sustaining Capital	0	0	0	<u> </u>	U	U 1	0	0	<u> </u>	<u> </u>	0	U	0	0	0	0	0	U	. 0	U	0
Annual CAPEX, \$	0	1,051,550	1,051,550	9,463,950	9,463,950	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total CAPEX, \$	21,031,000																				
Aerated static pile composting																					
Year	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044
Upfront Capital, \$ ASP Engineering Cost		460,500	460,500																	Ĩ	
ASP Construction Cost Total Upfront Capital		460,500	460,500	3,837,500 3,837,500	3,837,500 3,837,500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sustaining Capital, \$		<u>.</u>																			
Cover repairs or replacement and																					
concrete pad maintenance - 5 yrs Annual Sustaining Capital	0	0	0	0	0	0	0	0	0	0	1,750,000 1,750,000	0	0	0	0	1,750,000 1,750,000	0	0	0	0	1,750,000 1,750,000
Total Sustaining Capital	5,250,000				i	à.				F	.	A					1		••••••••	ā	
Annual CAPEX, \$	0	460,500	460,500	3,837,500	3,837,500	0	0	0	0	0	1,750,000	0	0	0	0	1,750,000	0	0	0	0	1,750,000
Total CAPEX, \$	13,846,000																				

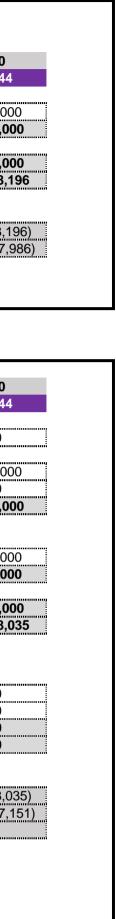
City of Cornwall Management of Biosolids, Organics and Septage Master Plan Economic Assessment of Organics Options

Status Quo

ear		2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	204
ost		2024	2023	2020	2021	2020	2025	2030	2031	2032	2033	2034	2033	2030	2037	2030	2033	2040	2041	2042	2043	20-
ndfill Fees & Transportation	\$/Year	0	840,000	840,000	840,000	840,000	840,000	840,000	840,000	840,000	840,000	840,000	840,000	840,000	840,000	840,000	840,000	840,000	840,000	840,000	840,000	840,
tal Net Revenue	\$/Year	0	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840
Insfer Station + 3rd Party Proc	cessing			A1000000000000000000000000000000000000									Annan 1997			A			A			
ar		2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	20
venue																						r
ost																				·····		
ocessing & Transportation Cost		0	0	0	0	0	640,000	640,000	640,000	640,000	640,000	640,000	640,000	640,000	640,000	640,000	640,000	640,000	640,000	640,000	640,000	640
ndfill Fees & Transportation	\$/Year	•	840,000	840,000	840,000	840,000	C 40, 000	C 10 000	C 40, 000	C 10 000	C 40, 000	C 10 000	C 10 000	C 40 000	~ 10 000	C 10 000	C 40 000	~ 10 000	~ 10 000	C 40, 000	C 40,000	C 44
tal Net Revenue	\$/Year	U	-840,000	-840,000	-840,000	-840,000	-640,000	-640,000	-640,000	-640,000	-640,000	-640,000	-640,000	-640,000	-640,000	-640,000	-640,000	-640,000	-640,000	-640,000	-640,000	-640
PEX																						
ansfer Station OPEX	\$/Year	0	0	0	0	0	247,000	247,000	247,000	247,000	247,000	247,000	247,000	247,000	247,000	247,000	247,000	247,000	247,000	247,000	247,000	247
tal OPEX	\$/Year	0	0	0	0	0	247,000	247,000	247,000	247,000	247,000	247,000	247,000	247,000	247,000	247,000	247,000	247,000	247,000	247,000	247,000	247
ganics Pre-Processing																						
ar		2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	20
venue																						
IP Electricity and NG Savings	\$/Year	0	0	0	0	0	645,000	645,000	645,000	645,000	645,000	645,000	645,000	645,000	645,000	645,000	645,000	645,000	645,000	645,000	645,000	64
st																						
ndfill Fees & Transportation	\$/Year		840,000	840,000	840,000	840,000											1					
tal Net Revenue	\$/Year	0	-840,000	-840,000	-840,000	-840,000	645,000	645,000	645,000	645,000	645,000	645,000	645,000	645,000	645,000	645,000	645,000	645,000	645,000	645,000	645,000	64
PEX																						
e-processing OPEX	\$/Year	0	0	0	0	0	505,200	505,200	505,200	505,200	505,200	505,200	505,200	505,200	505,200	505,200	505,200	505,200	505,200	505,200	505,200	505
otal OPEX	\$/Year	0	0	0	0	0	505,200	505,200	505,200	505,200	505,200	505,200	505,200	505,200	505,200	505,200	505,200	505,200	505,200	505,200	505,200	505
		÷		.			<u>.</u>	<u>-</u>													<u>.</u>	
rated static pile composting																						
ar		2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	20
venue																						
ished Compost Sales	\$/Year	0	0	0	0	0	225,000	225,000	225,000	225,000	225,000	225,000	225,000	225,000	225,000	225,000	225,000	225,000	225,000	225,000	225,000	225
st				<u></u>	<u>.</u>	. <u>.</u>	<u>.</u>	<u>.</u>					<u>.</u>	· <u>.</u>	<u>.</u>	<u>.</u>	<u>.</u>			. <u>.</u>	. <u>.</u>	<u>.</u>
ndfill Fees & Transportation	\$/Year		840,000	840,000	840,000	840,000																
tal Net Revenue	\$/Year	0	-840,000	-840,000	-840,000	-840,000	225,000	225,000	225,000	225,000	225,000	225,000	225,000	225,000	225,000	225,000	225,000	225,000	225,000	225,000	225,000	22
	¢/Voor		∩	\land	^	∧		950 000	950 000	950 000	950 000	950 000						950 000	950 000	950 000	950 000	050
PEX acility O&M otal OPEX	\$/Year \$/Year	0	0	0	0	0	850,000 850,000	850 850														

Status Quo																				
DCF Model	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	
Year Cost, \$	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	
Landfill Fees & Transportation	0	840,000	840,000	840,000	840,000	840,000	840,000	840,000	840,000	840,000	840,000	840,000	840,000	840,000	840,000	840,000	840,000	840,000	840,000	8
Total Net Revenue	0	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000		-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-8
Total Profit	0	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	3-
Total Escalated Profit	0	-856,800	-873,936	-891,415	-909,243	-927,428	-945,976	-964,896	-984,194	-1,003,878	-1,023,955	-1,044,434	-1,065,323	-1,086,630	-1,108,362	-1,130,529	-1,153,140	-1,176,203	-1,199,727	-1,
Cash Flow, \$																				
Annual Free Cash Flow	0	(856,800)	(873,936)	(891,415)	ງົມການປະເທດການການການການການປະເທດຜູ້	(927,428)	(945,976)	(964,896)	ññññññ	(1,003,878)	(1,023,955)	(1,044,434)	(1,065,323)	(1,086,630)	(1,108,362)	(1,130,529)	(1,153,140)	(1,176,203)	(1,199,727)	(1,
Cumulative FCF Net Present Value	0 - 12,565,316	(856,800)	(1,730,736)	(2,622,151)	(3,531,394)	(4,458,822)	(5,404,798)	(6,369,694)	(7,353,888) ((8,357,766)	(9,381,721)	(10,426,155)	(11,491,478)	(12,578,108)	(13,686,470)	(14,817,000)	(15,970,140)	(17,146,342)	(18,346,069)	(19
Transfer Station + 3rd Party Proces	ssing																			
Transfer Station + 3rd Party Proces DCF Model Year	0 2024	1 2025	2 2026	3 2027	4 2028	5 2029	6 2030	7 2031	8 2032	9 2033	10 2034	11 2035	12 2036	13 2037	14 2038	15 2039	16 2040	17 2041	18 2042	
DCF Model	0 2024	1 2025	2 2026	•	4 2028	5 2029	6 2030	7 2031		3					2038			2041		
DCF Model Year Revenue, \$ Cost, \$	0	1 2025 0	2 2026 0	•	4 2028 0	0	0	0	0	2033 0	2034 0	2035 0	2036 0	2037 0	2038 0	2039 0	2040 0	2041 0	2042 0	
DCF Model Year Revenue, \$ Cost, \$ Processing & Transportation Cost	0 2024 0	0	0	2027 0	0	0	0	0	0 640,000	3	2034 0 640,000	2035 0 640,000	2036 0 640,000	2037 0 640,000	2038 0 640,000	2039 0 640,000	2040 0 640,000	2041 0 640,000	2042 0 640,000	
DCF Model Year Revenue, \$ Cost, \$	0 2024 0	1 2025 0 0 840,000 -840,000	2 2026 0 840,000 -840,000	2027 0	4 2028 0 0 840,000 -840,000	0	0	0	0 640,000 0	2033 0	2034 0	2035 0	2036 0	2037 0	2038 0	2039 0	2040 0	2041 0	2042 0	(
DCF Model Year Revenue, \$ Cost, \$ Processing & Transportation Cost Landfill Fees & Transportation Total Net Revenue	0 2024 0 0	0 0 840,000	0 0 840,000	2027 0 0 840,000	0 0 840,000	0 640,000 0	0 640,000 0	0 640,000 0	0 640,000 0	2033 0 640,000 0	2034 0 640,000 0	2035 0 640,000 0	2036 0 640,000 0	2037 0 640,000 0	2038 0 640,000 0	2039 0 640,000 0	2040 0 640,000 0	2041 0 640,000 0	2042 0 640,000 0	6
DCF Model Year Revenue, \$ Cost, \$ Processing & Transportation Cost Landfill Fees & Transportation	0 2024 0 0	0 0 840,000	0 0 840,000	2027 0 0 840,000	0 0 840,000	0 640,000 0	0 640,000 0	0 640,000 0	0 640,000 0 -640,000	2033 0 640,000 0	2034 0 640,000 0	2035 0 640,000 0	2036 0 640,000 0	2037 0 640,000 0	2038 0 640,000 0	2039 0 640,000 0	2040 0 640,000 0	2041 0 640,000 0	2042 0 640,000 0	(
DCF Model Year Revenue, \$ Cost, \$ Processing & Transportation Cost Landfill Fees & Transportation Total Net Revenue OPEX, \$	0 2024 0 0 0	0 0 840,000	0 0 840,000	2027 0 0 840,000	0 0 840,000	0 640,000 0 -640,000	0 640,000 0 -640,000	0 640,000 0 -640,000	0 640,000 0 -640,000 247,000	2033 0 640,000 0 -640,000	2034 0 640,000 0 -640,000	2035 0 640,000 0 -640,000	2036 0 640,000 0 -640,000	2037 0 640,000 0 -640,000	2038 0 640,000 0 -640,000	2039 0 640,000 0 -640,000	2040 0 640,000 0 -640,000	2041 0 640,000 0 -640,000	2042 0 640,000 0 -640,000	-
DCF Model Year Revenue, \$ Cost, \$ Processing & Transportation Cost Landfill Fees & Transportation Total Net Revenue OPEX, \$ Transfer Station OPEX Total OPEX Total Profit	0 2024 0 0 0 0 0 0	0 0 840,000 -840,000 0 0 -840,000	0 840,000 -840,000 0 0 -840,000	2027 0 840,000 -840,000 0 0 -840,000	0 840,000 -840,000 0 0 -840,000	0 640,000 0 -640,000 247,000 247,000	0 640,000 0 -640,000 247,000 247,000 -887,000	0 640,000 0 -640,000 247,000 247,000 -887,000	0 640,000 0 -640,000 247,000 247,000 -887,000	2033 0 640,000 0 -640,000 247,000 247,000 247,000	2034 0 640,000 0 -640,000 247,000 247,000 -887,000	2035 0 640,000 0 -640,000 247,000 247,000 -887,000	2036 0 640,000 0 -640,000 247,000 247,000 -887,000	2037 0 640,000 0 -640,000 247,000 247,000 -887,000	2038 0 640,000 0 -640,000 247,000 247,000 -887,000	2039 0 640,000 0 -640,000 247,000 247,000 -887,000	2040 0 640,000 0 -640,000 247,000 247,000 -887,000	2041 0 640,000 0 -640,000 247,000 247,000 -887,000	2042 0 640,000 0 -640,000 247,000 247,000 -887,000	
DCF Model Year Revenue, \$ Cost, \$ Processing & Transportation Cost Landfill Fees & Transportation Total Net Revenue OPEX, \$ Transfer Station OPEX Total OPEX	0 2024 0 0 0 0 0 0	0 0 840,000 -840,000 0 0	0 0 840,000 -840,000 0 0	2027 0 840,000 -840,000 0 0 -840,000	0 840,000 -840,000 0 0 -840,000	0 640,000 0 -640,000 247,000 247,000	0 640,000 0 -640,000 247,000 247,000 -887,000	0 640,000 0 -640,000 247,000 247,000	0 640,000 0 -640,000 247,000 247,000 -887,000	2033 0 640,000 0 -640,000 247,000 247,000	2034 0 640,000 0 -640,000 247,000 247,000 -887,000	2035 0 640,000 0 -640,000 247,000 247,000	2036 0 640,000 0 -640,000 247,000 247,000	2037 0 640,000 0 -640,000 247,000 247,000	2038 0 640,000 0 -640,000 247,000 247,000	2039 0 640,000 0 -640,000 247,000 247,000	2040 0 640,000 0 -640,000 247,000 247,000	2041 0 640,000 0 -640,000 247,000 247,000 -887,000	2042 0 640,000 0 -640,000 247,000 247,000	
DCF Model Year Revenue, \$ Cost, \$ Processing & Transportation Cost Landfill Fees & Transportation Total Net Revenue OPEX, \$ Transfer Station OPEX Total OPEX Total Profit	0 2024 0 0 0 0 0 0	0 0 840,000 -840,000 0 0 -840,000	0 840,000 -840,000 0 0 -840,000	2027 0 840,000 -840,000 0 0 -840,000	0 840,000 -840,000 0 0 -840,000	0 640,000 0 -640,000 247,000 247,000	0 640,000 0 -640,000 247,000 247,000 -887,000	0 640,000 0 -640,000 247,000 247,000 -887,000	0 640,000 0 -640,000 247,000 247,000 -887,000	2033 0 640,000 0 -640,000 247,000 247,000 247,000	2034 0 640,000 0 -640,000 247,000 247,000 -887,000	2035 0 640,000 0 -640,000 247,000 247,000 -887,000	2036 0 640,000 0 -640,000 247,000 247,000 -887,000	2037 0 640,000 0 -640,000 247,000 247,000 -887,000	2038 0 640,000 0 -640,000 247,000 247,000 -887,000	2039 0 640,000 0 -640,000 247,000 247,000 -887,000	2040 0 640,000 0 -640,000 247,000 247,000 -887,000	2041 0 640,000 0 -640,000 247,000 247,000 -887,000	2042 0 640,000 0 -640,000 247,000 247,000 -887,000	
DCF Model Year Revenue, \$ Cost, \$ Processing & Transportation Cost Landfill Fees & Transportation Total Net Revenue OPEX, \$ Transfer Station OPEX Total OPEX Total OPEX Total OPEX Total Profit Total Escalated Profit CAPEX, \$ Total Upfront CAPEX	0 2024 0 0 0 0 0 0	0 0 840,000 -840,000 0 0 -840,000	0 840,000 -840,000 0 0 -840,000	2027 0 840,000 -840,000 0 0 -840,000	0 840,000 -840,000 0 0 -840,000	0 640,000 0 -640,000 247,000 247,000	0 640,000 0 -640,000 247,000 247,000 -887,000	0 640,000 0 -640,000 247,000 247,000 -887,000	0 640,000 0 -640,000 247,000 247,000 -887,000	2033 0 640,000 0 -640,000 247,000 247,000 247,000	2034 0 640,000 0 -640,000 247,000 247,000 -887,000	2035 0 640,000 0 -640,000 247,000 247,000 -887,000	2036 0 640,000 0 -640,000 247,000 247,000 -887,000	2037 0 640,000 0 -640,000 247,000 247,000 -887,000	2038 0 640,000 0 -640,000 247,000 247,000 -887,000	2039 0 640,000 0 -640,000 247,000 247,000 -887,000	2040 0 640,000 0 -640,000 247,000 247,000 -887,000	2041 0 640,000 0 -640,000 247,000 247,000 -887,000	2042 0 640,000 0 -640,000 247,000 247,000 -887,000	
DCF Model Year Revenue, \$ Cost, \$ Processing & Transportation Cost Landfill Fees & Transportation Total Net Revenue OPEX, \$ Transfer Station OPEX Total OPEX Total OPEX Total OPEX Total Profit Total Escalated Profit CAPEX, \$ Total Upfront CAPEX Total Sustaining CAPEX	0 2024 0 0 0 0 0 0 0 0 0	0 0 840,000 -840,000 0 0 -840,000 -856,800 51,000 0	0 0 840,000 -840,000 0 0 -840,000 -873,936 51,000 0	2027 0 840,000 -840,000 -840,000 0 -840,000 -891,415 549,000 0	0 0 840,000 -840,000 0 0 -840,000 -909,243 549,000 0	0 640,000 0 -640,000 247,000 247,000 -887,000 -979,320	0 640,000 0 -640,000 247,000 247,000 -887,000	0 640,000 0 -640,000 247,000 247,000 -887,000 -1,018,884	0 640,000 0 -640,000 247,000 247,000 -887,000 -1,039,262	2033 0 640,000 0 -640,000 247,000 247,000 247,000	2034 0 640,000 0 -640,000 247,000 247,000 -887,000	2035 0 640,000 0 -640,000 247,000 247,000 -887,000	2036 0 640,000 0 -640,000 247,000 247,000 247,000 -887,000 -1,124,930	2037 0 640,000 0 -640,000 247,000 247,000 -887,000	2038 0 640,000 0 -640,000 247,000 247,000 -887,000	2039 0 640,000 0 -640,000 247,000 247,000 -887,000	2040 0 640,000 0 -640,000 247,000 247,000 247,000 -1,217,661	2041 0 640,000 0 -640,000 247,000 247,000 247,000 -887,000 -1,242,014	2042 0 640,000 0 -640,000 247,000 247,000 247,000 -887,000 -1,266,854	
DCF Model Year Revenue, \$ Cost, \$ Processing & Transportation Cost Landfill Fees & Transportation Total Net Revenue OPEX, \$ Transfer Station OPEX Total OPEX Total OPEX Total OPEX Total Profit Total Escalated Profit CAPEX, \$ Total Upfront CAPEX	0 2024 0 0 0 0 0 0 0 0 0	0 0 840,000 -840,000 0 0 -840,000 -856,800	0 0 840,000 -840,000 0 0 -840,000 -873,936	2027 0 840,000 -840,000 -840,000 0 0 -840,000 -891,415	0 0 840,000 -840,000 0 0 -840,000 -909,243	0 640,000 0 -640,000 247,000 247,000 -887,000 -979,320	0 640,000 0 -640,000 247,000 247,000 247,000 -887,000 -998,906	0 640,000 0 -640,000 247,000 247,000 -887,000 -1,018,884 0	0 640,000 0 -640,000 247,000 247,000 247,000 -1,039,262	2033 0 640,000 0 -640,000 247,000 247,000 247,000	2034 0 640,000 0 -640,000 247,000 247,000 247,000 -1,081,248	2035 0 640,000 0 -640,000 247,000 247,000 -887,000	2036 0 640,000 0 -640,000 247,000 247,000 247,000 -887,000 -1,124,930 0	2037 0 640,000 0 -640,000 247,000 247,000 247,000 -1,147,429 0	2038 0 640,000 0 -640,000 247,000 247,000 -887,000	2039 0 640,000 0 -640,000 247,000 247,000 247,000 -1,193,785	2040 0 640,000 0 -640,000 247,000 247,000 247,000 -1,217,661 0	2041 0 640,000 0 -640,000 247,000 247,000 -887,000 -1,242,014	2042 0 640,000 0 -640,000 247,000 247,000 -887,000 -1,266,854	

DCF Model	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	
Year	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	
Cost, \$																					
Landfill Fees & Transportation	0	840,000	840,000	840,000	840,000	840,000	840,000	840,000	840,000	840,000	840,000	840,000	840,000	840,000	840,000	840,000	840,000	840,000	840,000	840,000	
Fotal Net Revenue	0	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	
Total Profit	0	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	-840,000	
Total Escalated Profit	0	-856,800	-873,936	-891,415	-909,243	-927,428	-945,976	-964,896	-984,194	-1,003,878	-1,023,955	-1,044,434	-1,065,323	-1,086,630	-1,108,362	-1,130,529	-1,153,140	-1,176,203	-1,199,727	-1,223,721	-
Cash Flow, \$																					
Annual Free Cash Flow	0	(856,800)	(873,936)	(891,415)	(909,243)	(927,428)	(945,976)	(964,896)	(984,194)	(1,003,878)	(1,023,955)	(1,044,434)	(1,065,323)	(1,086,630)	(1,108,362)	(1,130,529)	(1,153,140)	(1,176,203)	(1,199,727)	(1,223,721)	1
Cumulative FCF	0	(856,800)	(1,730,736)	(2,622,151)	(3,531,394)	(4,458,822)	(5,404,798)	(6,369,694)	(7,353,888)	(8,357,766)	(9,381,721)	(10,426,155)	(11,491,478)	(12,578,108)	(13,686,470)	(14,817,000)	(15,970,140)	(17,146,342)	(18,346,069)	(19,569,791)) (
Net Present Value	-12,565,316																				
Transfer Station + 3rd Party Proces	ssing																				
DCF Model	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	
Year	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	
Revenue, \$	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Cost, \$	0	0	0	0	0	0	0	<u> </u>	0	0	0	U	0	0	0	0	0	0	<u> </u>	<u> </u>	
Processing & Transportation Cost	0	0	0	0	0	640,000	640,000	640,000	640,000	640,000	640,000	640,000	640,000	640,000	640,000	640,000	640,000	640,000	640,000	640,000	 [
Landfill Fees & Transportation	0	840,000	840,000	840,000	840,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total Net Revenue	0	-840,000	-840,000	-840,000	-840,000	-640,000	-640,000	-640,000	-640,000	-640,000	-640,000	-640,000	-640,000	-640,000	-640,000	-640,000	-640,000	-640,000	-640,000	-640,000	
OPEX, \$																					
Transfer Station OPEX	0	0	0	0	0	247,000	247,000	247,000	247,000	247,000	247,000	247,000	247,000	247,000	247,000	247,000	247,000	247,000	247,000	247,000	
Total OPEX	0	0	0	0	0	247,000	247,000	247,000	247,000	247,000	247,000	247,000	247,000	247,000	247,000	247,000	247,000	247,000	247,000	247,000	
Total Profit	0			-840,000					-887,000	-887,000	-887,000	-887,000	-887,000	-887,000	-887,000	-887,000	-887,000	-887,000	-887,000	-887,000	
Total Escalated Profit	0	-856,800	-873,936	-891,415	-909,243	-979,320	-998,906	-1,018,884	-1,039,262	-1,060,047	-1,081,248	-1,102,873	-1,124,930	-1,147,429	-1,170,378	-1,193,785	-1,217,661	-1,242,014	-1,266,854	-1,292,192	
CAPEX, \$																					
Total Upfront CAPEX	0	51,000	51,000	549,000	549,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total Sustaining CAPEX	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total CAPEX	0	51,000	51,000	549,000	549,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total Escalated CAPEX	0	52,020	53,060	582,603	594,255	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Cash Flow, \$																					
Annual Free Cash Flow	0	(908,820)	3	(1,474,018)				Aanaalaanin maanaanin maanaani	(1,039,262)	1			(1,124,930)	(1,147,429)	(1,170,378)	(1,193,785)				າເຈັ້າການການນັ້ນການການການການການການການການການ	immen in the second second
Cumulative FCF	0	(908,820)	(1,835,816)	(3,309,834)	(4,813,333)	(5,792,652)	(6,791,558)	(7,810,443)	(8,849,704)	(9,909,751)	(10,991,000)	(12,093,873)	(13,218,803)	(14,366,232)	(15,536,610)	(16,730,395)	(17,948,056)	(19,190,070)	(20,456,924)	(21,749,116))
Payback Calcs	0.00.1/-																				
Payback Period	0.00 Years																				
Net Present Value	-14,183,266																				



City of Cornwall Management of Biosolids, Organics and Septage Master Plan Economic Assessment of Organics Options

Organics Pre-Processing

DCF Model	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	1
ear	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	20
evenue, \$																					
HP Electricity and NG Savings	0	0	0	0	0	645,000	645,000	645,000	645,000	645,000	645,000	645,000	645,000	645,000	645,000	645,000	645,000	645,000	645,000	645,000	645
ost, \$																					
andfill Fees & Transportation	0	840,000	840,000	840,000	840,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
otal Net Revenue	0	-840,000	-840,000	-840,000	-840,000	645,000	645,000	645,000	645,000	645,000	645,000	645,000	645,000	645,000	645,000	645,000	645,000	645,000	645,000	645,000	645
PEX, \$																					
re-processing OPEX	0	0	0	0	0	505,200	505,200	505,200	505,200	505,200	505,200	505,200	505,200	505,200	505,200	505,200	505,200	505,200	505,200	505,200	505
otal OPEX	0	0	0	0	0	505,200	505,200	505,200	505,200	505,200	505,200	505,200	505,200	505,200	505,200	505,200	505,200	505,200	505,200	505,200	505
							<u>.</u>		<u>.</u>		- <u>-</u>	. <u>.</u>	<u>.</u>					. <u>.</u>			<u>.</u>
otal Profit	0	-840,000	-840,000	-840,000	-840,000	139,800	139,800	139,800	139,800	139,800	139,800	139,800	139,800	139,800	139,800	139,800	139,800	139,800	139,800	139,800	13
otal Escalated Profit	0	-856,800	-873,936	-891,415	-909,243	154,350	157,438	160,586	163,798	167,074	170,415	173,824	177,300	180,846	184,463	188,152	191,915	195,754	199,669	203,662	20
CAPEX, \$				0.400.050	9,463,950	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
otal Upfront CAPEX	0	1.051.550	1.051.550	9,463,950	9,403,930	: 0	: 0		. 0	. 0											
	0	1,051,550 0	1,051,550 0	9,463,950 0	9,403,950 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
otal Sustaining CAPEX			1,051,550 0 1,051,550	9,463,950 0 9,463,950	9,463,950 0 9,463,950	0 0 0	<u> </u>	0 0	0 0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	
otal Sustaining CAPEX	0	0	0 1,051,550	0	0 9,463,950	0 0 0 0	<u> </u>	0 0 0	0 0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	U	
otal Sustaining CAPEX	0 0	0 1,051,550	0 1,051,550	0 9,463,950	0 9,463,950	0 0 0 0	<u> </u>	0 0 0	0 0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0	
Total Upfront CAPEX Total Sustaining CAPEX Total CAPEX Total Escalated CAPEX Cash Flow, \$	0 0	0 1,051,550	0 1,051,550	0 9,463,950	0 9,463,950	0 0 0	<u> </u>	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0	
otal Sustaining CAPEX Total CAPEX Total Escalated CAPEX Cash Flow, \$	0 0	0 1,051,550 1,072,581	0 1,051,550 1,094,033	0 9,463,950 10,043,219	0 9,463,950 10,244,084	0 0 0 154,350	<u> </u>	0 0 0 160,586	0 0 0 163,798	0 0 0 167,074	0 0 0 170,415	0 0 0 173,824	0 0 0 177,300	0 0 0 180,846	0 0 0 184,463	0 0 0 188,152	0 0 0 191,915	0 0 0 195,754	0 0 0 199,669	0	207
Total Sustaining CAPEX Total CAPEX Total Escalated CAPEX	0 0	0 1,051,550 1,072,581 (1,929,381)	0 1,051,550 1,094,033 (1,967,969)	0 9,463,950 10,043,219 (10,934,634)	0 9,463,950 10,244,084 (11,153,327)		0 0 0	A	0 0 0 163,798 (25,349,138)	0 0 0 167,074 (25,182,064)	0 0 0 170,415 (25,011,649)	0 0 0 173,824 (24,837,825)	0 0 177,300	0 0 0 180,846 (24,479,679)	0 0 0 184,463 (24,295,216)	0 0 0 188,152 (24,107,063)	0	0 0 0 195,754 (23,719,394)	0 0 0 199,669 (23,519,725)	0	
Total Sustaining CAPEX Total CAPEX Total Escalated CAPEX Cash Flow, \$ Annual Free Cash Flow	0 0 0	0 1,051,550 1,072,581 (1,929,381)	0 1,051,550 1,094,033 (1,967,969)	0 9,463,950 10,043,219 (10,934,634)	0 9,463,950 10,244,084 (11,153,327)		0 0 0 157,438	A		1			0 0 177,300				0 0 0 191,915	A		0 0 203,662	207
otal Sustaining CAPEX otal CAPEX otal Escalated CAPEX Cash Flow, \$ Annual Free Cash Flow Cumulative FCF Payback Calcs	0 0 0	0 1,051,550 1,072,581 (1,929,381)	0 1,051,550 1,094,033 (1,967,969)	0 9,463,950 10,043,219 (10,934,634)	0 9,463,950 10,244,084 (11,153,327)		0 0 0 157,438	A		1			0 0 177,300				0 0 0 191,915	A		0 0 203,662	
Total Sustaining CAPEX Total CAPEX Total Escalated CAPEX Cash Flow, \$ Annual Free Cash Flow Cumulative FCF	0 0 0 0	0 1,051,550 1,072,581 (1,929,381)	0 1,051,550 1,094,033 (1,967,969)	0 9,463,950 10,043,219 (10,934,634)	0 9,463,950 10,244,084 (11,153,327)		0 0 0 157,438	A		1			0 0 177,300				0 0 0 191,915	A		0 0 203,662	

Aerated static pile composting

DCF Model	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	
Year	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	
Revenue, \$																					
Finished Compost Sales	0	0	0	0	0	225,000	225,000	225,000	225,000	225,000	225,000	225,000	225,000	225,000	225,000	225,000	225,000	225,000	225,000	225,000	
Cost, \$																					
Landfill Fees & Transportation	0	840,000	840,000	840,000	840,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total Net Revenue	0	-840,000	-840,000	-840,000	-840,000	225,000	225,000	225,000	225,000	225,000	225,000	225,000	225,000	225,000	225,000	225,000	225,000	225,000	225,000	225,000	
OPEX, \$																					
Facility O&M	0	0	0	0	0	850,000	850,000	850,000	850,000	850,000	850,000	850,000	850,000	850,000	850,000	850,000	850,000	850,000	850,000	850,000	
Total OPEX	0	0	0	0	0	850,000	850,000	850,000	850,000	850,000	850,000	850,000	850,000	850,000	850,000	850,000	850,000	850,000	850,000	850,000	
Total Profit	0	-840,000	-840,000	-840,000	-840,000	-625,000	-625,000	-625,000	-625,000	-625,000	-625,000	-625,000	-625,000	-625,000	-625,000	-625,000	-625,000	-625,000	-625,000	-625,000	
Total Escalated Profit	0	-856,800	-873,936	-891,415	-909,243	-690,051	-703,852	-717,929	-732,287	-746,933	-761,872	-777,109	-792,651	-808,504	-824,674	-841,168	-857,991	-875,151	-892,654	-910,507	
CAPEX, \$	0	460,500	460,500	3,837,500	3,837,500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	,
3	0	460,500	460,500 0	ų̃	• <u>.</u>	0	0	0	0	0	0		0	0	0	<u> </u>	0	0	0	0	
Total Sustaining CAPEX Total CAPEX	0	460,500	460,500	0 3,837,500	0 3,837,500	0	0	0	0	0	1,750,000 1,750,000	0	0	0	0	1,750,000 1,750,000	0	0	0	0	
Total Escalated CAPEX	0	460,500 469,710	460,500 479,104	4,072,386		0	0	0	0	0	2,133,240	0	0	0		2,355,270	0	0	0	0	
	U	469,710	479,104	4,072,380	4,153,033	U	U	U	U	U	2,133,240		U	U	U	2,355,270	U	U	U	U	
Cash Flow, \$																					
Annual Free Cash Flow	0	(1,326,510)	(1,353,040)	(4,963,800)	(5,063,076)	(690,051)	(703,852)	(717,929)	(732,287)	(746,933)	(2,895,112)	(777,109)	(792,651)	(808,504)	(824,674)	(3,196,437)	(857,991)	(875,151)	(892,654)	(910,507)	
Cumulative FCF	0	(1,326,510)	(2,679,550)	(7,643,351)	(12,706,427)	(13,396,478)	(14,100,329)	(14,818,258)	(15,550,545)	(16,297,478)	(19,192,589)	(19,969,698)	(20,762,349)	(21,570,854)	(22,395,528)	(25,591,965)	(26,449,956)	(27,325,107)	(28,217,761)	(29,128,268)	3)
Payback Calcs																					
Payback Period	0.00 Years																				
Net Present Value	-21,389,264																				
IDD	0%																				



125) 393)



City of Cornwall Biosolids, Organics and Septage Master Plan

Biosolids, Organics and Septage Master Plan Council Presentation

August 13th, 2024

Agenda



- Project Team Introductions
- Project Background
 - Overview of the Class Environmental Assessment Process
- Problem and Opportunity Statement
- Project Status and Schedule
- Review of Alternatives
- Environmental Considerations
- Financial Discussion
 - **Recommended Path Forward**



Project Background

Project Background

- In 2021 the City identified an opportunity to take a holistic view of the three (3) main waste streams being generated, to determine the approach best suited to the City's current and future needs
- This resulted in the Biosolids, Organics and Septage Master Plan project.
- The main goals for this project include:
 - Establishing a long-term planning framework for the management of:
 - Biosolids from the Wastewater Treatment Plant (WWTP).
 - Organics from the new green bin curbside organics collection program (2025), and
 - Septage that is currently being transported to the landfill and conveyed with leachate via the sanitary collection system to the WWTP.
 - Clearly identifying projects to address these waste streams before the Master Planning stage is completed (individual projects or combined project); and,
 - Laying the groundwork to allow any identified next stage Environmental Assessment processes to proceed, having provided proposed recommended alternatives that will be carried forward.

What are the waste streams to be managed?



This is a unique project, as three (3) separate waste streams need to be managed, which may require multiple solutions:

- **Biosolids** generated by the Cornwall WWTP that is currently deposited at the local landfill located at 2590 Cornwall Centre Road West, at a rate of 4,000 wet tonnes per year (approximately 27% total solids).
- **Organics material (food waste)** collected through a green bin program that is planned to commence January 1, 2025 (projected at a minimum 4,000 wet tonnes/year).
- Septage generated by residents and local customers, that is also currently accepted at the local landfill, and combined into the leachate collection system where it ends up at the Cornwall WWTP (estimated at 5- 10 m3/day).

Biosolids

- Based on current estimates, an average of about 4,000 wet tonnes/year of biosolids material are deposited at the City of Cornwall landfill, which is 11% of total average waste input of 36,000 wet tonnes/year (excluding contaminated soil).
- Due to nature of this material, the biosolids (27% TS) also has to be handled differently at the destination (not the same as handling mixed waste/garbage).
- Based on current estimates of landfill capacity remaining, no changes to this practice will continue to decrease the availability of space in the existing landfill – and this is a "relatively easy" item to address as there is no impact to existing operations. The truck hauling the material is simply re-routed to a new processing facility.

Organics

The Ontario Food and Organic Waste Policy Statement (April 2018) states that:

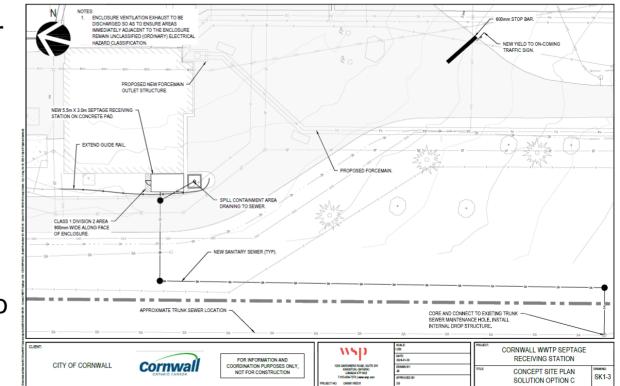
- 4.2(ii) Municipalities in Southern Ontario that, as of the effective date, do not provide curbside collection of source separated food and organic waste shall provide collection of food and organic waste to single-family dwellings in an urban settlement area within a local municipality if:
 - The population of the local municipality is greater than 50,000 and the population density of the local municipality is less than 300 persons per square kilometre; or
 - The population of the local municipality is greater than 20,000 but equal to or less than 50,000 and the population density of the local municipality is greater than or equal to 100 persons per square kilometre.

- By section 2.1(b):

- Municipalities in Southern Ontario subject to policy 4.2ii, shall commit to a **50% waste reduction** and resource recovery of food and organic waste generated by single-family dwellings in urban settlement areas **by 2025**.
- Therefore, the City will be implementing its organics management strategy by 2025.

Septage

- The MECP has previously stated City is no longer permitted to allow direct discharge of septage at Cornwall landfill, and this practice should stop.
- In response, City has pro-actively undertaken a pre-design of a new septage receiving station to be located at the Cornwall WWTP which is currently underway.
- Having septage receiving at the WWTP is a common practice at many WWTPs across Ontario and Canada.

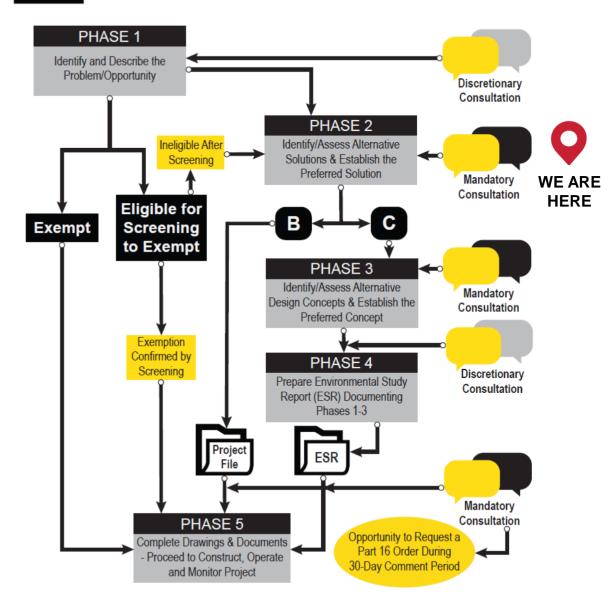


Overview of the Municipal Class Environmental Assessment (MCEA) Process

- We are following "Approach 2" within the MCEA framework and are in Phase 2 of a two-phase process that encompasses a Master Plan.
- The Master Plan process "stops" after feedback collected and document issued after Phase 2.
- This is <u>not</u> a recommendation of a design, only a suggested path forward for the City to achieve their goals.



Overview of the **Municipal Class Environmental Process**



Problem and Opportunity Statement



- The City aims to improve the overall operating lifespan of the landfill by:
 - diverting organics and biosolids, increasing the residential waste diversion rate from 42.98% to 63.99%, with a <u>total</u> diversion rate including organics and biosolids from 32.60% to 49.38%; and,
 - Through this diversion, adding an approximate 4-year capacity increase to the landfill based on current filling conditions.
- Build in flexibility to accommodate changes in waste streams;
- Optimize operational, financial and environmental benefits of biosolids, organics and septage from collection phases to end use/disposal phases;
- Reduce the overall amount of greenhouse gas (GHG) emissions;
- Protect public health and the environment.

Cornwall BOSMP - Presentation to Council I © 2024 GHD. All rights reserved.

Project Status and Schedule

- Notice of Biosolids, Organics and Septage Master Plan Project published July 2023
- Long List of Alternatives Reviewed August/September 2023
- Short List of Alternatives Developed October/November 2023
- Evaluation of Alternative Solutions January/February 2024
- Public Information Center February 28, 2024
- Master Plan for 30-day Public Review July 2024
- Council Presentation with Recommendations today
- Green Bin Program planned to commence January 1, 2025

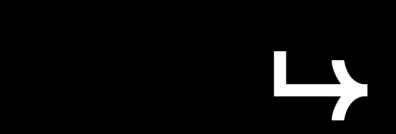




Review of Alternative Solutions

- → Biosolids
- → Organics
- → Septage

Biosolids





Biosolids Loading bay at Cornwall WWTP

The following Alternatives were evaluated:

- **1. "Do Nothing"** continue to put biosolids into landfill, contributing to consumption of remaining capacity (current practice).
- 2. Biosolids Processing by others haul City's biosolids to a merchant facility where material will be used as soil amendment or compost bulking, or other external process.
- 3. Thermal Hydrolysis Process (THP) at Cornwall WWTP – this will create a beneficial use product on site, enhance biogas (renewable energy) production and potential partnerships in agricultural sector.
- **4. Sludge Drying Process at Cornwall WWTP** "thermal treatment" involving high temperature air or other heating medium to create a biosolids particle or pellet at 98% TS, significantly reducing volume of biosolids to be managed.
- **5. Hybrid solution** implement Alternative 2 in short term and develop permanent solution (Alternative 3 or 4) in long term.

Evaluation of Alternatives - Biosolids

Alternative	Benefits	Drawbacks	Recommended Solution
1. "Do Nothing"	No impacts on current O&M practicesNo additional infrastructure required	Decreasing available volume in City's landfillNo beneficial use of material	No
2. Biosolids Processing by Others	 No impacts on current O&M practices No additional infrastructure practices Beneficial use material (created by others) 	 Truck traffic over longer distance (but no increase in # of trucks) Dependent on 3rd party 	Yes
3. Thermal Hydrolysis Process (THP) at Cornwall WWTP	 Can implement in existing building Builds good security on multiple outlets for material (Agricultural sector) Some additional biogas recovery Potential source of revenue, and partnerships with some THP system suppliers for management of material 	 Will have to convert existing centrifuges to thickening, including downstream equipment, but no new <u>major</u> equipment Higher truck traffic with liquid material leaving site (not high TS cake anymore) 	No
4. Sludge Drying Process at Cornwall WWTP	 Significantly reduce volume of biosolids (27% TS to 98% TS) – less truck traffic Potential energy recovery from process to offset energy inputs Produce a beneficial use fertilizer product (pellets) 	 Dryers would be at low end of capacity for City's throughput New building required at WWTP site, safety concerns with dried product, significant capital and energy costs City would have to manage end product 	No
5. Hybrid Solution (Alternative 2 plus Alternative 3)	 Refer to Alternative 3 Allows time to develop a more robust, long term solution including earmarking of funds 34 	Refer to Alternative 3	No



Organics





The following Alternatives were evaluated to comply with the objectives of the City:

- "Do Nothing" continue to put collected organics into landfill (currently going as garbage)
- **2. Aerobic composting** construct a new composting facility adjacent to City's existing landfill, fully owned and operated by the City
- **3. Organics Processing by others** haul City's organics to a 3rd party merchant facility where material will be processed and turned into a beneficial use product (either compost, soil amendment material or renewable energy via biogas)

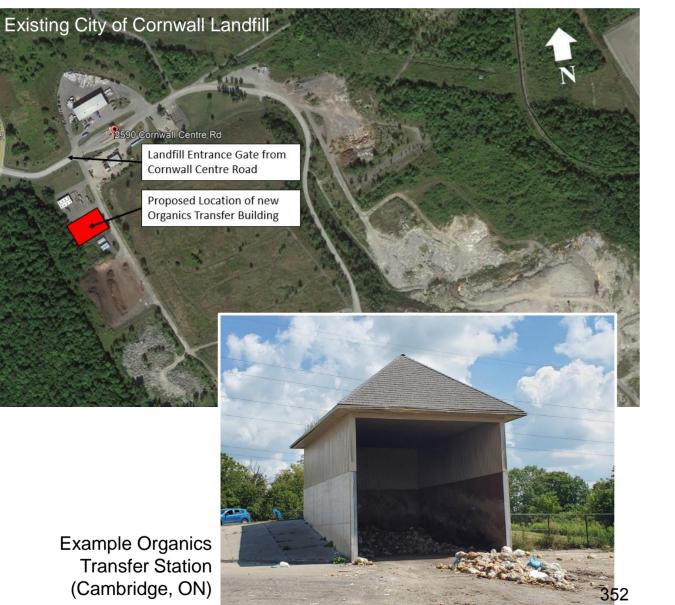
A Note about Co-digestion at Cornwall WWTP

- The Project Team reviewed the study from 2021 that recommended co-digestion, including importing significant feedstocks (Scenario C), which was focused on energy generation and did not have the benefit of being considered within a larger Master Plan exercise.
- We also understand that two grant applications to assist in funding the project were submitted, but were not successful.
- Enbridge also reviewed the ability to take on the RNG produced at Cornwall WWTP site, including construction of new local infrastructure but this assessment depends on 400 m³/h biogas production; current biogas output is ~125 m³/h.
- Self-processing of organics material by the City is a significant capital and operational cost investment without any assistance.
- Co-digestion was investigated as part of the long list of options for review under the Master Plan, but was NOT shortlisted due to the above constraints.

Evaluation of Alternatives - Organics

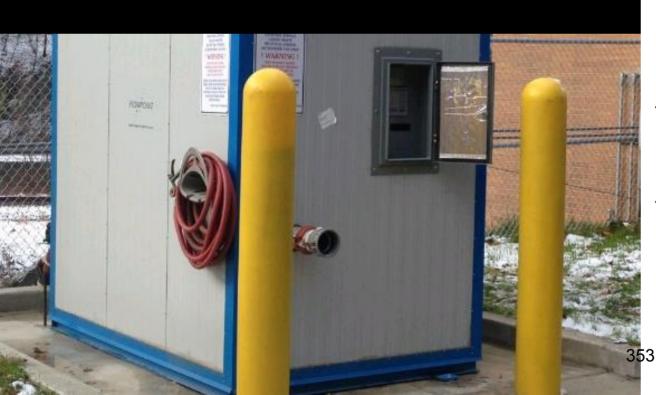
Alternative	Benefits	Drawbacks	Recommended Solution
1. "Do Nothing"	 No impacts on current O&M practices No additional infrastructure required 	 Decreasing available volume in City's landfill No beneficial use of material The City is required to implement an organics program in 2025 in order to achieve the City's sustainability and adhere to provincial legislation. 	No
2. Aerobic Composting	 Can consolidate green bin waste and leaf & yard waste material into one stream City generates beneficial use material, and potential revenue source 	 Additional infrastructure required including receiving, composting, storage and handling of composting material City would be responsible for managing, marketing and distribution the compost material to realize revenue from sale Significant capital and operating costs 	No
3. Organics Processing by Others	 Contract out processing of material – City only bears cost to move it Beneficial use material (created by others) 	 Additional infrastructure (new organics staging area at existing Landfill) Additional truck traffic outside City limits Dependent on 3rd party 	Yes

Organics Processing By Others



- Alternative 3: Organics Processing By Others
 - To implement and process organics at a 3rd party processing facility, a transfer station within the City limits would be required to be designed and constructed by January 2025.
 - Therefore, the project team recommendation is the City construct and transfer station adjacent to the current leaf and yard waste depot.

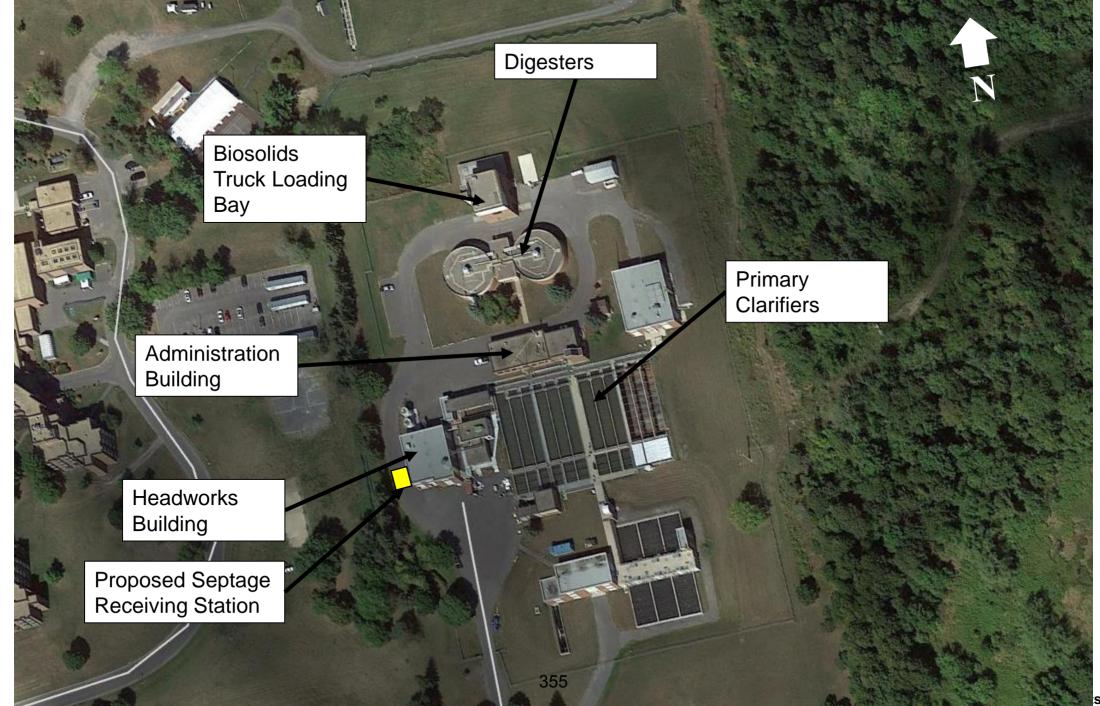
Septage



- MECP has previously provided direction to the City to stop current practice of depositing septage at landfill.
- In response, City has pro-actively undertaken a predesign of a new septage receiving station to be located at the Cornwall WWTP.
- The MCEA constitutes the construction of a new septage receiving station at the facility as undertaking 29a - Expand / refurbish / upgrade sewage treatment plant including outfall up to existing rated capacity where no land acquisition is required.
- Undertaking 29a is deemed exempt from the requirements of the Environmental Assessment Act (EAA) by the MCEA.
- Given this exemption the recommended solution will be presented.

Evaluation of Alternatives - Septage

- Septage
 - The Pre-design for the septage station at the Cornwall WWTP is complete
 - Intent is to provide a new receiving station of similar capacity as is currently provided at the current location at Cornwall landfill, to service existing customers and benefit City's tourism and development
 - The septage station will be designed to mitigate potential odours
 - Project team recommendation is to continue with this approach and complete design/construction of this septage receiving station as a separate project.





Social and Environmental Considerations

Social and Environmental Considerations

- In accordance with the EA Act the five components of the environment were assessed as part of the Net Effects Analysis and Comparative Evaluation of the Alternative Solutions in accordance with the MCEA Process. The five components of the environment are as follows:
 - Natural Environment
 - Built Environment
 - Social Environment,
 - Economic Environment and;
 - Cultural Environment
- We did not identify any potential effects to the Natural, Social or Cultural environments.
- The potential effects, proposed impact management measures, and resultant net effects associated with the Project are summarized in the following table.

Social and Environmental Considerations (cont'd)

Category	Potential Effects	Impact Management Measures	Net Effects	Proposed Monitoring Program
Natural Environment	Production of GHG emissions from the haulage of materials to a third- party facility.	Could stipulate that energy production is a requirement of contract (e.g. through anaerobic digestion), to offset GHG production.	No change in potential effect, unless stipulation of energy production in contract to offset GHG production.	No proposed monitoring program at this time, but could be written into contract
Built Environment	Construction of an organics processing facility at the City of Cornwall Landfill.	No impact management measures available.	No change in potential effect.	No proposed monitoring program at this time.
Built Environment	Diversion of waste (septage, biosolids and organics) away from the City of Cornwall Landfill extending its projected lifespan	No impact management measures required.	No change in potential effect.	No proposed monitoring program at this time.
Economic Environment	Aligns with provincial policies on the diversion of waste from landfills.	No impact management measures required.	No change in potential effect.	No proposed monitoring program at this time.



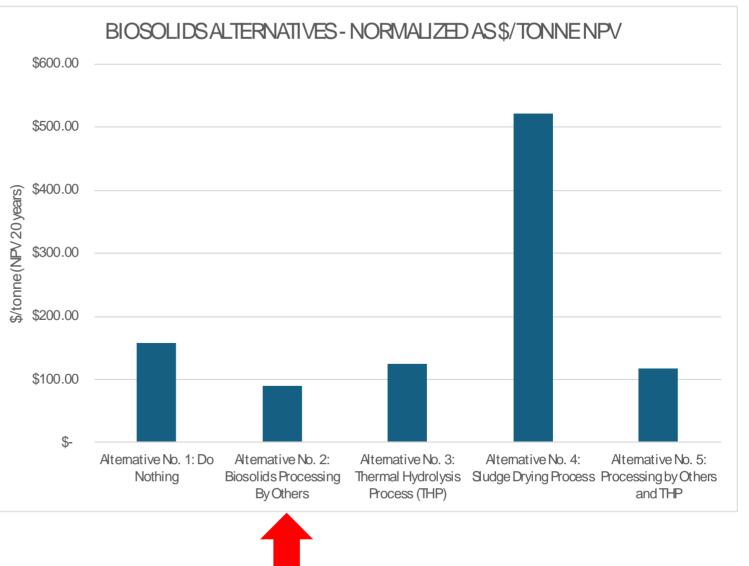
Financial Discussion

Financial discussion

- Two separate financial models were developed: one for biosolids, and one for organics
- 20-year study period for net present value analysis
- Using discount rate of 5% per year, escalation of 2% per year
- Biosolids tonnage at 4,000 tonnes per year, average
- Organics tonnage at 4,000 tonnes per year, average
- Using typical market rates for biosolids haulage and organics processing based on industry experience
- Using City's existing operational costs on Biosolids for "status quo" comparison
- Using solid waste handling costs for "status quo" comparison for organics

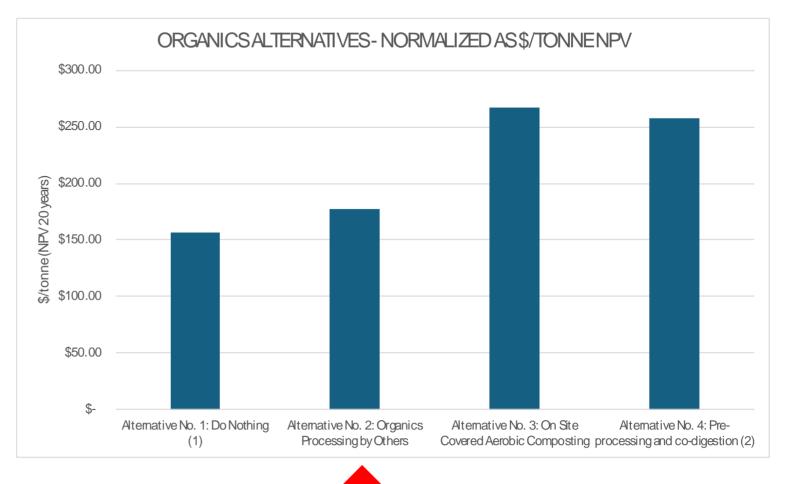
Financial Discussion - Biosolids

Alternative	CAPEX	OPEX (2024 dollars)
1. "Do Nothing"	"\$0"	\$210/tonne
2. Biosolids Processing by Others	\$0	\$120/tonne
3. Thermal Hydrolysis Process at Cornwall WWTP	\$10-15 M	Up to \$100,000/year
4. Sludge Drying Process at Cornwall WWTP	\$35 M	\$600,000/year
5. Hybrid Solution (Alternative 2 plus Alternative 3)	\$0 now \$10 – 15M at year 5	\$120/tonne now Up to \$100,000/year at year 5



Financial Discussion - Organics

Alternative	CAPEX	OPEX (2024 dollars)
1. Do Nothing (1)	\$0	\$210/tonne
2. Organics Processing by Others	\$1.5M (Transfer station)	\$150-170/tonne based on market rates
3. Aerated static pile (composting)	\$9 M	\$850,000 /year \$1.75M every 5 years
4. Pre- processing and co- digestion (2)	\$21M	\$505,000/year



Notes:

- (1) Technically not feasible since action must be taken by City to manage organics; only has been included for comparison.
- (2) Not short-listed; included for comparison.

Cornwall BOSMP - Presentation to Council I © 2024 GHD. All rights reserved.

Financial Discussion - Septage

Alternative	Description (1)	CAPEX (2)
1. Do Nothing	Discontinue service entirely.	\$0
2. Option A	Simple solution -Prefabricated enclosed receiving unit.	\$841K
3. Option B	Comprehensive solution -Highly robust fully enclosed option with site civil modifications.	\$1.8M
4. Option C	Minimalistic approach -Prefabricated unit, most cost effective solution.	\$673K

Notes:

- (1) Detailed description available in Appendix 'C' of the Master Plan.
- (2) Detailed financial breakdown, see pages 200-202 of the Master Plan



Recommended Path Forward

Recommended Path Forward



- Our preliminary findings for a recommended preferred alternative are as follows:
 - For **biosolids**, proceed with RFP to merchant vendors for haulage of material off-site, and for use as beneficial material (solid amendment, compost bulking, etc.).
 - For organics:
 - proceed with design and construction of a new organics staging area at existing landfill site; and,
 - Proceed with RFP to merchant vendors for haulage of organics material from new organics staging area.
 - For septage, proceed with project to complete septage receiving station at Cornwall WWTP.

Closing Remarks and Next Steps



- We have integrated feedback and comments received to date from City team and Public Information Center into the final draft Master Plan report.
- Master Plan draft currently available for public review and comment for 30 days per Municipal EA process.

Andrew Smale, P.Eng. Project Manager GHD Limited 179 Colonnade Road South, Suite 400 Ottawa, ON K2E 7J4 andrew.smale@ghd.com



*** Thank You**





The Corporation of the City of Cornwall Regular Meeting of Council Report

Department:	Planning, Development and Recreation
Division:	Building and By-law
Report Number:	2024-113-Planning, Development and Recreation
Meeting Date:	June 25, 2024
Subject:	Parking Program Review

Purpose

The Division has undertaken a policy review of the parking program following concerns brought forward by constituents and the CAO & Mayors Office. Operations identified the need to address the Parking Program. The City conducted an in-depth review of 21 Municipalities' Parking Programs and identified trends and best practices moving forward within the field.

Recommendation

That report number 2024-113- Planning, Development and Recreation be approved as presented.

Financial Implications

The cost to alter the machines' processing to return to Pay and Display parking is \$3,420.00.

Strategic Priority Implications

Current Implications:

- Pillar 2: Community Connections
 - Foster a trusted and engaged City where residents and businesses thrive by being welcomed and safe.



In addition to the Current Implications;

- Pillar 3: Achieve Net Zero by 2050
 - Respond to emerging environmental/climate impacts and adaptation needs with supportive and forward-thinking policies and procedures
- Pillar 4: Cornwall- Future Ready
 - Transform the growth of the City through leading-edge infrastructure

Background / Discussion

Paid Parking is a critical part of the City's infrastructure, which is often overlooked. The benefits of a parking program ensures that parking spaces are available to motorists for their use while visiting our downtown areas, while also encouraging turn-over for local businesses within the community. Revenue generated from the program is re-invested into the City, primarily to maintain the City parking lots such as; resurfacing, repairs and snow removal.

The Building and By-Law Division reviewed 21 Municipalities in Ontario, with 11 being comparable to the Citys' population. While reviewing these municipalities it became clear that the parking industry trend in Ontario is moving towards a modernization of Parking Programs, removing cash services, and increasing the use of mobile applications (APPS) and QR Codes.

The review of the programs demonstrated that 81% of Municipalities have phased out of Pay and Display Parking and have moved towards Pay by Plate Parking.

In 2018 the City of Cornwall phased out of Pay and Display Parking and implemented the current parking model; Pay by Plate. This parking model allows for constituents and transients to pay for parking using their licence plate (by machine or APP) and not have to return to their vehicle to display a permit.

The CAO and Mayors Office, as well as operations have received frequent complaints regarding errors when entering licence plates, the functionality of the machines, and the failure of the coin slots on the machines. When reviewing the data for total machine error (machine being inoperable) it is evident that the machines with the most activity are the ones that are down more frequently. Additionally, following this review, the By-Law Services team has implemented a more pro-active approach to ensure the functionality of the machines at all times.

The review of other municipality parking payment methods proved that they are tending towards electronic payment, which is consistent with staff's observations



of our parking clients' behaviours. Since 2019 (omitting 2020-2021 COVID-19 years, since the parking program was suspended during that period), the machines coin usage decreased by fifty-two percent (52%) and use of tap payments increased by thirty-seven percent (37%). Additionally, we have a steady trend up for the APP usage.

The City engaged with the DBIA about the concerns that the City was experiencing with complaints related to user experience with the parking machines, mostly due to user error related to entering a licence plate correctly when paying for a parking session. The DBIA surveyed their members with the following survey:

The City currently utilizes Pay-By-Plate for its parking machines. That is, the user pays for a parking session by entering their licence plate number (correctly) and paying a fee. There have been many instances of incorrect licence plates being entered by users. Thus, resulting in an invalid parking session, which could lead to a possible fine.

Therefore, the City is proposing to remove the requirement to input plate number which eliminates the possibility for user error frustration and fines. The user would validate their parking session by paying a fee at the machine, taking the receipt stub from the machine, and displaying it on the dashboard of their vehicle. The City would also introduce, in addition to the HOTSPOT application, a QR code payment options at all payment locations.

Question: Would you be in favour of Pay-and-Display machines in the City of Cornwall?

Yes, I would like to see plate input requirement removed, to avoid user errors.

No, I would like the payment approach and machines requirement to remain as is.

The results of the survey were as follows:

18, YES, in favour of Pay-and-Display

4, NO, remain status quo

Ultimately, Operations is proposing to move towards a cashless system within the next five (5) years if appropriate. The trends support moving towards strict use of QR Code or APP for payment of parking. To further support this initiative,



the City recently learnt that the 3G Network will no longer be supported by the end of 2025, therefore, further upgrades will be required to our parking machines to update technology. This will most likely require a \$30,000 - \$35,000 investment. As such the City may want to consider accelerating the need to review a cashless system. In the interim, Operations will be returning to the Pay and Display model of Parking and introduce the QR Code payment in order to address the active concerns within the community. The goal is to encourage people to use the APP and the soon to be implemented, QR Codes, rather than displaying a paper in the dash. The proposed short term parking options for users of the parking program will be:

- Machine (Pay and Display must place ticket on dash of vehicle): Pay by coin or credit card;
- APP, HotSpot; and
- QR Code (online platform).

Since the time of drafting this report, an incident occurred in which our software provider did a software update that appears to have caused a malfunction on several parking machines on Pitt Street. It was decided to provide free parking for on-street parking on Pitt Street only, while this matter is being resolved. Hopefully this will have been resolved by the time of this Council Meeting, Administration is working with the provider to ensure that the matter is rectified in a timely manner.

Administration worked with the Communications Team to inform the Public of this issue and provided notice on the City's social media platforms. Once the issue is resolved we will work again with the Communications Team to get the message out to the Public.

Accessibility Impact

None for current alterations. Additional signage and alterations to signage will conform to AODA standards.

Parking Program Review April 2024

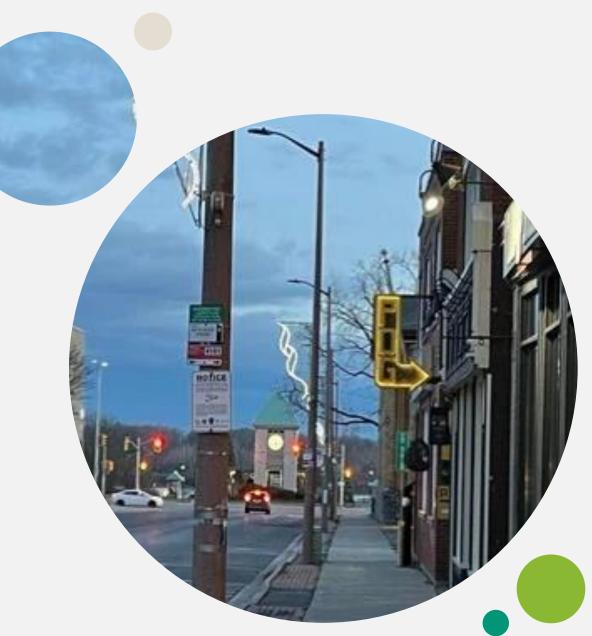
Building & By-Law Division



STR TO

Agenda

- Timeline & History
- Current Issues
- Research
- Next Steps
- Closing



Timeline of the Current Parking Program



Parking Working Group

- 15 Minute Stalls
- Pay-Per-Hour Service
- Single Use Overnight Service
- Day-Use Permits
- 24 Hour Permits
- Lot Leases
- New Lots/Spots
- Pay by Plate Machines
- Parking Signage

Glen Grant- Eric Bergeron- Todd Bennett Tracey Bailey- Mark Boileau-Bernadine McEvoy-Robertson



Current Issues

- CAO & Mayors Office
 - Licence Plate entry
 - Machine not working
 - Business Concerns
- Operations
 - Not enough parking stalls
 - Parking Permits high demand
 - Machine not working
 - Coins not working





Machine Errors

Total Error: Machine out of Order

		Total and Partial Error Count	Event Count	Total Error Count	
	2019	11	116	2	
	2020	11	183	2	
	2021	117	750	11	
Urquhart Lane	2022	1,606	10,574	60	
	2023	1,671	13,624	57	
	2024	409	3,195	26	
	Total	3,825	28,442	158	
	2019	103	6,750	94	
	2020	1,093	37,975	542	
	2021	1,321	31,659	66	
Water Street Boat launch	2022	1,028	8,384	27	
	2023	1,488	13,382	9	
	2024	10	98	2	
	Total	5,043	98,248	1,335	
	2019	169	1,048	15	
	2020	23	412	3	
	2021	239	1,836	71	
W-BROWN	2022	1,897	12,870	66	
	2023	2,268	16,613	245	
	2024	672	4,447	103	
	Total	5,268	37,226	503	
Total		68,999	575,261	5,189	

8/8/2024 An	nual Review
--------------------	-------------

		Total and Partial Error Cour	t Event Count	Total Error Count
	2019	2	7 335	12
	2020	3	9 210	
	2021	25	5 1,049	54
28 Second Street East	2022	1,62	6 10,656	64
	2023	1,72	14,383	73
	2024	41	4 4,847	23
	Tota	4,08	31,480	226
	2019	5	2 421	21
	2020		8 140	1
	2021	13	2 791	42
29 Second Street East	2022	1,53	5 10,347	39
	2023	1,68		82
	2024	31		18
	Tota	3,72	1. 1. 1. 1. 1.	
	2019	2		1
	2020	1	2000	4
	2021	10		27
Assaly Lane	2022	1,69		90
	2023	1,73		65
	2024	39	and the second second	10
	Tota			197
	2019	3		12
	2020	1		2
	2021	9		3
SINGOLOT	2022	1,64		
	2023		1,460 13,282	
	2024	41		74
	Tota	3,66		189
	2019	7		34
	2020		3 639	5.
	2021	11		25
City Hall	2022	1,64		
	2023	1,64		56
	2024	38	1	11
	Tota	3,85		
	2021	10		
	2022	1,65		
Cotton Mill1	2023	0000	and the second se	
	2024	40		
	Tota			
	2021	9		
	2021	1,26		
Cotton Mill2	2022			
	2023			
	Tota			

		Total and Partial Error Count	Event Count	Total Error Count
	2019	9	475	1
	2020	341	1,053	166
	2021	120	1,593	23
First and Pitt	2022	1,644	10,833	68
	2023	1,621	13,302	51
	2020	7	529	2
	2021	82	717	5
Library Lot	2022	1,571	10,348	39
	2023	1,542	13,452	22
	2024	371	3,111	. 10
	Tota	3,588	28,888	79
	2019	10	417	2
	2020	51	401	
	2021	156	770	50
Pitt First and Second	2022	1,671	10,985	77
	2023	1,759		
	2024			
	Tota	4,041		
	2019	8		
	2020	12	203	
	2021	250		
Pitt Third and Fourth	2022	1,626		
	2023	1,663		
	2024	314		
	Tota			
	2019	499		
	2020	25		
	2021	99		
SECOND STREET WEST	2022			
	2022	1,901		
	2023			
	Tota			
	2021	353		
	2021	1,928		
Sydney Street	2022			
	2023	402		
	Tota			
	2021	4,333		
	2021			
Third Chrack Week				
Third Street West	2023	1,879		
	2024			
	Tota	3,995	28,214	288

2019	Yearly Revenue	Total Coin	Total Tap
Machine	Pay-by-Plate	Use	Use
Pitt Street (City Hall)	5,447.84	4,775	622
Pitt Street (Esca)	2,294.21	1,541	305
Pitt Street (George Assaly Lane)	19,985.79	13,522	2,409
Second Street West (Court House)	13,020.80	7,629	1,684
Second Street East (Church) 28	12,371.73	8,710	1,248
Second Street East (Library) 29	8,255.77	5,125	1,281
Pitt Street (Axis)	6,497.39	4,407	719
Pitt Street (Uraquart Lane)	7,052.42	3,746	1,770
Library Parking Lot	16,813.25	10,921	1,590
Warrington Brown Parking Lot	36,564.84	17,724	4,341
Bingo Lot South Parking Lot	26,562,77	9,607	1,815
Total Pay-By-Plate Monthly Revenue	\$ 154,867.81	87,707	17,784

	Yearly Revenue		Total Coin	Total Tap
Machine	Pay-by-Plate		Use	Use
Pitt Street (City Hall)	3,309.30		1,372	877
Pitt Street (Esca)	3,205.43		624	811
Pitt Street (Third Street West)	12,116.15		1,783	1,959
Pitt Street (George Assaly Lane)	19,532.45		5,872	4,357
Second Street West (Court House)	9,367.07		2,528	1,527
Second Street East (Church) 28	8,139.24		2,476	1,714
Second Street East (Library) 29	4,798.53		1,228	1,109
Pitt Street (Jack Lee's)	14,658.88		3,971	3,245
Pitt Street (Uraquart Lane)	22,518.28		6,042	4,952
Pitt Street (Axis)	4,222.89		1,126	1,002
Sydney Street	9,275.59		2,273	1,770
Cotton Mill 1	5,274.98		1,609	1,419
Cotton Mill 2	1,816.96		435	296
Boat Launch	19,486.05		414	1,347
Library Parking Lot	16,972.45		3,544	3,198
Warrington Brown Parking Lot	43,499.57		11,176	8,437
Bingo Lot South Parking Lot	15,923.30		2,220	1,937
			48,693	39,957
Total Pay-By-Plate Monthly Revenue	\$ 214,117.12			

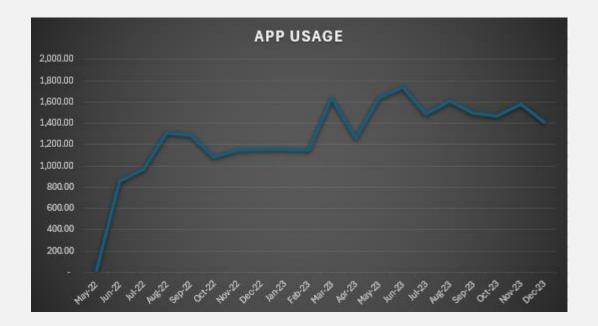
Pay by Plate Machines

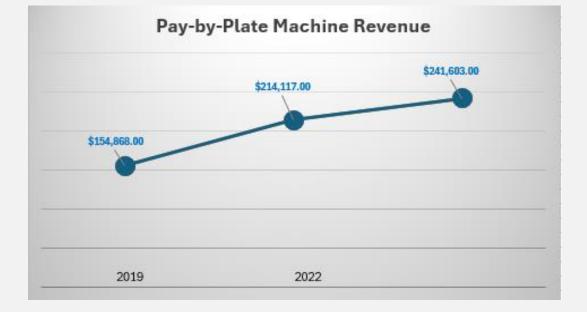
Yearly Revenue		Yearly Coin	Y	early Tap
Pay-by-Plate		Use		Use
3,718.91		1,240		1,154
3,779.50		615		1,221
15,441.82		1,956		2,611
22,862.30		5,423		5,666
12,225.96		2,442		2,146
9,644.16		2,896		1,851
6,227.66		1,280		1,147
18,106.39		3,681		4,337
22,829.95		5,222		5,020
4,210.72		949		1,055
12,095.16		1,931		2,558
5,508.83		1,148		1,546
2,418.34		477		509
17,124.45		161		1,366
21,670.60		4,073		4,010
47,582.85		9,148		10,445
16,155.82		2,780		1,780
\$ 241,603.42		45,422		48,422
	Pay-by-Plate 3,718.91 3,779.50 15,441.82 22,862.30 12,225.96 9,644.16 6,227.66 18,106.39 22,829.95 4,210.72 12,095.16 5,508.83 2,418.34 17,124.45 21,670.60 47,582.85	Pay-by-Plate 3,718.91 3,779.50 15,441.82 22,862.30 12,225.96 9,644.16 6,227.66 18,106.39 22,829.95 4,210.72 12,095.16 5,508.83 2,418.34 17,124.45 21,670.60 47,582.85 16,155.82	Pay-by-Plate Use 3,718.91 1,240 3,779.50 615 15,441.82 1,956 22,862.30 5,423 12,225.96 2,442 9,644.16 2,896 6,227.66 1,280 18,106.39 3,681 22,829.95 5,222 4,210.72 949 12,095.16 1,931 5,508.83 1,148 2,418.34 477 17,124.45 161 21,670.60 4,073 47,582.85 9,148 16,155.82 2,780	Pay-by-Plate Use 3,718.91 1,240 3,779.50 615 15,441.82 1,956 22,862.30 5,423 12,225.96 2,442 9,644.16 2,896 6,227.66 1,280 18,106.39 3,681 22,829.95 5,222 4,210.72 949 12,095.16 1,931 5,508.83 1,148 2,418.34 477 17,124.45 161 21,670.60 4,073 47,582.85 9,148 16,155.82 2,780

Quick Stats

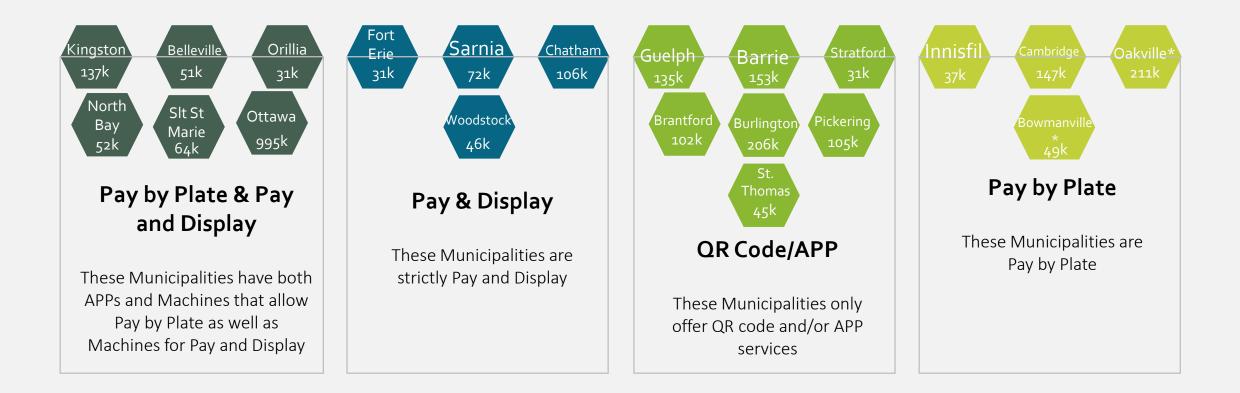
APP USAGE

Pay by Plate Machine Revenue





RESEARCH



Results of Research

- 48% Of Research is comparable to

Cornwall Population

- **80%** of these Municipalities are _ phasing out of Pay and Display
- Modernization of Parking Program;
- **81%** are Phasing out of Pay and Display Parking;
- Removing Cash Parking; and
- Implementation of QR Code & APP usage.



APPs in Use

P			(HONK	
HotSpot	PayByPhone	Passport	HONK	
4.6 Apple	4.8 Apple	4.7 Apple	4.5 Apple	
3.7 Google	4.2 Google	3.3 Google	4.3 Google	
6 Municipalities	1 Municipality	4 Municipalities	5 Municipalities	

21 Municipalities researched

4 only do Pay and Display

1 has City System for Pay by Foot

Parking Lot Stalls

		Day Permit Stalls	24 Hour Permit Stalls	Pay-By-Plate Stalls	City Staff Stalls	Overnight Stalls	Police Stalls	EV Charging Stations	Meter Stalls
DOWNTOWN BIA	Library Lot	71	3	16					
	Warrington Brown	36	5	43	11	2			
	Bingo Lot	53		15					
	Melody Music	6	3						
	Urquart Lane			10					
	George Assaly			12					
	Justice Lot (Staff Parking)		4	7	97		19	2	
	Total	170	15	103	108	2	19	2	
STAFF OVERFLOW	St. Columban's Church				34				
	(Staff Parking)								
					34				
WATER STREET	Total								
	Si Miller Lot								
	Si Miller Overflow	14							
		54							
MONTREAL ROAD	Total					0	1		0
	Police Annex		4			2	1		9
	Vogue Lot	4	2						16
	Total	37	6			2	1		25
	Overall Total		21	103	142	4	20	2	25

Parking Stalls Review

Total Stalls

- City currently has 575 stalls available (parking lot stalls)
- 142 Stalls are City Staff Parking- Daytime
- 20 Stalls are Police Staff Parking- Daytime
- 279 Stalls are Permit Parking
- REMAINING FOR PUBLIC= 134 Stalls-Weekday
- Downtown Permit Stalls (July '24)
 - Daytime Available Stalls Downtown=168
 - Normally Cap = 179

 (higher because some permits are not used every day; i.e.: hybrid positions and 21 library staff that rotate working hours)
 - Current Permits issued = 192
 - Current Overage = 13 (due to Arts Building)
 - Waitlist = 0 (fluctuates)



Options for Signage

This is completely reliant on the decision of the Parking Machines.

All Signage will be AODA compliant and Bilingual.



Options for Machines

Pay & Display with APP

- Changing the Machines to allow for Pay and Display
 - \$3420 total
- Keep HotSpot
- Increase Education

What this means for Enforcement:

- Verifying payment by plate (through the APP);
- Verifying payment by the Dash for P&D
 - Continued Machine Maintenance

Pay Per Plate with APP

- Continue Status Quo
- Review Signage on Machines to facilitate use
- Increase Education
- Keep HotSpot

What this means for Enforcement:

- Verifying payment by plate (through the APP)
 - Continued Machine Maintenance

387

QR Code with APP

- Remove all Machines/Meters
- Add QR Codes to all Parking areas (posts and signs installed in areas deemed necessary)
- Keep HotSpot
- Increase Education

What this means for Enforcement:

- Verifying payment by plate (through the APP)

/8/2024

Summary



Current System vs Trends

The current system is in-line with the Trends in Ontario Parking Programs.



Processing Complaints

The complaints for Parking should be received and addressed by the Building and By-Law Division. There are systems in place to address the concerns.



Next Steps

City will be changing to Pay and Display model with the implementation of QR Codes and continued encouragement to use the APP and QR Codes.

The City commits to conducting a broader review of the future of our Parking Program.



The Corporation of the City of Cornwall Regular Meeting of Council

Report

Department:	CAO
Division:	Choose a Division
Report Number:	2024-64-CAO
Meeting Date:	August 13, 2024
Subject:	Strategic Priorities Update

Purpose

To provide Council with an update on the progress of the strategic priorities approved on January 22, 2024.

Recommendation

That Council receive report 2024-64-CAO.

Strategic Priority Implications

The purpose of report 2024-64-CAO is to provide Council with an update on the progress of the strategic priorities. All priorities outlined throughout the body of this report support Council's overarching mission and vision statement:

Vision: Cornwall is a diverse and progressive community where residents and partners feel safe, welcomed, and enjoy a high quality of life supported by access to financially responsible and sustainable municipal services and infrastructure.

Mission: To foster vibrant, inclusive, responsible, and forward-thinking community services for residents and future generations.

Background / Discussion

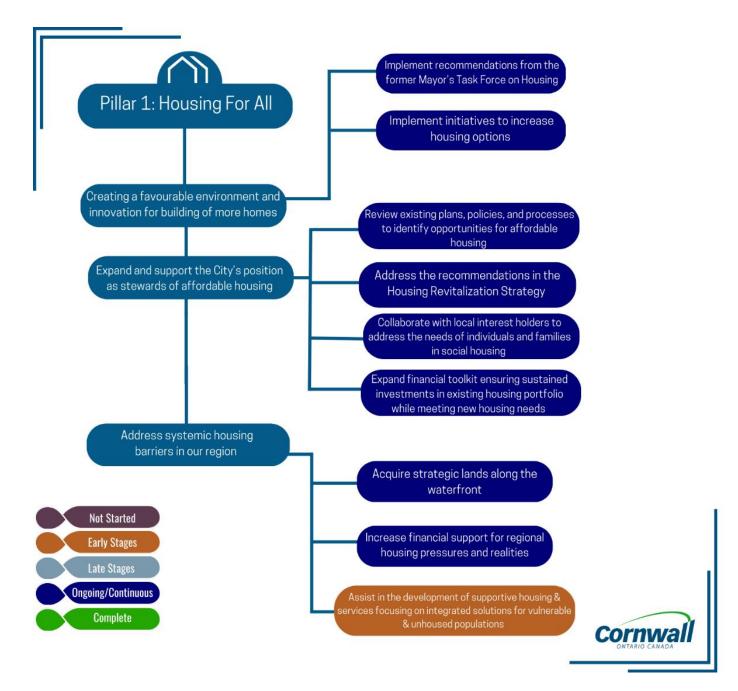
On January 22, 2024 Council approved a new set of strategic priorities, with an updated vision statement being approved on March 26, 2024.



Execution, monitoring and measuring these specific subsets is pertinent to success. Ensuring a well-balanced approach, balancing core service, financial implications and keeping the mission and vision at the forefront of Council decisions is also necessary.

The purpose of this report is to provide Council with a six-month update. A copy of the strategic priorities has been attached to this report.





Pillar 1: Housing for All

Housing is a fundamental human need and a key determinant of health, wellbeing, and social inclusion. Municipalities play an important role in housing and collaborate with other levels of government, non-profit organizations, private sector partners, and community interest holders to address diverse housing

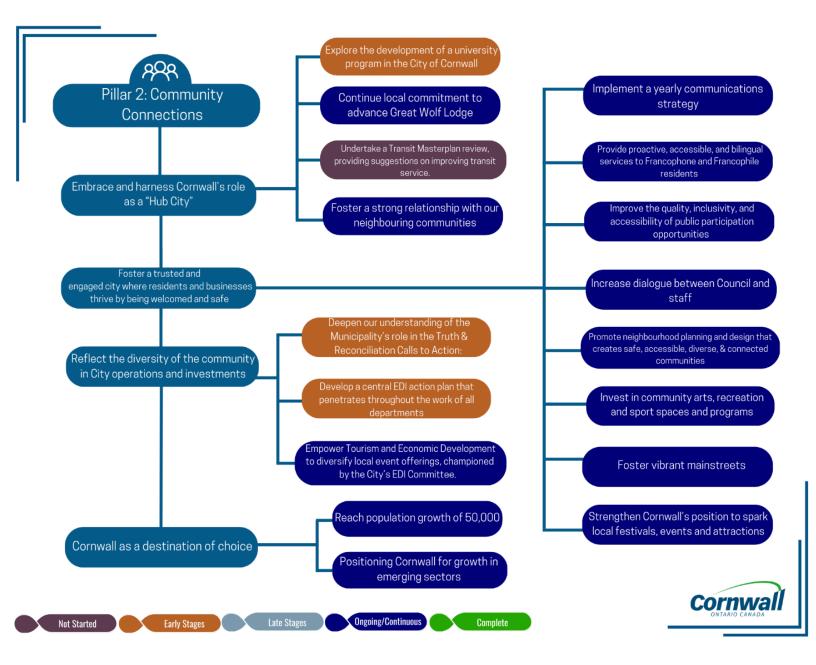


needs for residents. By prioritizing housing for all, the City of Cornwall contributes to building a livable, sustainable, and inclusive community.

Notable Pillar Progress:

- Moving forward with housing developments:
 - Massey Commons: 24 Units
 - Pitt Street: 27 Units in Phase 1
 - Morris Glen: 17 Units
- Moving forward on the recommendations set out in the Housing Revitalization Strategy to provide affordable housing units suitable for families and individuals in all stages of life and of varying financial standing.
- Long Term Housing Development Plan completed in June 2024. This plan provides a roadmap for housing development considerations over the next 10 years.
- Advocacy on housing to senior levels of government and interest holders (including MMAH, CMHC)
 - CMHC funding secured to bring energy efficiency of 25% to 400 units, including:
 - Replacing the aging, conventional gas hot water heating system with high-efficiency tankless water heaters at a 45-unit property in SDG.
 - Provide heat pumps to replace forced-air, gas furnaces at up to six
 (6) family housing communities located in the City of Cornwall and SDG.
 - Convert gas-fired hot water tanks at 195 family housing units, throughout the City of Cornwall and SDG, with high-efficiency tankless water heaters
 - An accessibility audit of key senior housing properties to guide aging at home improvements for a minimum of 80 units of seniors housing located in the City of Cornwall and SDG.







Pillar 2: Community Connections

Municipalities are the level of government closest to the people and play a vital role in fostering community connections and quality of life for residents, businesses and visitors. The City of Cornwall provides essential services and infrastructure that support the social, economic and environmental well-being of such as transit, recreation, culture, public health and safety.

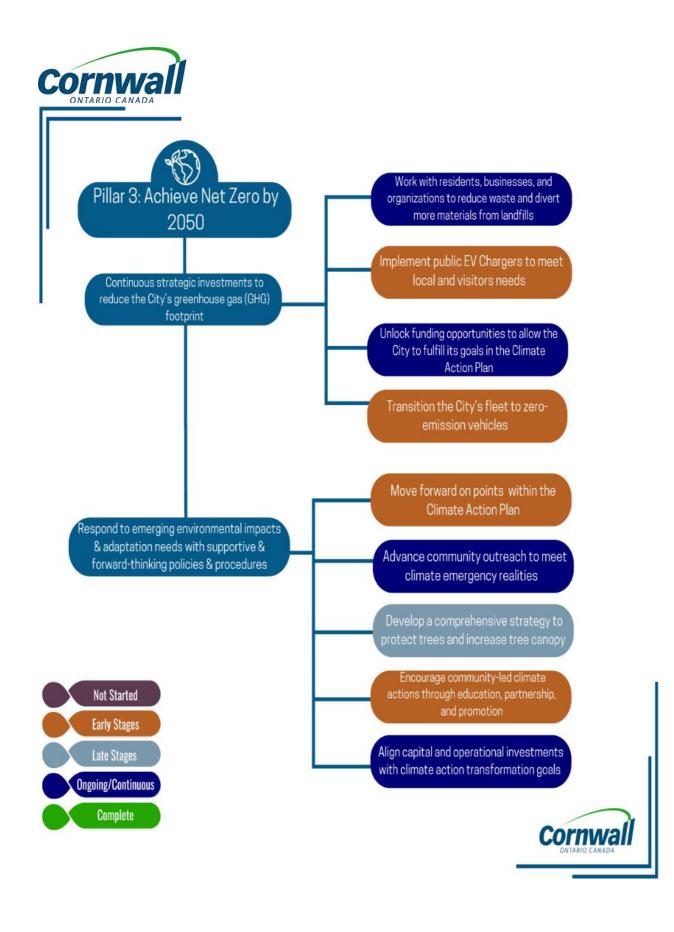
Staff continue to engage with partners to identify and address local needs and priorities, promote civic participation and inclusion, and celebrate the unique identity and heritage of the City. By prioritizing these elements, the entire community helps to foster a sense of belonging and pride and enhance Cornwall's attractiveness and competitiveness as a place to live, work, learn and visit.

Notable Pillar Progress:

- The Institute for Institutional Development at the University of Ottawa is working on a business case for post-secondary courses and programs to be offered in Cornwall.
- After the release of francophone service review, the City began to provide council agendas, minutes and memos in both official languages. The City is engaging with francophone-community to discuss the results of the review, is recruiting bilingual staff and ensuring all communications to employees is bilingual.
- Discussions for a dog park and beach are underway with OPG
- Reconstruction of the tennis courts at Broadview Park into pickleball courts will begin shortly.
- A Multi-Outdoor Sports report was brought to Council in February 2024.
- An RFP for the Transit Masterplan will be brought to Council shortly.



- The City is a partner with Rachel's Kid's Park of Hope, which will provide a fully inclusive playground where children of all ages and abilities can safely interact and socialize without barriers and accessibility challenges. The park is slated for opening later this summer.
- City staff continue to work with representatives from Great Wolf Resorts to advance the project in the Cornwall Business Park.
- Members of Council completed a site visit of City facilities on August 8, 2024, including:
 - Cornwall Police Headquarters
 - Cornwall Transit
 - Water Purification Plant
 - Glen Stor Dun Lodge
 - Cornwall SDG Paramedic Services
 - Municipal Works





Pillar 3: Achieve Net Zero By 2050

Achieving net zero by 2050 is a crucial goal for the City, as it reflects a commitment to sustainability and climate action. Net zero means balancing greenhouse gas emissions with removals, either by reducing our sources or enhancing our carbon sinks. By doing so, the City of Cornwall contributes to the global effort to limit the rise in average temperature and avoid the worst impacts of climate change. The City has already taken steps to reduce its energy consumption, enhance biodiversity, increase its renewable energy supply, and improve its waste management. Many of these efforts are outlined in the City's Climate Action Plan.

Staff also support residents and businesses to adopt sustainable practices through programs and education opportunities.

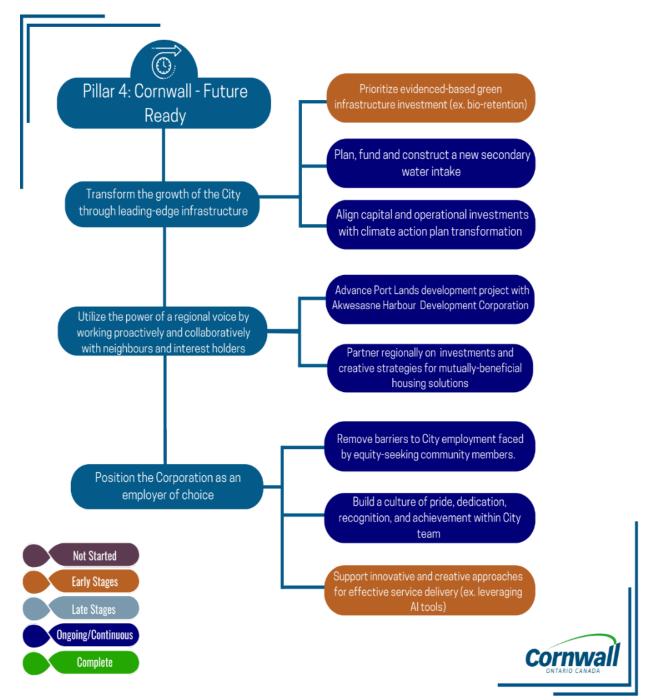
Notable Pillar Progress:

- The City is in the process of reviewing its procurement documents to advance net zero objectives.
- The City is in position, as it acquires new fleet, to advance the purchase of e-vehicles.
- Staff are developing an electric charging station strategy for City fleet and community needs.
- Staff are working with non-profit Clean Air Partnership (lead) on an FCM grant application for a feasibility study for a Home Energy Loan program.
- As approved by Council in February 2024, the City is moving forward with a clear bag waste collection policy. The Waste Management Department has consulted with retailers of garbage bags to make them aware of the upcoming changes so they can adjust their inventory accordingly.
- Staff have begun to work on achieving green standards for the community housing portfolio, including:
 - Morris Glen:17 units with heat pumps.
 - Pitt Street: 27 units all with heat pumps



- Massey Commons: all units with individual heat pumps.
- Iroquois Housing Location: 64 high efficiency cooking stoves with smart elements have been ordered.
- Energy Efficiency Day 2024 (October 2024) will include an in-person event with panelists and round-table discussions. Guest speakers will include a Passive House builder, and a local energy advisor.
- Funding application submitted to FCM for Cooling Vulnerable Neighbourhoods, Part 2 project.
- An urban tree inventory has been completed. Staff are also wrapping up Phase 1 of the Tree Protection By-Law process.







Pillar 4: Cornwall - Future Ready

The City of Cornwall is committed to investing in infrastructure that will support the well-being and resilience of its residents and businesses now and in years to come. The City of Cornwall strives to create a livable and prosperous community for its current and future generations. By pursuing projects that enhance and maintain assets, the city is demonstrating its leadership and vision in sustainability and resilience.

Notable Pillar Progress:

- The Municipal Works Department is in the design phase and ECA amendment phase of constructing a transfer station for Source Separated Organics (SSO). The station will allow for curbside vehicles to deposit SSO & be loaded into a larger vehicle to a third-party processing facility. This system minimizes the GHG emissions generated through transportation of SSO to a processing facility.
- Staff continue to speak with senior levels of government regarding the need for funding for the secondary water intake.
- The Mayor's Task Force on Medical Recruitment officially launched on July 8, 2024. The goal for this initiative is to complete a review, engagement and provide a modernised health professional recruitment program for the City of Cornwall in collaboration with Akwesasne and the United Counties of Stormont, Dundas and Glengarry and health partners within the region.
- Staff have issued an RFP for the creation of a Truth and Reconciliation Action Plan.

City of Cornwall Strategic Priorities



TERRITORIAL ACKNOWLEDGEMENT

We acknowledge that we are gathered on the traditional territory of the Haudenosaunee peoples, the Mohawks of Akwesasne, the original keepers of this land. As settlers, we are grateful for the opportunity to meet here, and we thank all the generations of people who have taken care of this land for thousands of years.

Table of Contents

LE1 ΟU OU

PIL

TTER FROM OUR MAYOR
IR VISION AND MISSION
IR FOUR STRATEGIC PILLARS
LAR 1: HOUSING FOR ALL
1.1 An Environment for Housing
1.2 Positioning Our City
1.3 Addressing Barriers
LAR 2: COMMUNITY CONNECTIONS
2.1 Cornwall as a "Hub City"
2.2 Fostering a Trustworthy and Engaging City
2.3 Reflecting the Diversity of Our City
2.4 Position Cornwall as a Top Destination
LAR 3: ACHIEVE NET-ZERO BY 2050
3.1 Reducing Cornwall's Greenhouse Gas (GHG) Footprint.
3.2 Response to Climate Change
LAR 4: CORNWALL – FUTURE READY
4.1 Transforming Cornwall's Growth
4.2 Using The Power of Our Regional Voice
4.3 Employer of Choice

PIL

PIL

PIL

Version 2024.1

Letter from our Mayor

As your Mayor, I am pleased to present the 2022-2026 City of Cornwall Strategic Plan.

This plan is the direction forward that has been set by Council for this term. It is our guiding document, based on the unique needs our of community.

Our community has changed, which means that our challenges and needs have changed as well. While there are more urgent needs to address, we must also ensure that we continue to plan for the future and the long term needs of our community as well.

It is my feeling that this strategic plan strikes that balance. While it looks at our immediate priorities, we are also establishing a strong foundation for our future.

I would like to thank Council and administration for their continued work on this plan, as we look to implement it over the coming years.

Justin Towndale Mayor City of Cornwall





City of Cornwall Strategic Priorities 2022-2026

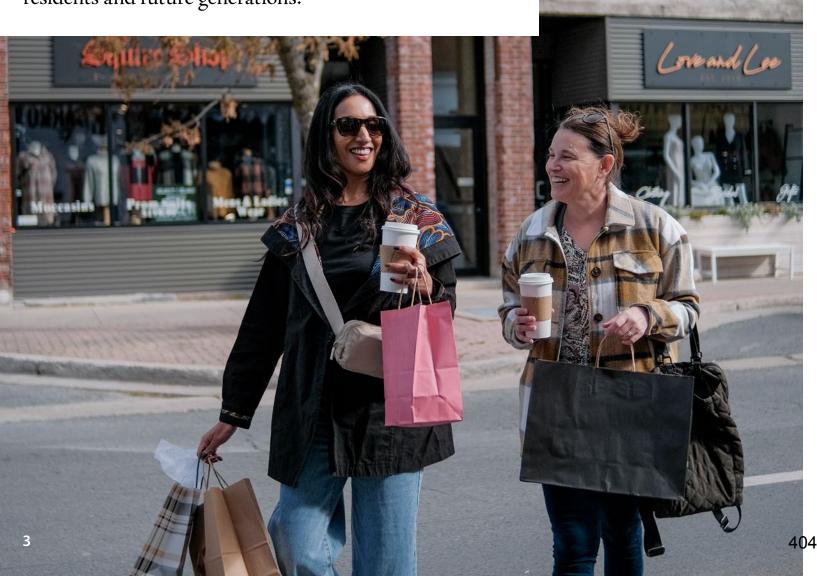
Our Vision and Mission

VISION

Cornwall is a diverse and progressive community. Residents and partners feel safe, welcomed, and enjoy a high quality of life. Everyone is supported by access to financially responsible and sustainable municipal services and infrastructure.

MISSION

Our mission is to foster vibrant, inclusive, responsible, and forward-thinking community services for current residents and future generations.







Strategic Priorities Pillar 1: Housing for All

AN ENVIRONMENT FOR HOUSING

OUR STRATEGY

We will create an environment that enables innovation to build more homes for residents of all ages, incomes, and demographics to enjoy.

OUR OPERATIONS

- Housing while emphasizing the following points:
 - each space.
 - Build more public housing with a commitment of funds.
- B. Besides the recommendations from the Task Force on Housing, we will also implement

POSITIONING THE CITY

OUR STRATEGY

As Cornwall expands, we will support our City's position as stewards of affordable housing.

OUR OPERATIONS

- housing.
- **B.** Address the recommendations in the Housing Revitalization Strategy.
- and families in social housing.
- **D.** Expand our financial toolkit to make sure our investments are sustained in existing housing portfolios, while also meeting new housing needs.



A. We will continue to implement recommendations from the former Mayor's Task Force on

Reviewing building heights and density considerations to create housing that works for

initiatives to reduce residential and commercial vacancies to increase housing options.

A. Review our existing plans, policies, and processes to identify opportunities for affordable

C. Work collaboratively with locals in the neighbourhood to address the needs of individuals

1.3 ADDRESSING BARRIERS

OUR STRATEGY

We must address the systemic housing barriers in our region and City. These include financial and social barriers, as well as public lands ownership and legal limitations.

OUR OPERATIONS

- **A.** Acquire land in strategic locations along the waterfront.
- **B.** Increase our financial support for regional housing pressures and the realities they bring.
- **C.** Facilitate and support the development of supportive housing and services, with a focus on integrated solutions for our vulnerable and unhoused residents.



City of Cornwall Strategic Priorities 2022-2026





Strategic Priorities **Pillar 2: Community Connections**

CORNWALL AS A "HUB CITY" 2.1

OUR STRATEGY

Embrace and Harness Cornwall as a "Hub City."

OUR OPERATIONS

- **A.** Explore the development of a university program in Cornwall by working side-by-side with local interest holders, and engaging with university officials.
- **B.** Continue our commitment to advance Great Wolf Lodge resort.
- **C.** Construct a Transit Masterplan review to provide recommendations on improving our transit service. This review will evaluate:
 - 15-minute accessibility.
 - Sunday Bus Service.
 - Offering Regional Bus Services.
- benefits, and a regional voice on issues of concern and expand shared services.





D. Foster a strong relationship with our neighbouring communities by collaboration, mutual

FOSTERING A TRUSTWORTHY AND ENGAGING CITY

OUR STRATEGY

Foster a community where residents and businesses trust our City, feel engaged, and thrive by being welcomed and safe.

OUR OPERATIONS

- **A.** Implement a yearly communications strategy.
- **B.** Provide services to Francophone and Francophile residents that are proactive and accessible.
- C. Improve the opportunities of public participation to be higher-quality, more inclusive, and have greater accessibility.
- **D.** Increase the dialogue that happens between Council and staff through a variety of methods, like governance updates, workshops, networking, and education opportunities.
- E. Promote neighbourhood plans and designs that create connected communities that are safe, accessible, diverse, walkable, and healthy.
- **F.** Invest in our community arts, recreation and support spaces and programs by prioritizing equity seeking groups. This includes:
 - Dog Parks.
 - Reviews of how indoor and outdoor recreational facilities are used, and the need for a new city gymnasium.
- **G.** Foster and create more vibrant streets by:
 - Conducting height and density studies for main streets.
 - Reconstructing Montreal Road in 2026.
- H. Strengthen our City's position to encourage local festivals, events, and attractions, which will increase the pride and prosperity in our residents.

REFLECTING THE DIVERSITY OF OUR CITY 2.3

OUR STRATEGY

Reflect how diverse our community is in the City's operations and investments.

OUR OPERATIONS

- **A.** Take time to deepen our understanding of the Municipality's role in the Truth & Reconciliation Calls to Action, such as:
 - Consistent focus on truth.
 - Learning and educating Council, staff, and the public.
- **B.** Develop a central EDI action plan that's applicable for work in all departments.
- **C.** Empower our Tourism and Economic Development to take action to diversify local festivals and events.

POSITION CORNWALL AS A TOP DESTINATION

OUR STRATEGY

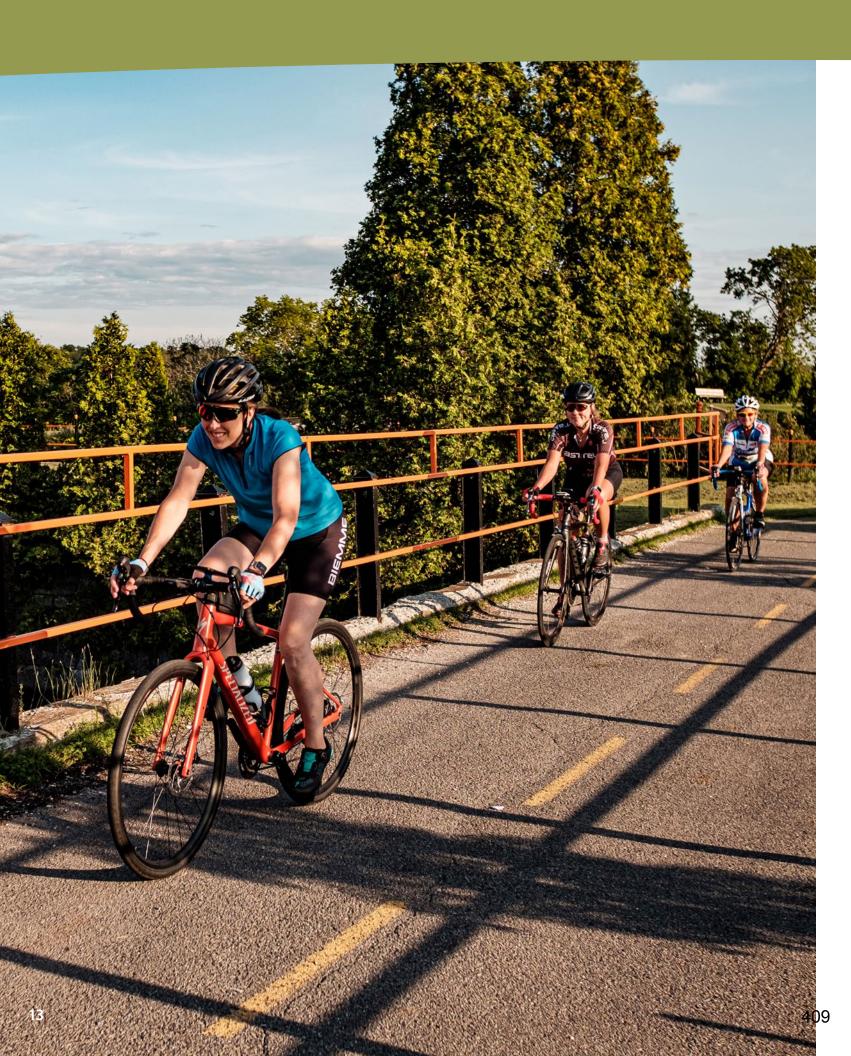
Position our City as a top destination for young families, professionals, and investors to land in.

OUR OPERATIONS

- A. Reach population growth of 50,000 residents.
- emerging sectors.



B. Not only attract but retain top talent and investors by positioning Cornwall for growth in



Strategic Priorities Pillar 3: Achieve Net-Zero by 2050

REDUCING CORNWALL'S GREENHOUSE GAS (GHG) FOOTPRINT

OUR STRATEGY

Continuous with our strategic investments to reduce Cornwall's GHG footprint and be a more environmentally-friendly city.

OUR OPERATIONS

- more materials from landfill.
- B. Implement public EV Chargers to meet the needs of locals and visitors of Cornwall.
- (electric fleet and green buildings).
- **D.** Transition Cornwall's fleet to zero-emissions vehicles.
- **E.** Achieve Green Building Standards for our housing portfolio.
- F. Achieve a Net-Zero energy footprint for all City owned buildings.

RESPONSE TO CLIMATE CHANGE

OUR STRATEGY

Respond to emerging environmental and climate impacts and adaptation needs with supportive and forward-thinking policies and procedures.

OUR OPERATIONS

- **A.** Move forward on points within the Climate Action Plan, specifically reaching the goals described under the five core pillars:
 - Efficient carbon-neutral buildings.
 - Active and zero-emission mobility and transportation.
 - Waste transformed.
- **B.** Advance our community outreach abilities to meet climate emergency realities.
- **C.** Develop a detailed strategy to protect trees and increase tree canopy within our City.
- **D.** Encourage and empower community-led climate action through education, partnership, and promotion.



A. Work with residents, businesses, and organizations in our City to reduce waste and divert

C. Unlock funding opportunities to allow our City to fulfill our goals in the Climate Action Plan

- Enhanced nature-based solutions.
- Municipal leadership.



Strategic Priorities Pillar 4: Cornwall – Future Ready

TRANSFORMING CORNWALL'S GROWTH 4.1

OUR STRATEGY

Transform the growth of our City through leading-edge infrastructure.

OUR OPERATIONS

- **A.** Prioritize evidence-based green infrastructure investments, for example bio-retention.
- **B.** Plan, fund, and construct a new secondary water intake.
- **C.** Align our capital and operational investments with climate action plan transformation.

USING THE POWER OF OUR REGIONAL VOICE 4.2

OUR STRATEGY

Utilize the power of our regional voice by working proactively and collaboratively with neighbours and interest holders.

OUR OPERATIONS

- **A.** Advance the Port Lands development project with the Akwesasne Harbour Development Corporation.
- **B.** Create regional partnerships for investments and creative strategies for mutuallybeneficial housing solutions.





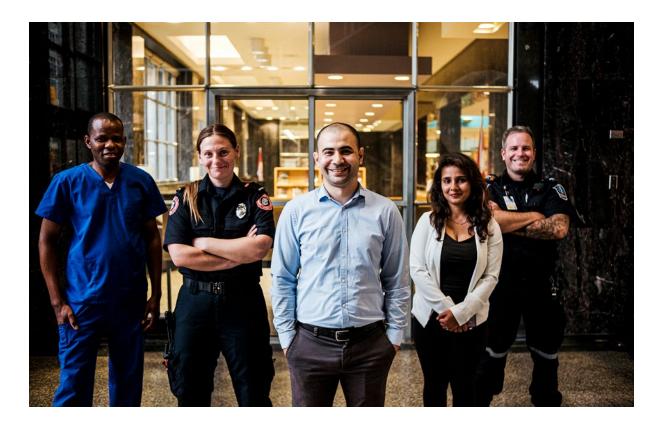
4.3 EMPLOYER OF CHOICE

OUR STRATEGY

Position the Corporation as an employer of choice for all residents.

OUR OPERATIONS

- **A.** Remove barriers to our City employment faced by equity seeking groups.
- **B.** Build a culture of pride, dedication, recognition, and achievement within our City's team.
- **C.** Support and encourage innovative and creative approaches for effective service delivery. For example, leveraging AI tools.





City of Cornwall Strategic Priorities 2022-2026





Ville de Cornwall Priorités stratégiques





RECONNAISSANCE TERRITORIALE

Nous reconnaissons que nous nous rassemblons sur le territoire traditionnel des Haudenosaunee, des Mohawks d'Akwesasne, les gardiens originaux de cette terre. En tant que colons, nous sommes reconnaissants de pouvoir nous réunir ici et nous remercions toutes les générations qui ont pris soin de cette terre pendant des milliers d'années.



Table des matières

LET NO NO

PIL

TRE DE NOTRE MAIRE
TRE VISION ET NOTRE MISSION
S QUATRE PILIERS STRATÉGIQUES
IER 1 : UN LOGEMENT POUR TOUS
I.1 Un environnement pour le logement
I.2 Positionner notre Ville
I.3 Abolir les obstacles
IER 2 : CONNECTIONS COMMUNAUTAIRES
2.1 Cornwall comme « ville pivot »
2.2 Promouvoir une Ville fiable et attrayante
2.3 Refléter la diversité de notre Ville
2.4 Positionner Cornwall comme une destination de choix
IER 3 : ATTEINDRE LA CARBONEUTRALITÉ D'ICI 2050 13
3.1 Réduire l'empreinte GES de Cornwall
3.2 Répondre au changement climatique
IER 4 : CORNWALL – PRÊTE POUR L'AVENI
1.1 Transformer la croissance de Cornwall
1.2 Utiliser le pouvoir de notre voix régionale
1.3 Un employeur de choix

PIL

PIL

3 3

PIL

Lettre de notre maire

En tant que maire, j'ai le plaisir de présenter le Plan stratégique 2022-2026 de la Ville de Cornwall.

Ce plan est la voie définie par le Conseil pour le présent mandat. C'est notre document d'orientation, fondé sur les besoins uniques de notre communauté.

Notre communauté change, tout comme nos défis et nos besoins. Bien qu'il existe des besoins plus urgents auxquels il faut répondre, nous devons assurer que nous continuons à planifier l'avenir et les besoins à long terme de notre communauté.

Je crois que ce plan stratégique établit cet équilibre. Bien qu'il traite de nos priorités immédiates, il établit également de solides fondations pour notre avenir.

Je voudrais remercier le Conseil et l'administration pour leur travail continu sur ce plan, alors que nous le mettons en œuvre au cours des prochaines années.

Justin Towndale Maire Ville de Cornwall





Ville de Cornwall – Priorités stratégiques 2022-2026

Notre vision et notre mission

VISION

Cornwall est une communauté diversifiée et progressiste. Les résidents et les partenaires se sentent en sécurité et bienvenus, et bénéficient d'une excellente qualité de vie. Tous sont soutenus par l'accès à des infrastructures et à des services municipaux financièrement responsables et durables.

MISSION

Notre mission consiste à promouvoir des services communautaires dynamiques, inclusifs, responsables et avantgardistes, pour les résidents actuels et les futures générations.



Nos quatre piliers stratégiques





Priorités stratégiques **Pilier 1 : Un logement pour tous**

UN ENVIRONNEMENT POUR LE LOGEMENT

NOTRE STRATÉGIE

Nous allons créer un environnement propice à l'innovation afin de construire plus de logements qui bénéficieront aux résidents de tous les âges, de toutes les tranches de revenu et de tous les groupes démographiques.

NOS INITIATIVES

- **A.** Nous allons continuer à mettre en œuvre les recommandations du Groupe de travail sur le logement du maire précédent, tout en insistant sur les points suivants :
 - Revoir les considérations liées à la densité et à la hauteur des bâtiments afin de construire des logements adaptés à chaque espace.
 - Construire plus de logements sociaux, avec des fonds dédiés.
- **B.** En plus des recommandations du Groupe de travail sur le logement, nous allons prendre des initiatives visant à réduire l'inoccupation des espaces résidentiels et commerciaux afin d'augmenter les options de logement.

POSITIONNER LA VILLE

NOTRE STRATÉGIE

Alors que Cornwall s'agrandit, nous allons soutenir la position de notre Ville en tant que gardienne du logement abordable.

NOS INITIATIVES

- A. Revoir les plans, politiques et processus existants pour identifier les possibilités de logement abordable.
- **B.** Donner suite aux recommandations de la Stratégie de revitalisation du logement.
- C. Travailler en collaboration avec les résidents pour répondre aux besoins des particuliers et des familles vivant dans des logements sociaux.
- **D.** Agrandir notre boîte à outils financière pour faire des investissements soutenus dans les portefeuilles de logements existants, tout en répondant aux nouveaux besoins.



1.3 ABOLIR LES OBSTACLES

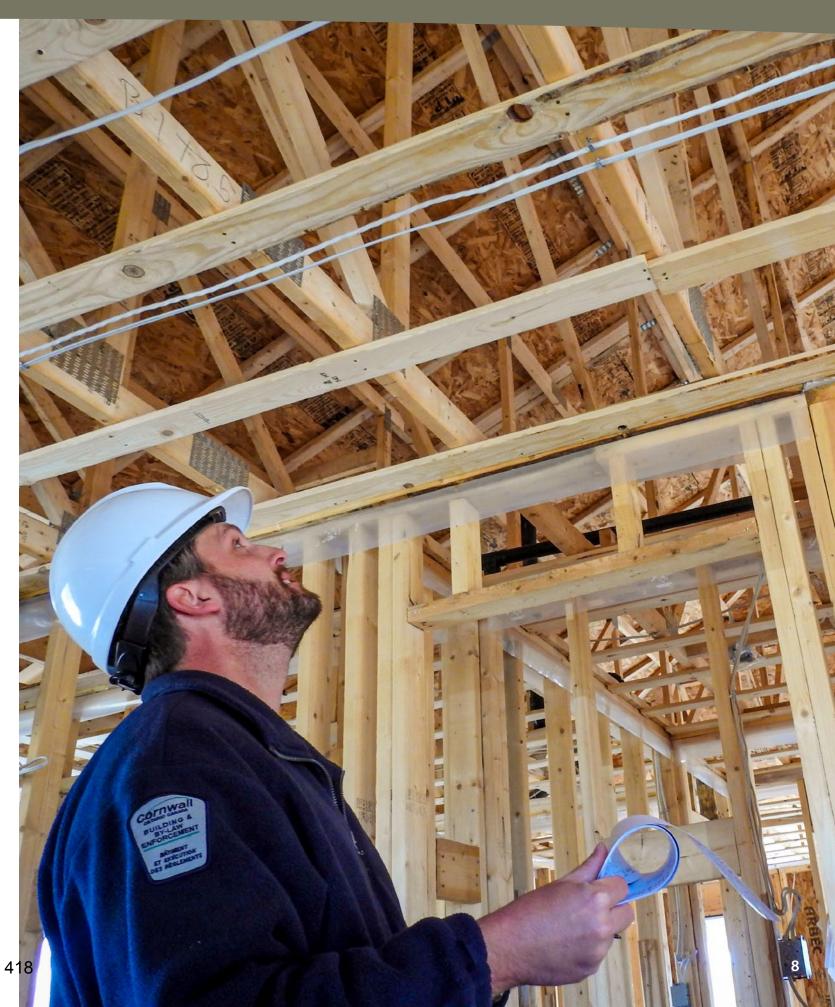
NOTRE STRATÉGIE

Nous devons abolir les obstacles systémiques au logement dans notre région et dans notre Ville. Il s'agit notamment des obstacles financiers et sociaux, ainsi que la propriété des terrains publics et les limites juridiques.

NOS INITIATIVES

- **A.** Acquérir des terrains à des endroits stratégiques en bordure de l'eau.
- **B.** Augmenter notre soutien financier face aux pressions régionales pour le logement et aux réalités qui en découlent.
- **C.** Faciliter et appuyer le développement de logements supervisés et de services de soutien, en nous concentrant sur des solutions intégrées pour les résidents vulnérables et sans logement.





Ville de Cornwall – Priorités stratégiques 2022-2026



Priorités stratégiques **Pilier 2 : Connections communautaires**

CORNWALL COMME « VILLE PIVOT » 2.1

NOTRE STRATÉGIE

Adopter et exploiter Cornwall comme une « ville pivot ».

NOS INITIATIVES

- les parties intéressées et des responsables universitaires.
- **B.** Poursuivre notre engagement envers le parc aquatique Great Wolf Lodge.
- sur l'amélioration des services de transport en commun. Cet examen évaluera :
 - L'accessibilité en 15 minutes.
 - Un service de bus le dimanche.
 - Des services de bus régionaux.
- **D.** Encourager de solides relations avec les communautés voisines par la collaboration, les services partagés.





A. Envisager le développement d'un programme universitaire à Cornwall en collaborant avec

C. Examiner le plan directeur de transport en commun afin de formuler des recommandations

avantages mutuels et une voix régionale dans les domaines d'intérêt, et augmenter les

PROMOUVOIR UNE VILLE FIABLE ET ATTRAYANTE

NOTRE STRATÉGIE

Promouvoir une communauté où les résidents et les entreprises font confiance à notre Ville, veulent s'engager et prospèrent en se sentant accueillis et en sécurité.

NOS INITIATIVES

- **A.** Réaliser une stratégie de communication annuelle.
- B. Offrir aux résidents francophones et francophiles des services proactifs et accessibles.
- C. Améliorer les possibilités de participation publique pour qu'elles soient de qualité supérieure, plus inclusives et plus accessibles.
- **D.** Renforcer le dialogue entre le Conseil et le personnel par diverses méthodes comme des mises à jour sur la gouvernance, des ateliers, un réseautage et des possibilités d'éducation.
- E. Promouvoir des conceptions et des plans de quartier afin de créer des communautés connectées, sécuritaires, accessibles, diversifiées et saines.
- F. Investir dans nos espaces et programmes communautaires liés aux arts, aux loisirs et au soutien en donnant la priorité aux groupes recherchant une équité. Cela comprend :
 - Des parcs canins.
 - L'examen de l'utilisation des installations récréatives intérieures et extérieures et de la nécessité d'un nouveau gymnase municipal.
- G. Soutenir et créer des rues plus dynamiques :
 - Mener des études sur la taille et la densité des rues principales.
 - Reconstruire le Chemin Montréal en 2026.
- H. Renforcer la position de notre ville pour encourager les attractions, les festivals et les événements locaux, ce qui stimulera la fierté et la prospérité des résidents.

REFLÉTER LA DIVERSITÉ DE NOTRE VILLE

NOTRE STRATÉGIE

Refléter la diversité de notre communauté dans les activités et les investissements municipaux.

NOS INITIATIVES

- appels à l'action de la Commission de vérité et de réconciliation, par exemple :
 - Accent constant sur la vérité.
 - Compréhension et éducation du Conseil, du personnel et du public.
- **B.** Élaborer un plan d'action sur l'EDI applicable à tous les départements.
- C. Permettre aux responsables du tourisme et du développement économique de prendre des mesures pour diversifier les festivals et événements locaux.

POSITIONNER CORNWALL COMME UNE DESTINATION DE CHOIX

NOTRE STRATÉGIE

Positionner notre Ville comme une destination de choix pour les jeunes familles, les professionnels et les investisseurs.

NOS INITIATIVES

- A. Accroître la population à 50 000 résidents.
- Cornwall pour la croissance dans les secteurs émergents.



A. Prendre le temps d'approfondir notre compréhension du rôle de la Municipalité dans les

B. Non seulement attirer, mais garder les meilleurs talents et investisseurs en positionnant



Priorités stratégiques Pilier 3 : Atteindre la carboneutralité d'ici 2050

ÉDUIRE L'EMPREINTE DE GAZ A EFFET DE SERRE (GES) DE CORNWALL

NOTRE STRATÉGIE

Poursuivre nos investissements stratégiques pour réduire l'empreinte GES de Cornwall et en faire une ville plus écologique.

NOS INITIATIVES

- déchets et détourner plus de matériaux des décharges.
- Cornwall.
- Plan d'action pour le climat (parc électrique et bâtiments verts).
- **D.** Transformer le parc de Cornwall pour qu'il soit fait de véhicules sans émission.

RÉPONDRE AU CHANGEMENT CLIMATIQUE

NOTRE STRATÉGIE

Répondre aux impacts environnementaux et climatiques émergents et aux besoins d'adaptation par des politiques et des procédures de soutien et avant-gardistes.

NOS INITIATIVES

- des cinq piliers fondamentaux :
 - Bâtiments neutres en carbone efficients.
 - Mobilité et transport actifs et sans émission.
 - Transformation des déchets.
- climatique.
- la promotion.



A. Travailler avec les résidents, les entreprises et les organisations de notre Ville pour réduire les

B. Installer des chargeurs publics de VE pour répondre aux besoins des résidents et des visiteurs de

C. Trouver des possibilités de financement pour permettre à notre Ville d'atteindre les objectifs du

E. Respecter les Normes de construction écologique pour notre portefeuille de logements.

F. Atteindre une empreinte énergétique nette zéro pour tous les bâtiments appartenant à la ville.

A. Aller de l'avant avec le Plan d'action pour le climat, plus précisément en atteignant les objectifs

- Amélioration des solutions fondées sur la nature.
- Leadership municipal.

B. Renforcer nos capacités de liaison avec la communauté pour répondre aux réalités de l'urgence

C. Élaborer une stratégie détaillée pour protéger les arbres et augmenter le couvert arboré de la Ville. D. Encourager et renforcer l'action communautaire pour le climat par l'éducation, les partenariats et



Priorités stratégiques Pilier 4 : Cornwall – Prête pour l'avenir

TRANSFORMER LA CROISSANCE DE CORNWALL 4.1

NOTRE STRATÉGIE

Transformer la croissance de notre Ville par une infrastructure de pointe.

NOS INITIATIVES

- probantes, par exemple la bio-rétention.
- **B.** Planifier, financer et construire une nouvelle prise d'eau secondaire.

UTILISER LE POUVOIR DE NOTRE VOIX RÉGIONALE 4.2

NOTRE STRATÉGIE

Utiliser le pouvoir de notre voix régionale en travaillant de manière proactive et collaborative avec les voisins et les parties intéressées.

NOS INITIATIVES

- Development Corporation.
- **B.** Former des partenariats régionaux pour des investissements et des stratégies créatives afin de trouver des solutions de logement mutuellement bénéfiques.





A. Donner la priorité aux investissements dans l'infrastructure verte fondés sur des données

C. Aligner nos investissements en capital et opérationnels sur le Plan d'action pour le climat.

A. Promouvoir le projet d'aménagement des terrains portuaires avec l'Akwesasne Harbour

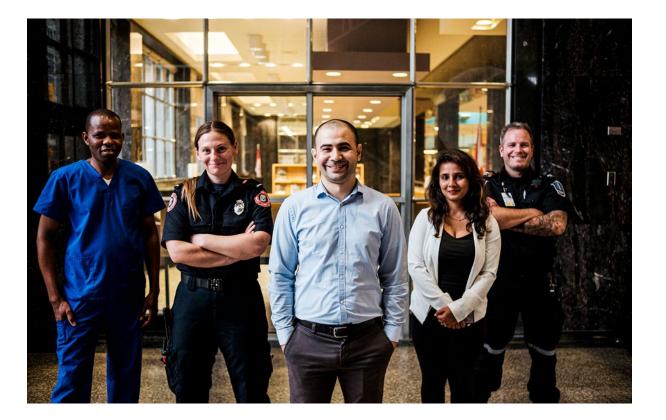
4.3 UN EMPLOYEUR DE CHOIX

NOTRE STRATÉGIE

Positionner la Ville comme un employeur de choix pour tous les résidents.

NOS INITIATIVES

- **A.** Abolir les obstacles à l'emploi de la Ville pour les groupes recherchant une équité.
- **B.** Créer une culture de fierté, de dévouement, de reconnaissance et de réussite au sein de l'équipe de notre Ville.
- **C.** Soutenir et encourager des approches innovantes et créatives pour une prestation de services efficace. Par exemple, tirer parti des outils d'IA.





Ville de Cornwall – Priorités stratégiques 2022-2026



cornwall_ca



The Corporation of the City of Cornwall Regular Meeting of Council

Report

Department:	Fire Services
Division:	Human Resources
Report Number:	2024-19-Fire Services
Meeting Date:	August 13, 2024
Subject:	HR Services Review

Purpose

This report is being provided in response to a council motion passed on November 27, 2023, requesting a detailed report of Human Resources (HR) programs and relevant data and trends.

Recommendation

That Council receive Report 2024-12-FS for information.

Strategic Priority Implications

Strategic Objective: Becoming an Employer of Choice

Background / Discussion

We appreciate Council's interest in understanding and improving our HR function. As outlined in the recent Human Resources Services Review that was presented to Council on June 11, 2024, many of the specific details you have requested in your motion are not currently available. The HR Services Review highlighted several gaps in our data collection and reporting capabilities, which will need to be addressed as we look to transform the HR function at the city.



As our HR transformation unfolds, we recognize that both internal management and Council reporting requirements will need to be clearly defined and enhanced. We are committed to developing comprehensive reporting frameworks that cover many of the topics highlighted in the November 27, 2023, motion of council.

We are dedicated to enhancing our reporting capabilities to ensure that comprehensive and detailed information is available in the future. Efforts are currently underway to address the priority gaps identified in the HR Services Review, while continuing to deliver the essential HR services to managers and employees.

In the meantime, enclosed is a summary of the reporting that we can offer under our current programs. This reporting covers the period of January 1 – May 31, 2024.

Labour Relations

Collective Bargaining

A significant focus for the HR team, in collaboration with management, has been collective bargaining. The following table outlines the status of collective bargaining activities and the agreements due to expire in the near term:

Union	# of Employees	CA Expiration	Status
Cornwall Professional Firefighters Association 849	61	December 2022	Active negotiations ongoing
Ontario Nurses Association 42	12	March 2023	Conciliation August 2024
CUPE 234 Outside Workers	103	March 2024	Preparing for negotiations
CUPE 1792 Glen Stor Dun Lodge	172	March 2025	CA was negotiated in February, 2023
CUPE 3251 Inside Workers	160	September 2025	CA was negotiated in July 2022
CUPE 5734 Paramedic Services	117	September 2025	CA was negotiated in June 2023
Amalgamated Transit Union 946	38	December 2025	CA was negotiated in September 2023
CUPE 4452 Housing Services	35	December 2027	CA was negotiated in April 2023



Grievance Trends

Since January 2024, the number of new grievances raised has declined significantly year over year from 18 for the first half of 2023 to 8 in the first half of 2024. This positive trend is attributed to continued efforts to improve communication channels and proactive collaboration and conflict resolution strategies. These efforts have fostered a more supportive work environment, resulting in fewer grievances and a more harmonious workplace, in most cases.

Recruitment

Recruitment Activities

In February, the HR team experienced a vacancy in the recruiter role that has taken some time to fill, coinciding with a period of exceptionally high-volume of recruitment activities. During this time, the team has been supporting the hiring processes for several critical cohorts, including paramedic and fire services, as well as the summer student program.

Despite the challenges posed by these concurrent recruitment drives, steady progress is being made, and the team remains committed to ensuring that all roles are filled with highly qualified candidates.

Full Time Positions	56
Part-Time Positions	30
Summer Student Positions	94

Recruitment Challenges

We have faced challenges in filling some specialized professional roles that has been attributed in some cases to our city's geographic location and wage competitiveness has also been a factor. Our city's distance from major urban centers and the higher salaries offered by private companies in more central areas have made attracting top talent difficult. This will be an important consideration in

the transformation of HR programs to address these challenges and becoming an Employer of Choice to attract top talent.



A new Applicant Tracking Software (ATS) was launched in early March 2024, and the Human Resources team continues to work with the software and provider to fully utilize the capabilities of the system.

An applicant tracking system (ATS) streamlines the recruitment process by automating the tracking and management of job applications, enhancing efficiency, improving candidate experience, and enabling data-driven decisionmaking to attract and hire the best talent. Additionally, an ATS provides managers with direct access to candidate information, reducing the reliance on email and hard copy documents, and facilitating smoother communication and collaboration throughout the hiring process.

The system also has a broad reach through networking with established and existing job boards and recruitment social media networks. Since launching the system, we have had 4,128 candidates apply for posted positions and 75,160 views on positions that we have posted.

Onboarding Program – Newly Developed Program

An onboarding program is a structured process designed to integrate and orient new employees into an organization. It typically spans the period from the initial hiring of an employee through their first few weeks and months on the job. The primary goal of an onboarding program is to help new hires adjust to their roles, understand the company culture, and become productive members of the organization.

The City's Onboarding Program was designed by a cross-functional team of employees that play key roles in onboarding activities. A selection of hiring managers and new employees were also involved to ensure a holistic perspective and that the program would meet their needs as well.

The City of Cornwall's Onboarding program is a thoughtful and strategic initiative designed to support new employees not only transition smoothly into their new role but also to set the stage for their long-term success at the City of Cornwall.



Our program goals include:

Smooth Transition Ensure a seamless transition for new hires into their roles	Cultural Integration Help new employees understand and embrace the organization's culture	Training & Development Equip new employees with the skills and knowledge needed to excel in their roles
Social Integration Foster a sense of belonging and camaraderie	Employee Engagement Keep new hires engaged and motivated	Compliance & Policy Understanding Ensure that new employees understand and adhere to organizational policies and compliance requirements
Job Clarity Ensure new hires have a clear understanding of their roles and responsibilities	Retention & Commitment Increase employee retention and commitment to the organization	Feedback & Assessment Gather ongoing feedback on the onboarding process

The Onboarding Program begins as soon an offer of employment has been signed and accepted by the candidate and spans to the end of their first 90 days, which normally concludes a probationary period.

Our Onboarding Program is designed to empower new employees, foster a positive and inclusive work environment, and lay the foundation for a successful and fulfilling career with us. Here is a bit more about what new employees can expect over their first 90 days:

A Warm	Introduction to	Meet the Team	Onboarding	HR Programs	Policies and	Technology and	Feedback
Welcome!	our Organization	and Colleagues	Mentorship	Overview	Procedures	Tools Overview	Mechanisms
You'll start with a warm welcome from our team, introducing you to the company culture and values that make us who we are.	Gain insights into our history, mission, and vision, helping you understand the bigger picture and your role within the organization.	Connect with your colleagues and department members through introductions to foster a sense of community and collaboration.	Benefit from mentorship to facilitate a smoother transition, offering guidance and support from an experienced team member.	Explore HR Programs including understanding benefits, pension, and wellness programs available to you and your family.	Get acquainted with our policies, procedures, and guidelines, ensuring a clear understanding of expectations and creating a safe and supportive work environment.	Learn about the technology and tools essential for your daily tasks, ensuring a smooth transition into your responsibilities.	We value your feedback! Throughout the onboarding process, there will be opportunities for you to provide input, ensuring continuous improvement of our onboarding program.

This program is planned to fully launch in July 2024 when the new Recruiter joins the organization.



HR Compliance

A recent policy review conducted by Stratford Group has led to the revision of seven legislated policies. The HR team is now working diligently on the launch of these updated policies, which includes developing and implementing the applicable corporate-level training to ensure compliance and understanding across the organization that can also be tracked. This includes training solutions for new hires to ensure full compliance. The new policies include and are attached for Councils awareness.

- Harassment & Workplace Violence Prevention Policy
- Health & Safety Policy
- Disconnecting from Work Policy
- Electronic Monitoring Policy
- Employee Data Retention Policy
- Whistleblower Policy
- Accessibility Policy
- Media Relations Policy
- Social Media Policy



Disconnecting From Work Policy

Category: Legislated Policy Department: Human Resources Effective Date: TBD 2024

Table of Contents

Purpose
Scope
Legislation and Applicable Regulations
Definitions2
Roles and Responsibilities
Directors and Senior Management
General Manager of Human Resources
Supervisors and Managers
Employees
Communications
Technology Guidelines
Employee Well-being
Policy Communication and Awareness
Exceptions
Complaint Procedure
Violations and Consequences
Review and Revision



Purpose

The purpose of this Policy is to demonstrate the City of Cornwall's ('the City') support for employees to disconnect from work, when appropriate, to assist in achieving a healthy work-life balance.

Employees are expected to disconnect from work during their non-working hours. Since some of the operations at the City of Cornwall run on 24/7 schedule, the working and non-working hours could be different for different employees. Employee working hours are set out in the respective employment agreement or collective agreement, as applicable.

Scope

This policy applies to all employees, including full-time, part-time, temporary, and contract employees at the City of Cornwall.

Legislation and Applicable Regulations

This Policy will be governed by and interpreted in accordance with all applicable legislation, including (but not limited to) <u>Ontario's Employment Standards Act</u>, 2000 (the "ESA") and <u>Ontario Occupational Health and Safety Act</u>.

Definitions

For the purpose of this Policy, the following definitions apply:

Disconnecting from Work: The term "disconnecting from work" is defined in the ESA and means not engaging in all types of work-related communications such as emails, telephone calls, video calls or sending or reviewing other messages, to be free from the performance of work. As the list of work-related communications is inclusive, and not exhaustive, other types of work-related communications could also fall under this definition.

Non-Working Hours: The period outside of an employee's regular working hours, which may include evenings, weekends, and official holidays, depending on the type of worker and shift schedule, as set out in a Collective Agreement, individual letters of offers and City Policies.

Emergency Situations: Unforeseen and critical situations requiring immediate attention that could not be reasonably anticipated or planned for in advance.

Supervisors and Managers: Individuals in leadership positions responsible for overseeing and managing the work of a team or department.

Out-of-Office Notifications: Automated responses informing senders that the recipient is currently unavailable and providing alternative contacts during a specified period.

Email Scheduling: The feature allows users to compose emails at one time and schedule them to be sent at a later time.

Employee Well-being: The overall health, satisfaction, and work-life balance of employees, including physical and mental well-being.



Working Hours: The period during which employee is expected to fulfill their responsibilities and job duties. Employee's working hours are those as determined in the employment agreement or collective agreement, as applicable.

Roles and Responsibilities

The City, its management and employees must work together to ensure that everyone is able to disconnect from work outside of normal working hours in accordance with this Policy.

Directors and Senior Management

- Ensure employees are provided with information regarding their normal hours of work given the nature of their work and any other information required to assist employees with complying with this Policy.
- Take all reasonable steps to ensure that management and employees are able to disconnect from the workplace at appropriate times as detailed in this Policy.
- Refrain from penalising or taking any other reprisal action against employees who have questions regarding this Policy or request compliance with it. Legitimate employer direction and/or corrective action towards employees is not considered "reprisal action."

General Manager of Human Resources

- Develop and maintain this Policy and ensure annual reviews of the policy to align with applicable legislative changes.
- Provide new employees with a copy of this Policy within 30 days of the employee's start date.
- Provide existing employees with a copy of any amended versions of the Policy within 30 days of the amendment.
- Provide advice and guidance to management and employees to support this Policy.
- Receive and manage employee inquiries related to the application of this Policy.
- Develop programs and campaigns to support this Policy as well as the overall health, satisfaction, and work-life balance of employees, including physical and mental well-being.

Supervisors and Managers

- Set an example by respecting employees' non-working hours and modelling compliance with this Policy within their respective teams.
- Advise employees of the limited instances in which they may be expected to perform work outside of their normal hours of work.
- Encourage and actively promote the use of accrued time off and breaks to support a healthy work-life balance among their team members.
- Support the overall health, satisfaction, and work-life balance of employees, including physical and mental well-being.
- Monitor the workload of their team members to ensure it is manageable within regular working hours. This includes regularly checking in with employees to assess their workload and identifying any potential issues that could lead to an inability to disconnect after regular work hours.
- Respond to employees' inquiries and resolve issues raised in collaboration with Human Resources.
- Responsible for contacting Human Resources to seek guidance in the application of this Policy.



Employees

- Responsible for familiarizing themselves with this Policy and adhering to its guidelines.
- Cooperate with any time recording methods which the City uses to track hours of work, when applicable.
- Take all reasonable steps to ensure that their colleagues are able to disconnect from work in accordance with this Policy.
- Notify management if they feel undue pressure to work or respond to work-related communications outside of their normal working hours, or if they are otherwise unable to comply with this Policy.
- Responsible for contacting Human Resources to seek guidance in the application of this Policy.

Communications

Employees are encouraged to disconnect from work-related communications, including emails, phone calls, and messages, during non-working hours. In the case of genuine emergencies that require immediate attention outside of regular working hours, employees are expected to respond accordingly. However, it is recognized that such instances should be infrequent, exceptional, and based on operational requirements.

Technology Guidelines

Employees are encouraged to utilize out-of-office notifications during periods of leave to inform colleagues and stakeholders of their unavailability and provide an alternative contact person. Employees are advised to use the email scheduling feature to send emails during regular working hours, even if they compose them outside of those hours.

In the course of their duties, some employees may use corporate owned - personally enabled electronic devices such as: mobile phones, laptops, tablets, etc. These devices are provided to employees to allow flexibility in how employees complete their work and do not imply that employees must make themselves available for work at all times.

Employee Well-being

The City recognizes the importance of employee well-being and acknowledges the potential negative impact of constant connectivity on mental health. Employees are encouraged to take breaks and time off, in accordance with applicable Policies, individual set terms and conditions of employment and Collective Agreements, to recharge, and supervisors are urged to support a healthy work-life balance.

Policy Communication and Awareness

The City will provide awareness programs to employees to educate them about the importance of disconnecting from work and the potential impact of excessive connectivity on their well-being.

Exceptions

There are situations when it is necessary for employees to perform work or communicate with colleagues outside of their normal hours of work, including, but not limited to the following:

• Where an emergency or an unforeseen business or operational circumstance arises, with or without notice;



- Where the nature of the employee's duties requires work and/or work-related communications outside of their normal hours of work;
- An employee's request or agreement to work certain hours or have flexible working hours;

Complaint Procedure

Employees are encouraged to first attempt to resolve the issue informally by discussing it with their immediate supervisor or manager. The employee may express their concerns and seek clarification regarding the application of the policy.

If the issue remains unresolved after the informal discussion, or if the employee is uncomfortable addressing it directly with their supervisor, they may contact the General Manager of Human Resources for support and investigation, if necessary.

Violations and Consequences

Any violations of this policy will be addressed in accordance with the City disciplinary procedures. The severity of the violation will be taken into consideration when determining appropriate consequences.

Review and Revision

This policy will be reviewed annually to ensure its effectiveness and relevance. Any necessary revisions will be made to align with changes in legislation, technology, and work practices. If the policy is changed, employees will receive a copy of the written policy within 30 calendar days of the policy change.

By adhering to this Disconnecting from Work Policy, employees contribute to a healthier workplace culture that promotes work-life balance and employee well-being.

Related Policies

This Policy is intended to outline the expectations and rights of employees to disconnect from work and should be read in conjunction with the City's other applicable policies, procedures and guidelines including but not limited to:

• IT Acceptable Use Policy



Х

Manon L. Levesque City Clerk

Х

Tracey Bailey General Manager, Financial Services Х

Matthew Stephenson Interim General Manager, Human Services

Х

Mathieu Fleury Chief Administrative Officer



Accessibility Policy

Category: Legislated Policy Department: Human Resources Effective Date: TBD 2024

Table of Contents

Organizational Commitment and Policy Statement	3
Purpose	3
Scope	3
Legislative and Administrative Authorities	3
Definitions	3
Roles and Responsibilities	5
Employees, Volunteers and Third Parties	5
Supervisors and Managers	6
Directors and General Managers	6
Human Resources	7
Accessibility Advisory Committee	7
Office of the City Clerk	8
General Provisions	8
Establishment of Accessibility Plans and Policies	8
Accessibility in Procurement, Goods, Services, Facilities and Kiosks	Э
General Training Requirements	Э
Information and Communication Standards	Э
Accessible Formats and Communication Supports	Э
Emergency Plans, Procedures, and Information of Public Safety	C
Accessible Websites and Web Content10	C
Feedback on available formats and communication supports10	C
Employment Standards10	C
Recruitment, Assessment and Selection10	C
Informing Employees of Available Supports1	1
Accessible Formats and Communication Supports for Employees1	1
Workplace Emergency Response Information1	1



Documented Individual Accommodation Plans12
Return to Work Process12
Performance Management, Career Development, and Redeployment12
Design of Public Spaces (Built Environment)12
Transportation Standards13
Customer Service Standards13
Use of Service Animal14
Use of Support Person14
Assistive Devices15
Notice of Temporary Disruption15
Customer Service Training15
Feedback Process16
Policy Review17
Questions about this policy17
Contraventions17
Reference and Related Policies and Documents17



Organizational Commitment and Policy Statement

The Corporation of the City of Cornwall (hereinafter "the City" or "Cornwall") is committed to the providing accessibility to people with disabilities with respect to the use of its services, programs, and facilities in a manner that respects their dignity and independence, and that is equitable in relation to the broader public.

The City of Cornwall is also committed to giving people with disabilities the same opportunity to access its services, allowing them to benefit from the same services, in the same place and in a similar way as others.

The City of Cornwall is committed to meeting the needs of its clients, including people with disabilities, and will do so in a timely manner by preventing and removing barriers to accessibility in (1) customer service (2) information and communication (3) employment (4) the built environment (5) transportation.

Purpose

The Integrated Accessibility Standards under the AODA, 2005 requires organizations to create a written accessibility policy and make them publicly available. This policy is intended to provide an overarching framework to guide the review and development of other related programs, procedures to comply with the standards developed under the Accessibility for Ontarians with Disabilities Act, 2005, S.O. 2005, c. 11 (AODA) and the Integrated Accessibility Standards, O. Reg. 191/11 (IAS).

Scope

This policy applies to all persons including residents, members of the public, employees, Mayor, Members of Council, agents, contractors, consultants, volunteers, or otherwise.

The policy extends to those who participate in developing the City's policies, practices and procedures governing the provision of goods and services to members of the public or other third parties.

Legislative and Administrative Authorities

This policy is in adherence to the following:

- Accessibility for Ontarians with Disabilities Act (AODA), 2005, S.O. 2005, c.11 (AODA)
- Accessibility Standards for Customer Service, O. Reg.429/07
- AODA, Integrated Accessibility Standards Regulation, O. Reg. 191/11
- Ontario Human Rights Code, R.S.O. 1990, c.H.19

Definitions

Accessible Formats: are the alternate formats or ways of presenting printed, written, or visual material so that people with disability can access the information. This includes but is not limited to large prints, recorded audio, closed captions etc.



Accessibility Plan: a plan that describes the actions an organization will take to prevent and remove barriers and when it will do so.

Accessibility for Ontarians with Disabilities Act (the Act): is an act that was passed in 2005 by the Ontario Government, with the mandate of making Ontario accessible by 2025.

Barrier: means anything that prevents a person with a disability from fully participating in all aspects of society because of his or her disability, including a physical barrier, an architectural barrier, an information or communications barrier, an attitudinal barrier, a technological barrier, a policy, or a practice.

Communication Supports: are ways for people who cannot access verbal or audio information to receive it visually or ways for people who are non-verbal to communicate with people who speak. This may include, but are not limited to, captioning, alternative, and augmentative communication supports, plain language, sign language and other supports that facilitate effective communications.

The City or Cornwall: means The Corporation of the City of Cornwall.

Disability: is defined, per Part 1 (2) of the AODA as follows:

- means any degree of physical disability, infirmity, malformation or disfigurement that is caused by bodily injury, birth defect or illness and, without limiting the generality of the foregoing, includes diabetes mellitus, epilepsy, a brain injury, any degree of paralysis, amputation, lack of physical co-ordination, blindness or visual impediment, deafness or hearing impediment, muteness or speech impediment, or physical reliance on a guide dog or other animal or on a wheelchair or other remedial appliance or device
- a condition of mental impairment or a developmental disability
- a learning disability, or a dysfunction in one or more of the processes involved in understanding or using symbols or spoken language
- a mental disorder
- or an injury or disability for which benefits were claimed or received under the insurance plan established under the *Workplace Safety and Insurance Act, 1997*

Individual Accommodation Plan: A formal way of recording and reviewing the workplacerelated accommodations that will be provided to an employee with a disability. The plan includes any information regarding accessible formats and communications supports provided (if required), individualized workplace emergency response information, details of how and when accommodations will be provided and identify any other requirements.

Integrated Accessibility Standards Regulation (now referred to as the Regulation): this regulation applies to all Ontario organizations that provide goods, services or facilities to the public or to other organizations and have at least one employee.

Mobility Aid: means a device used to facilitate the transport, in a seated posture, of a person with a disability.

Mobility Assistive Device: means a cane, walker or similar aid.

Practicable: means as soon as possible given all of the circumstances.



Service Animals: is defined by Section 80.45 (4) of the *AODA Customer Service Standards* (O.Reg 165/16) as an animal is a service animal for a person with a disability if the animal can be readily identified as one that is being used by the person for reasons relating to the person's disability, as a result of visual indicators such as the vest or harness worn by the animal; or the person provides documentation from one of the following regulated health professional confirming that the person requires the animal for reasons relating to the disability:

- A member of the College of Audiologists and Speech Language Pathologists of Ontario
- A member of the College of Chiropractors of Ontario
- A member of the College of Nurses of Ontario
- A member of the College of Occupational Therapists of Ontario
- A member of the College of Optometrists of Ontario
- A member of the College of Physicians and Surgeons of Ontario
- A member of the College of Physiotherapists of Ontario
- A member of the College of Psychologists of Ontario
- A member of the College of Registered Psychotherapists and Registered Mental Health Therapists of Ontario.

Support Person: as defined by the *Accessibility for Ontarians with Disabilities Act, 2005* shall mean any person, whether a paid professional, volunteer, family member or friend who accompanies a person with a disability in order to help with communication, mobility, personal care, or medical needs or with access to goods, services, or facilities.

Accessibility Advisory Committee: is a committee with the primary purpose of consulting with and providing advice to Council on the City's annual accessibility plan for the City of Cornwall. This committee is also responsible for reviewing and advising Council on accessibility issues.

Web Content Accessibility Guidelines: means the World Wide Web Consortium Recommendation, dated December 2008, entitled "<u>Web Content Accessibility Guidelines</u> (WCAG) 2.0".

Roles and Responsibilities

Accessibility is a shared responsibility, and everyone has a part to play in making the City accessible to residents, members of public, employees, and co-workers, as described in the following roles and responsibilities.

Employees, Volunteers and Third Parties

All employees and other persons acting on behalf of the City must:

- Have thorough knowledge of and maintain compliance with this Policy;
- Be familiar with their rights and responsibilities under this Policy;
- Prevent accessibility barriers by including accessibility considerations in the development of goods, services, and facilities;
- Participate in identifying accessibility barriers and planning for barrier removal;
- Provide a welcoming environment for people with disabilities, including any person with a disability using assistive devices or accompanied by a support person or service animal;



- Communicate with persons with disabilities in a manner that takes into account their disability;
- Provide information and communications in accessible formats upon request, or with communication supports, and to consult with the requestor about their preferred format;
- Facilitate the process of receiving and responding to feedback about the manner that the City provides goods, services, and facilities to persons with disabilities, and ensure all feedback processes are accessible to persons with disabilities by providing or arranging for accessible formats and communication supports, upon request;
- When serving customers that have competing accommodation needs, make every effort to meet the needs of all individuals according to the Ontario Human Rights Code (opens in new window) and the City's Accommodation Policy;
- Request support from a supervisor, manager, or the General Manager of Human Resources when accommodation requests are outside their area of responsibility, or beyond their capacity;
- Complete mandatory training on the AODA, the Human Rights Code and providing customer service to people with disabilities, as well as any additional training appropriate to the duties of their role.

Supervisors and Managers

In addition to the roles and responsibilities as an employee, individuals with management and supervisory roles must:

- Provide leadership in building an inclusive and accessible environment for the public and employees;
- Facilitate requests for accommodation by members of the public and employees with disabilities in a timely manner, to the point of undue hardship, in accordance with the Ontario human rights code (opens in new window) and the city's accommodation policy;
- Prevent barriers by including accessibility considerations in the development of new policies, practices, procedures, or by-laws;
- Ensure that the policy is communicated to all city employees and those acting on behalf of the city;
- Promote awareness of the policy within their area of responsibility;
- Monitor current practices and ensure that management and staff are held accountable for their responsibilities under the policy;
- Act on non-compliant issues within their area of responsibility;
- Ensure staff, volunteers and persons who participate in developing city policies complete mandatory training requirements on the *Accessibility For Ontarians with Disabilities Act;*
- Ensure volunteers providing goods, services, and facilities on behalf of the City have been provided training, by the City.

Directors and General Managers

The City's Directors and General Managers must:

• Ensure resources are budgeted for identifying and preventing accessibility barriers (including attitudinal, systemic, information, communications, and technology, built environment and public space barriers) and for planning for barrier removal;



- Provide oversight for the implementation of this Policy and compliance with AODA within area of responsibility;
- Provide AODA compliance assurance when required.

Human Resources

The City's Human Resources representatives must:

- Ensure that all responsible workplace parties fulfil their responsibilities as it related to accessibility;
- Provide guidance to management and senior management for being compliant with the requirements of the legislation under *Accessibility For Ontarians with Disabilities Act;*
- Ensure that all employees have completed the required accessibility training, and all new hires are enrolled for completion of this training within 30 days of being hired;
- Monitor current practices and ensure that management and staff are held accountable for their responsibilities under the policy;

Accessibility Advisory Committee

The mandate of the committee is to:

- Provide advice to City Council on the requirements and implementation of AODA, accessibility standards, and other matters for which Council may seek advice;
- Provide consultation to the Office of the City Clerk in preparation of the Accessibility compliance reports;
- Coordinate the immediate and ongoing information sharing in various formats to persons with disabilities, etc. and to the public at large regarding issues faced by persons with all types of disabilities and regarding the work undertaken by the AAC;
- Review the access for persons with a disability to buildings, structures and premises (or parts thereof) that the City purchases, constructs, significantly renovates, leases or funds for compliance with legislation;
- Perform other functions specified in the IASR, including to be consulted on development of the Multi-Year Accessibility Plan;
- Provide advice to the City on compliance with the accessibility standards in the Integrated Accessibility Standards Regulation for services such as:
 - The proportion of on-demand accessible taxicabs required in the community.
 - Advice on the design and placement of rest areas along the exterior path of travel when building new or making major changes to existing exterior paths of travel.
 - Advice on the accessible features for recreation trail prior to new construction or making major changes to existing recreational trails.
 - Advice on the needs of children and caregivers with various disabilities in their community when building new or making major changes to existing outdoor play spaces.
 - Location and design of accessible on-street parking spaces when building new or making major changes to existing on-street parking spaces.



- Review the site plans and drawings described in <u>section 41 of the *Planning Act*</u> that the committee selects;
- Provide advise to the City on the implementation, and effectiveness of the City's Five-year Accessibility Plan to ensure that it addresses the identification, removal and prevention of barriers to persons with disabilities in City's by-laws, and all policies, programs, practices and services;
- Provide advice to City Council on the prevention and elimination of barriers faced by
 persons with disabilities in order to achieve accessibility with respect to City by-laws,
 policies, goods, services and programs, employment, facilities, buildings, structures, and
 premises;
- Partner with external bodies to help create awareness and provide advise to such external bodies to assist with identification, prevention, and removal of barriers to the participation of persons with disabilities in public life;
- Advance the achievement of social, cultural, and economic well-being of persons with disabilities.

Office of the City Clerk

The City Clerk is responsible for:

- Promoting awareness of the Policy and for reporting compliance through accessibility compliance reports to the Province, in accordance with AODA reporting deadlines, with support from Human Resources and any another Department as required;
- Review and Update the Accessibility Policy as needed to be compliant with changes in legislation or whenever there are changes to the City's practices or procedures;
- Liaison with the responsible party and provide consultation for establishing the relevant procedures, standards, and guidelines to ensure all internet websites and web content is accessible in consultation with Accessibility Advisory Committee, Managers and Directors;
- Provide consultation to managers for conversion of information or communication into the accessible format as needed;
- Respond to any queries relating to City's compliance with the *Accessibility For Ontarians* with *Disabilities Act or* relating to this policy and related procedures.

General Provisions

The City of Cornwall's Statement of Organizational Commitment gives guidance to the delivery of City's goods and services to people with disabilities, in compliance with requirements of provincial legislation.

Establishment of Accessibility Plans and Policies

The City of Cornwall is committed to maintaining this policy and associated plans, and procedures and will provide these documents in an accessible format upon request. Furthermore, Cornwall shall produce a multi-year accessibility plan that establishes, implements, maintains, and documents the phased-in strategy to prevent and remove barriers as well as addressing current and future requirements of the AODA. Each year, a status report on the progress of measures taken to implement the multi-year accessibility plan will be



prepared and posted publicly. The accessibility plan will be reviewed by the Accessibility Advisory Committee and approved by the City Council at least once every five years. In addition, the plan will be posted on the City's website and upon request by a member of the public with a disability, the City of Cornwall will consult with the resident to provide or arrange for the provision of suitable accessible formats and communication supports.

Accessibility in Procurement, Goods, Services, Facilities and Kiosks

When procuring or acquiring goods, services, facilities or self-serve kiosks, the City shall incorporate accessibility design criteria and features, unless it is not feasible or practicable. If not practicable, the City of Cornwall shall provide an explanation, upon request.

General Training Requirements

The City of Cornwall will ensure that training is provided to all employees and volunteers, and others who are involved in developing the organization's policies and in providing goods, services, or facilities on behalf of the organization on the requirements of of the AODA and the Integrated Accessibility Standards and on the Ontario Human Rights Code as it pertains to persons living with disabilities. The training shall be appropriate to the duties of the employee, volunteer or third party. Training will be provided as soon as practicable. Training shall take place at time of hire and when any changes are made to this policy or the requirements. The City shall maintain a record of everyone who completes the training and of the date that the training was completed.

Information and Communication Standards

The City of Cornwall commits to communicating with people with disabilities in ways that takes into account their disabilities and will work with each individual to determine what method of communication works best for them.

Cornwall is obligated to provide or arrange for accessible formats and communication supports for persons with disabilities:

- upon request, in a timely manner that takes into account the persons' accessibility needs due to disability;
- at a cost that is no more than the regular cost charged to other persons;
- consult with the person making the request and determine the suitability of an accessible format or communication support;
- notify the public about the availability of accessible formats and communication supports.

Accessible Formats and Communication Supports

The City of Cornwall commits to creating, providing, and receiving information and communications in accessible formats to persons with disabilities. These accessible formats and communication supports will be provided in a timely manner and in a way that takes into account the individual needs of a person with a disability.

The City has a process for receiving and responding to feedback and the process is accessible to persons with disabilities, upon request. Employees will communicate with people with disabilities in ways that take into account their disability. When asked, the management will



provide information about our organization and its services, including public safety information, in accessible formats or with communication supports.

The City of Cornwall will consult with the person making the request to determine the suitability of an accessible format or communication support. Such accessible documents and communication supports will be provided at a cost no greater than the regular costs charged to others. If, in consultation with the Office of the City Clerk the information or communication is determined to be unconvertible within reasonable timeframe, the City must provide the person requesting the information or communication with:

- an explanation as to why the information or communications are unconvertible, and
- a summary of the unconvertible information or communications.

Emergency Plans, Procedures, and Information of Public Safety

The City of Cornwall will, upon request, provide emergency procedure, plan and public safety information in an accessible format or with communication support, as soon as practicable.

Accessible Websites and Web Content

The City of Cornwall will ensure the City's website and web content conforms to the World Wide Web Consortium Web Content Accessibility Guidelines WCAG 2.0 Level AA. The City of Cornwall's Clerk's Department, in consultation with Accessibility Advisory Committee, Managers and Directors are responsible for establishing and maintaining procedures, standards and guidelines to ensure all internet websites and web content is accessible.

Feedback on available formats and communication supports

The City of Cornwall will ensure that the processes for receiving and responding to feedback are accessible to people with disabilities. Upon request, accessible formats or communication supports will be provided or arranged. Cornwall will notify the public about the availability of accessible formats and communication supports.

Employment Standards

The City of Cornwall will foster an inclusive workforce and provide equitable treatment and accommodation to ensure a barrier-free employment. The requirements in this section apply only to employees of the City of Cornwall. Volunteers and other non-paid individuals are not captured under this section. This section addresses Cornwall's requirements of the IASR Employment Standards under the AODA.

Recruitment, Assessment and Selection

The City of Cornwall is committed to fair and equitable consideration of candidates during the recruitment, assessment, and selection process. The City of Cornwall will notify employees and the public about the availability of accommodations for applicants with disabilities:

 during the recruitment process when job applicants are individually selected to participate in an assessment or selection process;



- if a selected applicant requests an accommodation, Cornwall shall consult with the applicant and provide or arrange for the provision of a suitable accommodation that takes into account the applicant's disability; and
- notify successful applicants of the policies for accommodating employees with disabilities.

In cases where accommodations due to disability are requested, the City of Cornwall will consult with the individual and provide or arrange for suitable accommodations in a manner that considers the applicant's disability needs. Accommodations will be provided with respect to the materials or processes used in recruitment. When making offers of employment, Cornwall will notify the successful applicant of its policies for accommodating employees with disabilities.

Informing Employees of Available Supports

City of Cornwall will inform its employees of its policies used to support its employees with disabilities, including but not limited to, policies on the provision of job accommodations that take into account an employee's accessibility needs due to disability:

- as required to new employees as soon as practicable after they begin their employment; and
- whenever there is a change in policies on the provision of job accommodations that take into account an employee's accessibility needs due to a disability.

Accessible Formats and Communication Supports for Employees

Where an employee with a disability requests it, the City will consult with the employee to provide or arrange for the provision of accessible formats and communication supports for:

- information that is needed in order to perform the employee's job;
- information that is generally available to employees in the workplace; and
- consult with the employee making the request in determining the suitability of an accessible format or communication support.

Workplace Emergency Response Information

The City of Cornwall will provide individualized emergency response information to employees with a disability who identify potential accessibility barriers when responding to emergency situations.

If the employee requires assistance, and with their consent, the City of Cornwall will provide the individualized emergency response information to the person(s) designated to provide assistance. Cornwall will provide the information as soon as practicable after it becomes aware of the need for accommodation due to the employee's disability.

The City of Cornwall will review the individualized workplace emergency response information:

- When the employee moves to a different location in the organization;
- When the employee's overall accommodation needs or plans are reviewed or changed; and
- When the employer reviews or changes its general emergency response policies.



Documented Individual Accommodation Plans

Cornwall has a written process in place for developing a documented individual accommodation plan for employees with a disability. This process includes:

- the employee's participation in the development of the individual accommodation plan;
- assessment on an individual basis;
- identification of accommodation to be provided;
- timelines for the provision of accommodations;
- the City of Cornwall may request an evaluation by a medical or other expert, at its expense, to assist with determining accommodation and how to achieve accommodation;
- the employee may request the participation of a representative from the bargaining unit where represented, or otherwise a representative from the workplace where the employee is not represented by a bargaining agent;
- outlining steps taken to protect the privacy of the employee's personal information;
- frequency with which the individual accommodation plan will be reviewed and updated and the manner in which it will be done;
- if denied, the reasons for denial are to be provided to the employee;
- a format that takes into account the employee's disability;
- if requested, any information regarding accessible formats and communication supports provided; and
- identification of any other accommodation that is to be provided.

Return to Work Process

The City of Cornwall maintains a documented return to work process for employees returning to work following an illness or injury where disability-related accommodations are required in order to return to work. The City will also maintain a documented return to work process for employees who were away on leave of absence and require disability-related accommodation in order to return to work. The return-to-work process outlines the steps the City of Cornwall will take to facilitate the return to work and will include a documented individual accommodation plan as part of the process.

The return-to-work process does not replace or override any other return to work process created by or under any other statute including Occupational Health and Safety Act, Worker's Compensation Act etc.

Performance Management, Career Development, and Redeployment

The City of Cornwall will ensure employees with disabilities or individual accommodation plans are considered and treated fairly in matters related to performance management, career development and advancement, and redeployment plan.

Design of Public Spaces (Built Environment)

The City of Cornwall shall comply with the AODA Design of Public Spaces Standards (Accessibility Standards for the Built Environment) when undertaking new construction and redevelopment of public spaces in the following areas:



- Recreation trails/beach access routes
- Outdoor public eating areas like rest stops or picnic areas
- Outdoor play spaces
- Accessible parking
- Obtaining services
- Service-related elements like service counters, fixed queueing lines and waiting areas
- Maintenance of accessible elements

The City of Cornwall has procedures in place to prevent service disruptions to the accessible parts of our public spaces.

Transportation Standards

The City of Cornwall intends to make it easier for people to travel including persons with disabilities, older Ontarians and families traveling with children in strollers. Cornwall has taken a proactive and inclusive approach to accessible transit.

As a municipality, Cornwall will:

- consult with the City's Accessibility Advisory Committee, the public and persons with disabilities in the development of accessible design criteria in the construction, renovation, or replacement of bus stops/shelters, including steps to meet the goal of accessible stops/shelters;
- consult with the City's Accessibility Advisory Committee, persons with disabilities and the public to determine proportion of accessible taxis required in the community, including steps to meet the need;
- ensure taxi services do not charge a higher fee or an additional fee to persons with disabilities;
- ensure taxi services do not charge a fee for storage of assistive devices; and
- ensure taxi services have appropriate information displayed on the rear bumper and available in an accessible format to passengers.

The City of Cornwall's Accessibility Plan will include progress made by the City to meet the accessible taxi service needs of the community and provide accessible bus stops/shelters. The City of Cornwall is committed to providing accessible conventional transit, specialized transit and community transit services in accordance with the Integrated Accessibility Standards Regulation under the Accessibility for Ontarians with Disabilities Act through the development and implementation of policies, practices, procedures, resources, equipment and training in the provisions outlined in the Integrated Accessibility Standards Regulation under the Accessibility for Ontarians with Disabilities and training in the provisions outlined in the Integrated Accessibility Standards Regulation under the Accessibility for Ontarians with Disabilities Act.

Customer Service Standards

The City of Cornwall is committed to providing consistent customer service to persons with disabilities by putting into practice these four key principles:

- Dignity
- Independence



- Integration
- Equal Opportunity

Use of Service Animal

The City of Cornwall is committed to welcoming visiting persons with disabilities who are accompanied by a service animal on the parts of its premises that are open to the public and other third parties. If a visiting person with a disability is accompanied by a guide dog or other service animal, the City shall ensure that the person is permitted to enter the premises with the animal and to keep the animal with them unless the animal is otherwise excluded by law from the premises.

If a service animal is excluded by law from the premises or it is deemed unsafe for a visiting person with a disability to be accompanied by a guide dog or other service animal, the City shall ensure that other measures are available to enable the person with a disability to obtain, use or benefit from the City's goods or services by bringing goods or services to the person in a part of the premises where the animal is not restricted or by offering a safe location where the service animal can wait, if the person is able to be separated from the animal while obtaining the service, and offering assistance to the person with a disability while they are separated from the service animal.

The City shall ensure that all staff, volunteers, and other persons dealing with the public are properly trained in how to interact with visiting persons with disabilities who are accompanied by a service animal. If it is not readily apparent that the animal is used by the visiting person for reasons relating to their disability, the City has the right to request a letter from a physician or nurse confirming that the person requires the animal for reasons relating to the disability.

A visiting person with a disability who is accompanied by a service animal must maintain care and control of that animal at all times. If a customer or a staff member has an allergy to animals, the City shall make every reasonable effort to meet the needs of all individuals.

Use of Support Person

The City is committed to welcoming visiting persons with disabilities who are accompanied by a support person. If a visiting person with a disability is accompanied by a support person, the City shall ensure that both persons are permitted to enter the premises together and that the person with a disability is not prevented from having access to the support person while on the premises.

The City may require a visiting person with a disability to be accompanied by a support person when on the premises, but only if a support person is necessary to protect the health or safety of the person with a disability or the health or safety of others on the premises.

If an amount is payable by a support person for admission to the premises or in connection with a support person's presence at the premises, the City shall ensure that notice is given in advance about the amount, if any, payable in respect of the support person by including same on the City's website and in any other manner deemed appropriate.



In situations where the City has obligations under privacy laws or has issues of confidentiality or professional obligations, a support person may be requested to agree to requirements of service just as the person with a disability does.

Assistive Devices

The City is committed to welcoming visiting persons with disabilities who carry their own assistive device for the purpose of obtaining, using and benefitting from the City's goods, services or facilities. It is the responsibility of the person with a disability to ensure their assistive device is operated in a safe and controlled manner at all times.

In the situation where the City has determined that the assistive device may pose a risk to the health and safety of a person with a disability or the health and safety of others on the premises the City may offer a person with a disability other reasonable measure of assistance in obtaining, using and benefiting from the City's goods, services or facilities, where the City has such other measures available.

Notice of Temporary Disruption

The City is committed to establishing, implementing, and maintaining a process to provide notice of service disruptions. If, in order to obtain, use, or benefit from the City's goods or services, persons with disabilities usually use particular facilities or services of the City and if there is a temporary disruption in those facilities or services in whole or in part, the City shall give notice of the disruption to the public.

Notice of the disruption must include the following information:

- the reason for the disruption
- the anticipated duration
- a description of what alternative facilities or services are available, if any.

Notice shall be given on the approved Notice of Disruption Form by posting the information at a conspicuous place at the location of the disruption which may include any or all entrances and by posting it on the City's website or by such other method as is reasonable in the circumstances.

Customer Service Training

The City is committed to establishing, implementing, and maintaining a program for training staff on how to provide customer service to persons with disabilities.

The City shall ensure that the following persons receive training about the provision of its goods or services to persons with disabilities:

- Every person who deals with members of the public or other third parties on behalf of the City, whether the person does so as an employee, agent, volunteer or otherwise.
- Every person who participates in developing the City's policies, practices and procedures governing the provision of goods or services to members of the public or other third parties.
- The training must include a review of the purposes of the Accessibility for Ontarians with Disabilities Act, 2005 and the requirements of this Regulation and instruction about the following matters:



- How to interact and communicate with persons with various types of disability.
- How to interact with persons with disabilities who use an assistive device or require the assistance of a guide dog or other service animal or the assistance of a support person.
- How to use equipment or devices available on the City's premises or otherwise provided by the City, where the person interacts with the public, which may help with the provision of goods or services to a person with a disability.
- What to do if a person with a particular type of disability is having difficulty accessing the City's goods or services.
- The City's customer service policies, practices and procedures governing the provision of goods or services to persons with disabilities.

The training shall be provided to each person as soon as practicable after they have been assigned the applicable duties. The training shall also be provided on an ongoing basis in connection with changes to the policies, practices and procedures governing the provision of goods or services to persons with disabilities.

Records of training shall be kept by the City of who was trained, when they were trained, and in which format the training was delivered.

Feedback Process

The City is committed to establishing, implementing, and maintaining a process for receiving and responding to feedback about how to provide goods or services to persons with disabilities. The City has established a process for receiving and responding to feedback about the manner in which it provides goods or services to persons with disabilities and shall make information about the process readily available to the public.

Employees, members of public or others can provide feedback in person, by telephone, in writing, or by delivering an electronic text by email or online, or otherwise.

The feedback process shall include the following:

- The opportunity for the public to provide feedback in person, by telephone, in writing, or by delivering an electronic text by email or online, or otherwise.
- The opportunity to provide as much information as possible when providing feedback so that the event can be readily identified by the Supervisor and/or Manager responsible for where the event took place. This information may include dates, times, names, contact information, a description of the event, etc.
- Feedback may be received by any person who deals with members of the public or other third parties on behalf of the City, whether the person does so as an employee, agent, volunteer or otherwise and any person who participates in developing the City's policies, practices and procedures governing the provision of goods or services to members of the public or other third parties. A copy of the feedback shall be forwarded to the responsible Supervisor and to the Manager for review and to the Clerk's office for reporting purposes.
- An answer to the feedback is not mandatory, however, depending on the situation, the Supervisor and/or Manager responsible for where the event took place may deem it appropriate to respond to the individual. Should an answer be deemed appropriate and should the individual have chosen to supply their contact information, the individual may expect a response within 15 business days.



Policy Review

This policy shall be reviewed and updated by the Office of City Clerk to meet compliance with changes in legislation or whenever there are changes to the City's practices or procedures.

Questions about this policy

This policy exists to achieve service excellence to people with disabilities. If anyone has a question about the policy, or if the purpose of a policy is not understood, an explanation should be provided by or referred to the City Clerk.

Contraventions

A suitable action will be taken against employees, officials, and others responsible for compliance with the requirements of Accessibility for Ontarians with Disabilities Act (AODA) including a disciplinary action, up to and including dismissal. The City's failure to comply with AODA may result in significant fines and reputational damage.

Reference and Related Policies and Documents

- Municipal Accessibility Advisory Committee Terms of Reference
- AODA Training
- Accessibility Plan
- Employee Accommodation Policy
- Election Accessibility Plan



Manon L. Levesque City Clerk



Matthew Stephenson Interim General Manager, Human Services



Tracey Bailey General Manager, Financial Services Х

Mathieu Fleury Chief Administrative Officer

453



Electronic Monitoring Policy

Category: Legislated Policy Department: Human Resources Effective Date: TBD 2024

Table of Contents

Purpose	<u>2</u> 3
Scope	<u>2</u> 3
Application	<u>2</u> 3
Legislation and Applicable Regulations	<u>2</u> 3
Definitions	<u>2</u> 3
Roles and Responsibilities	<u>3</u> 4
Directors and Senior Management	<u>3</u> 4
General Manager of Human Resources	<u>3</u> 4
Supervisors and Managers	<u>3</u> 5
Employees	<u>3</u> 5
Information Technology4	<u>1</u> 5
Policy Statement	<u>15</u>
Active Electronic Monitoring of Employees	<u>16</u>
Passive Monitoring of Employees	<u>5</u> 6
Use of Information	<u>5</u> 7
Privacy	<u>}</u> 7
Data Retention	<u>38</u>
Policy Communication and Awareness	<u>38</u>
Violations and Consequences	<u>}8</u>
Review and Revision	<u>}8</u>
Related Policies	<u>38</u>
Appendix A - Sources for Electronic Monitoring	<u>39</u>



Purpose

Electronic monitoring can be used by the City of Cornwall (the "City") to collect information about employee activities while in the workplace or while working remotely. This Electronic Monitoring Policy (the "Policy") describes the Employer's approach to electronic monitoring in compliance with the relevant provisions of the Ontario *Employment Standards Act, 2000*, S.O. 2000, c.41 as amended from time to time (the "ESA").

The City of Cornwall is committed to transparency with regard to electronic monitoring. The purpose of this Policy is to provide transparency about the City's use of electronic monitoring tools for employee activities, including:

- how and in what circumstances the City electronically monitors employees, and,
- the purposes for which information obtained through electronic monitoring may be used by the City.

Scope

This Policy applies to all employees of the City whether the employee is working at an Employer work site, working remotely or a hybrid work model.

Application

This electronic monitoring policy aims to fulfill the City's legal obligations to address the circumstances where the City may electronically monitor employees and purposes for which such recorded information may be used. This Policy does not provide employees any new rights or right to not be electronically monitored. The contents of this Policy do not affect or limit the City's ability to conduct electronic monitoring, or use information obtained through electronic monitoring. This policy is not intended to amend or supersede any grievance procedure or other aspect of any applicable collective agreement.

Legislation and Applicable Regulations

This Policy is subject to:

- Digital Platform Workers' Rights Act, 2022
- Ontario Employment Standards Act, 2000
- Municipal Freedom of Information and Protection of Privacy Act (MFIPPA).

Definitions

- Electronic Monitoring the collection and/or use of information about an employee by an employer, for the benefit of an employer, by means of electronic equipment, software (including those managed or hosted by a third-party, e.g. cloud software) or electronic network.
- Employer The Corporation of City of Cornwall.
- Employee an individual who performs work, in any capacity, for an employer as defined by the Employment Standards Act of Ontario which includes paid and unpaid employees, contractors, temporary employees, employees who work on site, remotely or in a hybrid capacity.



- Active Monitoring the intentional tracking of activities and events, usually in real time, including without limitation: audit logs, audio and video files, camera footage, physical entry logs and location information, that may be actively reviewed on a regular basis.
- **Passive Monitoring** The collection of data, activities, and events, as a result of automated systems to maintain business operations.
- **Record** means any record of information, however recorded, that contains identifiable information about an individual in relation to an activity or event.

Roles and Responsibilities

The City, its management and employees must adhere to their responsibilities in accordance with this Policy.

Directors and Senior Management

- Ensure directing compliance and resolving any conflicts with this Policy;
- Ensure that procedural guidelines are established for this Policy;
- Upholding transparency of electronic monitoring that occurs in the workplace.
- Take all reasonable steps to ensure that management and employees rights are maintained, and procedures are followed as detailed in this Policy.
- Refrain from penalising or taking any other reprisal action against employees who have questions regarding this Policy or request compliance with it. Legitimate employer direction and/or corrective action towards employees is not considered "reprisal action."

General Manager of Human Resources

- Develop and maintain this Policy and ensure annual reviews of the policy to align with applicable legislative changes.
- Provide new employees with a copy of this Policy within 30 days of the employee's start date.
- Provide existing employees with a copy of any amended versions of the Policy within 30 days of the amendment.
- Provide advice and guidance to management and employees to support this Policy.
- Receive and manage employee inquiries related to the application of this Policy.
- Ensure privacy of all employees is respected and maintained in any electronic monitoring activities.

Supervisors and Managers

- Ensure that the privacy of employees is respected while maintaining a standard of appropriate use of City issued devices, vehicles, and accesses.
- Advise employees of the instances where they may be electronically monitored through means not mentioned in this policy;
- Respond to employees' inquiries and resolve issues raised in collaboration with Human Resources.
- Responsible for contacting Human Resources to seek guidance in the application of this Policy.

Employees

• Responsible for familiarizing themselves with this Policy and adhering to its guidelines.



- Notify management if they have any concerns relating to this policy or if they are otherwise unable to comply with this Policy.
- Responsible for contacting Human Resources to seek guidance in the application of this Policy.

Information Technology

- Understand implications around electronic monitoring of employees prior to making any changes to new software and programs, work equipment, practices or protocols which may impact this Policy.
- Informing HR of any changes to the software, practices or protocols that may impact this Policy.

Policy Statement

In this Policy, "electronic monitoring" includes all forms of monitoring of employees using technological, electronic, or digital means to track, observe or monitor employees' actions, including but not limited to, electronic equipment, mobile devices or software installed on computers or mobile devices (where data is used in compliance with the privacy policy and Acceptable use of IT equipment policy), video cameras, GPS tracking software installed on vehicles, electronic key cards and keypads.

The City will ensure that it uses the recorded events and activities for the purpose for which it was obtained and communicated and where its purpose remains consistent. The City will make every effort to inform the employee, using explicit statements and warnings, where technology permits, or using awareness and training, that an employee is being actively monitored prior to the employer engaging in monitoring activities.

This policy does not supersede any rights an employee may have under a collective agreement or employment contract with the employer. However, this policy does not provide new rights or privileges to employees to not be electronically monitored.

Active Electronic Monitoring of Employees

As a regular course of business, the City does not actively electronically monitor employees for performance management. However, the City reserves the right to monitor employees for the purpose of their performance management when there are reasonable grounds, with oversight from appropriate authorities, and in compliance with relevant legislation, the City's policies, and collective agreements. Employee performance management may include tracking employee attendance, location, and activities to ensure fulfillment of their job duties and/or compliance with organizational policies. Examples of active electronic monitoring of employees may include, but are not limited to:

- Monitoring the date and time of access to physical locations and digital resources.
- Monitoring physical location using global positioning system (GPS) technology.
- Active electronic monitoring of employees may also include direct access to the contents of assigned account(s) and/or the device(s) used by an identified employee. City accounts include, and are not limited to, email, voicemail, Teams, SharePoint, OneDrive, and other storage space assigned for use by an individual employee.



Passive Monitoring of Employees

The City conducts passive electronic monitoring of physical spaces and digital identities, assets, and resources for the following purposes:

- Physical security To assure the safety of community members and the physical security
 of premises; to monitor for violations of organizational policy; and, to monitor for violations of
 municipal, provincial, or federal laws.
- Environment management To assess and manage the physical environment, including but not limited to heating, cooling, lighting, and other facilities services that contribute to a comfortable living and workspace.
- Information technology service assurance To identify indicators of service degradation, and to assure ongoing availability and integrity of digital assets and resources connected to the network.
- **Cybersecurity** To detect, prevent, and respond to cybersecurity events and incidents, and to assure the security and safety of digital identities, assets, and resources.
- **Audit and compliance** To monitor and assure confidentiality and compliance with organizational policies, contractual obligations, relevant legislation, and regulations.

Data collected during passive electronic monitoring may include data about identifiable employees. Such data may be used to review the activities of an identifiable employee or may be used in correlation with other data sets to review the activities of an identifiable employee in the event of a complaint or investigation in alignment with applicable City policies and procedures.

The use of data collected during passive electronic monitoring at the City is done with oversight from appropriate authorities and in compliance with relevant legislation and City policies. The City's use of any electronic monitoring tools for employment-related purposes is subject to any rights an employee may otherwise have per their employment contract, collective agreement or otherwise at law.

Use of Information

The information obtained by the Employer through electronic monitoring may be used for the following purposes if there a reasonable cause to do so. The use of monitored data includes but not limited to:

- tracking employee working time through systems such as punch cards or time tracking to ensure accurate compensation and/or adherence to working time or attendance policies;
- improving work efficiency by tracking time spent on specific task types, tracking employee use of specific tools or software, or tracking employee location and travel time;
- protecting employee health and safety by tracking employee location or keeping a record of employee access to the workplace;



- ensuring employee adherence to workplace policies, especially those related to use of IT systems. For example, the Employer may review an employee's internet browsing history or instant messaging history following a complaint of inappropriate behaviour;
- To evaluate employee performance, to assess productivity and to ensure appropriate use of Employer equipment if necessary;
- For the purpose of investigations, to resolve any complaints or in case of suspicious activities such as theft, vandalism, break-in etc.

Appendix A of this policy address the various systems, software and tools through which employee activities could be monitored.

Privacy

Access to recorded activities, logs, and information, under the custody and control of the City of Cornwall, is limited to mangers and general managers who are responsible to manage and maintain the data. The City is committed to maintain the privacy of its employees and other identifiable individuals to the extent possible.

Data Retention

In order to comply with the Freedom of Information and Protection of Privacy Act, 1990 and other statutory requirements, all records, activities, and events recorded using electronic monitoring within the scope of this policy, will be kept in accordance with the City's Record Retention Policy. Any data not covered under the City's record retention policy may be kept for at least one (1) calendar month from the date that the data was first captured.

Policy Communication and Awareness

The City will provide all current employees with access to or a copy of this Policy within 30 calendar days of implementation. The City will provide all employees hired after this Policy is implemented with access to or a copy of this Policy (or the applicable revised version) within 30 calendar days of the employee's start date.

Violations and Consequences

Any violations of this policy will be addressed in accordance with the City disciplinary procedures. The severity of the violation will be taken into consideration when determining appropriate consequences.

Review and Revision

This policy will be reviewed annually to ensure its effectiveness and relevance. Any necessary revisions will be made to align with changes in legislation, technology, and work practices. If the policy is changed, employees will receive a copy of the written policy within 30 calendar days of the policy change.

Related Policies

This Policy is intended to outline the City's electronic monitoring practices and should be read in conjunction with the City's other applicable policies, guidelines, or standards, including but not limited to:



- Acceptable Use Policy for Information Technology
- Access to Information and Privacy Policy
- Video Surveillance Policy
- Records Retention Policy

Х

Manon L. Levesque City Clerk Х

Matthew Stephenson Interim General Manager, Human Services

Х

Tracey Bailey General Manager, Financial Services Х

Mathieu Fleury Chief Administrative Officer



Appendix A - Sources for Electronic Monitoring

Currently, the City is engaged in following monitoring activities:

Monitoring of Video Surveillance

The City collects data and information about activities in physical spaces on the City's premises. This data includes video surveillance of employee or public activities. Security cameras are installed at various facilities and locations across the City of Cornwall. Cameras record videos, collect and retain video of physical spaces including indoors and outdoors. The Security Cameras are used for passive monitoring of employee activities. The data and logs can be used for the purpose of investigations or in the case of any suspicious activities.

Monitoring of Key Fobs/Smart Cards/Digital Badging

Entry, exits, and other doorways are locked using electronic locks which are accessible through use of an access card, key fobs, smart card, or other digital badging technologies. The access data is recorded by the card access system(s) which collects and retains logs of physical attempts to access City's buildings and/or areas with restricted access.

Data collected may include, and is not limited to:

- the date and time of the request,
- the unique identifier of the card being used to attempt access.
- Door location

The data and logs could be used for the purpose of investigations or in case of any suspicious activities.

Passive Electronic Monitoring of digital identities, assets, and resources

Any employee utilizing devices (PC, laptop, tablet) connected to the corporate network either directly through a wired or wireless connection, or via remote access (VPN) for their day-to-day activities, can expect data to be collected. This data may include, and is not limited to, the date and time of the request, the name and internet protocol address ("IP address") of the requesting device, and the name and IP address of the digital asset or resource being requested, and the physical location of the requesting device. Additional data is collected in relation to cybersecurity threats. This data may include, and is not limited to, the results of malware scans, and the behaviour of executables, files, software, code, and processes when opened or accessed, and other data about cybersecurity threats. The data and logs could be used for the purpose of investigations or in case of any suspicious activities.



Remote Access (VPN)

This VPN solution is used for users with remote access from laptops. The systems maintain logs including the Date and time of access, username, laptop name, Windows version, Secure Access version, remote IP, VPN tunnel data usage, authentication type (single, 2FA), Wi-Fi name, cellular or other network usage, and more.

Domain Name System (DNS) Servers

DNS servers collect and retain logs of internet resource requests. Automated analysis of internet resource requests is performed to prevent exposure to known cybersecurity threats. Data collected and retained may include, and is not limited to:

- the date and time of the request,
- the name and IP address and the requesting device,
- the name and IP address of the resource being requested (e.g., websites and other resources that are accessed by devices on the City network),
- details about cybersecurity threats prevented and/or detected.

Data collected by DNS Servers may be correlated with other data sets to monitor activities of an identifiable person or persons.

Firewalls

Firewalls collect and retain logs of network connections, including connections from the internet to digital assets and resources on the network, connections from devices on the network to websites and other resources on the internet, and connections between devices on the network. Automated analysis of network connections and the content thereof is performed to prevent exposure to known cybersecurity threats. Data collected may include, and is not limited to:

- the date and time of the request,
- the name and IP address and the requesting device,
- the name and IP address of the resource being requested (e.g., websites and other resources that are accessed by devices on the City network).
- details about cybersecurity threats prevented and/or detected.

Data collected by Firewalls may be correlated with other data sets to monitor activities of an identifiable person or persons. Firewall VPN

PC Management and Inventory Systems



The City collects data for PC Management and inventory including data for various device tools and access. The logs include user access per device with date and time. The PC Management and Inventory System also catalogues and inventories installed software.

Network Servers

The City's Network Policy Servers collects data/logs and provide authentication services for Wi-Fi access on corporate devices. The logs are recorded at each connection attempt which includes include Username (valid or invalid), log in attempts - success or failure, date and time of access, device name.

Authentication and Authorization

The City collects data about authentication attempts to digital assets and resources. This data may include, and is not limited to, the date and time of the authentication attempt, the authentication identifier (e.g., network ID) and IP address of the requestor.

Active Directory

Digital assets and resources collect data about successful and unsuccessful authentication attempts.

Microsoft 365

All content directly provided to Microsoft 365 applications, including all text, sound, video, image files, and software, is retained and associated with the City's Microsoft tenant subject to both Microsoft's Data Handling Standard and the City's internal data retention policies.

Email

Email servers, including Outlook, Microsoft Exchange Online, retain logs of email communications. Email servers, including Outlook, retain logs of the results of cybersecurity threat analysis on the content of messages. Content may be retained if a cybersecurity threat is detected or suspected.

Microsoft SharePoint

Applications and sites on the Microsoft SharePoint platform may be configured to retain activity and audit logs.

Anti-Virus Software

The City collects data about cybersecurity threats on City owned and issued devices, and personally owned devices that are protected by Anti-Virus software managed by the City. This data includes, but is not limited to, the results of malware scans, internet



resources to which the device has connected, and the behaviour of executables, files, software, code, and processes when opened or accessed, and other data about cybersecurity threats.

Endpoint Protection

The City uses endpoint protection software which collects logs of cybersecurity threat analysis on the content of files and network connections. Content may be retained if a cybersecurity threat is detected or suspected. The logs are maintained for:

- Endpoint: logs activities like process executions, network communications, and file modifications;
- Network: Logs network activities related to potential threats, such as unusual data transfers or communications with known malicious IP addresses;
- UBA: monitors and logs user sign-in activities and attempts to access resources. It can detect anomalies in user behavior, such as sign-ins from unusual locations or multiple failed login attempts, which could indicate compromised credentials;
- Email / Teams: This includes logging of email activities, including the tracking of phishing attempts, malware distribution via email, and abnormal email sending patterns. It also monitors collaboration tools like Microsoft Teams for potentially harmful or suspicious activities;
- Cloud: extends its logging capabilities to cloud applications, monitoring for unusual user activities, and risky configurations. It can log data about file downloads, data sharing activities, and access to sensitive information in cloud applications.

Access Software

The City uses a software system which includes a suite of identity and access management products that has capabilities for securing and managing identities and access across environments. The following logs are maintained:

- Sign-in logs: The sign-in logs can track user sign-in activities, including information like the IP address, device information, and information on successful and unsuccessful sign-in attempts.
- Audit logs: Audit logs record changes made in the directory, such as adding or removing users, changing group memberships, and modifying application settings.
- Risk detection logs: Records potentially risky sign-in behaviors based on a variety of signals (location, time of access, baseline deviation, etc.)

GPS System - Acetek



Acetek System in installed in the City's EMS vehicles which may record and maintain records of location of the vehicles, speed of the vehicles, use of emergency warning systems, idling time, seat belt use by the Driver. The system also records and maintain video surveillance footage recorded from cameras from inside the EMS vehicles. This data is used for passive monitoring for purposes of providing emergency services with location of the vehicle, performance management, investigations, monitor vehicles performance and in case of suspicious activities.

GPS System – Geo-Data Systems

Geo-Data Systems is installed in all company vehicles except EMS vehicles. This system records and maintains records and logs for data including location of the vehicle, hard use of brakes or acceleration, idling time. This data is used for passive monitoring for purposes including performance management, investigations, monitor vehicles performance and in case of suspicious activities.

Work Phones

Call logs on work phone be monitored for call duration, source, destination, costs etc. may be recorded for usage & license management and for reconciliation of long-distance charges with the service provider(s).

Time and Attendance Stations

The electronic time and attendance stations installed at various locations records the time of entry and exit for each employee when the smart card is tapped on the system. The purpose of the stations to record time entry and prepare timesheets for employees. The data reports are used for time keeping, investigations, or in case of suspicious activities

Maintenance Systems

The maintenance system is used to record data involving documentation of preventative maintenance of EMS vehicles. The recorded data includes – data of maintenance, name of the employee performing maintenance. The data is for investigations, performance management, or in case of suspicious activities.

MediSystems Portal

The MediSystems Software records and maintain data/logs once an employee requests for medication from Pharmacy. The data or logs are used for investigations, performance management, or in case of suspicious activities.

Call Bells



The Nursing call system records and maintains data/logs of the call requests from the patients/visitors and response time to the call requests. The data or logs is used to evaluation of employee performance, for investigations or in case of suspicious activities.



Employee Record Retention Procedures

Category: Legislated Department: Human Resources Effective Date: TBD 2024

Table of Contents

Purpose
Scope
Legislation and Applicable Regulations 3
Definitions
Employee Records
Record Maintenance and Retention <u>34</u>
Document/Record
Information to be retained
Retention Period
Accessed and Maintained by
Employee's Personal Information <u>4</u> 5
Date of Birth – if employee is less than 18 years old
Dates, Time, and Hours worked by each employee for hourly employees <u>45</u>
Fixed Pay for salaried employees who are exempt from Overtime Pay provisions <u>45</u>
The regular rate for each hour of overtime worked, where the employee has two or more regular rates of pay
Written agreements to work excess hours or average overtime pay
Information contained in an employee's wage statement
Vacation time records
Vacation pay records
Substituted day off for public holiday <u>5</u> 6
Information related to statutory Leaves of Absence <u>5</u> 6
End date of employment
Severance Pay6
Grievance Files <u>6</u> 7



Arbitration Files	<u>6</u> 7
Employment Agreements and Termination Agreements	<u>6</u> 7
Record Disposal	<u>6</u> 7
Privacy	<u>6</u> 7
Right to Information	7
Related Policies	7



Purpose

The purpose of this Policy is to ensure that the City of Cornwall's (the 'City') legal and operational record keeping obligations for retention of employee records and files are identified and met in accordance with all applicable legislation. The City is responsible for establishing a framework for the retention and disposal of employee records. This policy provides a guideline for the period of time for retaining documents as well as its disposal.

Scope

These procedures are relevant for records relating to all employees, including full-time, parttime, temporary, and contract employees at the City of Cornwall.

Legislation and Applicable Regulations

This Policy will be governed by and interpreted in accordance with all applicable legislation, including (but not limited to) Ontario's Employment Standards Act, 2000 (the "ESA") and Municipal Freedom of Information and Protection of Privacy Act.

More information on the ESA requirements can be found at: Employee Files Retention

Definitions

Record: Any company documents that are stored for future reference.

Record retention: The method for securing and overseeing records.

Retention period: The length of time a record is to be kept in the company's files and storage, physically or electronically.

Active Employee: An Individual who works for the City on a regular basis and gets paid for it.

Inactive Employees: An Individual whose employment with the City has ended due to reasons including but not limited to resignation, termination, death, or retirement

Employee Records

Based on the applicable legislation, all employee records including their personal information should be kept and maintained by the Human Resources Department only. No personal information should be accessed or retained in other departments.

Record Maintenance and Retention

As per the ESA, the City is required to maintain written records for all employees including their personal information, employment history and details and payroll records.



Below is a list of employee records, information, and the department responsible for retaining that information:

Document/Record	Information to be retained	Retention Period	Accessed and Maintained by
Employee's Personal Information	 Full name Address Start date of employment 	Active Employees: Throughout the tenure of employment Inactive Employees: Three years after the employee stopped working	Human Resources Department
		for the employer	
Date of Birth – if employee is less than 18 years old	Date of Birth	Earliest of: Three years after the employee's 18th birthday or Three years after the employee stopped working for the employer	Human Resources Department
Dates, Time, and Hours worked by each employee for hourly employees	 Date on which employee worked. Start and End time of the employee's shift and break time. Total Hours worked by the employee in a day/week 	Active and Inactive Employees: Three years after the day or week of work to which the information relates	Payroll Department
Fixed Pay for salaried employees who are exempt from Overtime Pay provisions	Date, Time and hours worked do not need to be recorded for employees with fixed salary	Active and Inactive Employees: Three years after the day or week since work was performed	Payroll Department
The regular rate for each hour of overtime worked, where the employee has two or more regular rates of pay	 Date on which employee worked overtime. Start and End time of the employee's overtime shift and break time. Regular pay rate for the work for which employee worked overtime 	Active and Inactive Employees: Three years after the day or week where performed work for the employer has exceeded the overtime threshold	Payroll Department and Human Resources Department
Document/Record	Information to be retained	Retention Period	Accessed and Maintained by



		ONTARIO C	ANADA
Written agreements to work excess hours or average overtime pay Information contained in an employee's wage statement	 Agreement made with an employee to: Work excess hours. Average overtime pays Employee's wage statements 	Active and Inactive Employees: For three years after the last day on which work was performed under the agreement. Active and Inactive Employees: For three years after the information was given to the employee	Payroll Department and Human Resources Department Payroll Department
Vacation time records	 Vacation time earned since the date of hire but not taken before the start of entitlement year. Vacation time earned during the entitlement year. Vacation time taken during the entitlement year. Vacation time earned but unused as of the end of the entitlement year 	Active and Inactive Employees: For five years after the record of vacation time was made	Human Resources Department
Vacation pay records	 Vacation pays earned and paid to the employee during the entitlement year. How that vacation pay was calculated. 	Active and Inactive Employees: For five years after the record of vacation pay was made	Payroll Department and Human Resources Departments
Substituted day off for public holiday	 the public holiday which is being substituted the date of the substituted day the date on which the statement is provided to the employee 	Active and Inactive Employees: For three years from when the public holiday was substituted	Human Resources Department
Information related to statutory Leaves of Absence	All notices, certificates, correspondence, and other documents provided by the employee, or produced by the employer	Active and Inactive Employees: For three years after the day on which the leave expired.	Human Resources Department



ONTARIO CANADA			
Document/Record	Information to be retained	Retention Period	Accessed and Maintained by
End date of employment	Last date worked by the employee	Inactive Employees: For three years from date of termination	Human Resources Department
Severance Pay	Amount of severance pay paid to the employee (if applicable)	Inactive Employees: For three years from date of termination	Payroll Department
Grievance Files	All documents related to grievances including disciplinary letters, Union and management's response, settlement notes etc.	Active Employees: Throughout the employment Terminated Employees: For three years from date of termination	Human Resources Department
Arbitration Files	All documents related to grievances including disciplinary letters, Union and management's response, settlement notes etc.	Active Employees: Throughout the employment Terminated Employees: For three years from date of termination	Human Resources Department
Employment Agreements and Termination Agreements	 Offers of Employment or Contracts issued at start of employment and additional contracts issued during employment. Letters of resignation, Termination Letters, Release Letters 	Active Employees: Throughout the employment Terminated Employees: For three years from date of termination.	Human Resources Department

Record Disposal

The above-mentioned records will become eligible for disposal at the end of their retention period. The custodian of the records will annually sort the data to be disposed of after the completion of the retention period and prepare it for secured disposal. Any electronic data will be deleted permanently from all systems and software in a secure manner.

Privacy

Access to employee documents, data, and information under the custody and control of the City of Cornwall, is limited to managers and directors who are responsible to manage and maintain the data. The City is committed to maintain the privacy of its employees and store all personal information relating to employees in a confidential manner.



Right to Information

An employee may request access to their employment files by contacting Human Resources. Such a request will not be reasonably withheld. A request under this clause is limited to an Employee's own data and information. Such requests must be in accordance with an employee's applicable Collective Agreement.

Related Policies

This Policy is intended to outline the procedures for retention and disposal of employee data and should be read in conjunction with the City's other applicable policies, procedures and guidelines including but not limited to:

- Record Keeping and management.
- Privacy Policy

Х

Manon L. Levesque City Clerk Х

Mathieu Fleury

Chief Administrative Officer

Matthew Stephenson Interim General Manager, Human Services

Х

Tracey Bailey General Manager, Financial Services

7

Workplace Harassment & Violence Prevention Policy

Category: Legislated Policy Department: Human Resources Effective Date: TBD 2024

Table of Contents

Policy Statement
Purpose
Scope 3
Applicable Legislation
Our Commitment
Definitions4
Responsibilities
Employer
Employee6
Management6
Human Resources
Joint Health and Safety Committee7
Unions
Reporting Procedures
Step One – Assess Urgency and Self-Advocate, if appropriate7
Step Two – Notify Human Resources
Exceptions:
Step Three – Determine Complaint Type8
Investigation Procedures
Commitment to Investigate9
Timing of the Investigation9
Investigation Process
Confidentiality
Record Keeping
Consequences
Prohibition of Retaliation
Training
Complaints Involving Clients, Visitors or Members of the Public

Policy Review Process	12
Policy Revisions and Updates	12
Related Policies:	12
Appendix "A" - Workplace Harassment and Violence Reporting Form	13

Policy Statement

The Corporation of the City of Cornwall ("The City") is committed to providing a working environment in which all individuals are treated with respect and dignity and where every person is entitled to work in a safe environment that is free of discrimination, harassment, violence, and threatening behaviour. Workplace harassment nor violence will be tolerated from anyone in the workplace, including employees, volunteers, clients, other employers, supervisors, or members of the public. The City will take all reasonable and practical measures to prevent and protect those who work at the City from acts of discrimination, harassment and violence. As part of this commitment, we have developed a comprehensive Harassment and Violence Prevention Policy and associated Program in accordance with the applicable laws and regulations that govern the City.

Purpose

The purpose of this policy is to prevent and address all forms of discrimination, harassment, and violence in our workplace. The City will take all reasonable and practical measures to prevent and protect employees from acts of discrimination, harassment and violence. The City strives to create a workplace and community environment where individuals are treated with dignity and respect, and where all forms of discriminatory behaviour, harassment, or violence are not tolerated.

One of the ways the City demonstrates this commitment is through the development and enforcement of this Policy which also outlines our obligations to investigate reported incidents in a fair, respectful, and timely manner.

All individuals governed by this Policy have a personal responsibility to each other to take an active role in ensuring a safe and respectful workplace and upholding the principles of promoting a truly inclusive workplace where diversity and inclusion, in all forms, are valued and respected.

Scope

This Policy applies to all individuals associated with the City including, but not limited to employees, volunteers, clients, contractors, consultants, and visitors. The Policy applies to all employees of the City and all activities that occur while at the workplace, including, but not limited to, on City premises, and while engaging in City business, activities, or social events which could be outside the City's premises.

Applicable Legislation

This Policy was developed further to the City's obligations under the following legislation:

- PART III.0.1 of the Ontario's Occupational Health and Safety Act ('OHSA')
- Ontario Human Rights Code.

Under Ontario's <u>*Human Rights Code*</u>, every person has a right to equal treatment in employment without discrimination and the right to be free from harassment in the workplace.

Workplace measures to prevent and address workplace harassment are also required by the *Occupational Health and Safety Act*.

Our Commitment

The City is committed to:

- Promoting a culture of respect, dignity, and inclusion.
- Preventing all forms of discrimination, harassment, and violence, whether physical, verbal, or psychological.
- Providing education and awareness Programs to ensure all individuals understand their rights and responsibilities under this Policy.
- Promptly and impartially addressing all complaints of discrimination, harassment, or violence confidentially.
- Taking appropriate corrective action, up to and including termination or legal action, against individuals found to have violated this Policy.

Definitions

To the extent definitions may not be identical to statutory definitions, they shall be interpreted and applied in accordance with applicable legislation, including the *Human Rights Code* and *Occupational Health and Safety Act*.

Complainant(s): A person(s) who files a formal pursuant to this Policy. This can also be a person(s) for which the City potentially considers a victim of harassment and violence in the workplace.

Employee(s): An individual in an employment relationship with the City. For the purposes of this Policy, "employee" includes all workers as defined by the Ontario *Occupational Health and Safety Act.*

Formal Complaint: A written complaint using the "Reporting Workplace Harassment & Violence Reporting Form" in Appendix A of this Policy which is submitted to the General Manager of Human Resources, or as otherwise directed in this Policy,

Informal Complaint: A fully voluntary, structured interaction between the Complainant and Respondent that is designed to help them address and resolve harassment or violence issues at the earliest stage possible without a full and/or formal investigation.

Investigator: An individual or a team responsible for conducting an impartial and thorough investigation into complaints or reports of workplace discrimination, harassment, or violence. This can be internal to the organization or a third party.

Manager: An Employee of the City who has direct reports and/or provides formal supervision to another employee(s), including Senior Management (i.e. General Managers).

Prohibited Ground: One of those listed in the Ontario Human Rights Code, as amended from time to time, including race, ancestry, place of origin, colour, ethnic origin, citizenship, creed, sex, sexual orientation, gender identity, gender expression, age, record of offences, marital status, family status, and disability.

Respondent: The individual(s) against whom allegations of conduct that could constitute a violation of this Policy have been made.

4

Supervisor: An Employee of the City(s) who provides formal supervision to another employee(s) or team(s) of employees.

Vexatious: A term used to describe something that causes annoyance, frustration, or distress. If a situation, behavior, or person is referred to as vexatious, it means that it is causing trouble or irritation.

Workplace: Any place where business or work-related activities are conducted, including, but not limited to, the physical work premises, work-related social functions, work assignments outside the City's work premises, work-related travel, and work-related conferences or training sessions.

Workplace Discrimination: The differential treatment of an individual or group, such as the denial of an opportunity, based on one or more Prohibited Grounds. A person does not have to intend to discriminate for the behaviour to be deemed discriminatory. Regardless of the intent, such conduct is not acceptable and violates this Policy.

Workplace Harassment: Engaging in a course of vexatious comment or conduct against an Employee in a workplace that is known or ought reasonably to be known to be unwelcome, including on one or more Prohibited Ground. While harassment is usually based on an ongoing pattern of conduct, in some instances a single incident may be sufficiently serious to constitute harassment.

Workplace Harassment and Violence Programs: A comprehensive policy, procedures, and initiatives designed to create a safe and respectful work environment by addressing and preventing harassment and violence in the workplace.

Workplace Sexual Harassment: Includes any unwelcome conduct, comment, gesture, or contact of a sexual nature, whether on a one-time basis or a series of incidents that might reasonably be expected to cause offence or humiliation or that might reasonably be perceived as placing a condition of a sexual nature on employment, on an opportunity for training or promotion, or on the receipt of services or a contract. Sexual harassment means:

 engaging in a course of vexatious comment or conduct against an Employee in a workplace because of sex, sexual orientation, gender identity, or gender expression, where the course of comment or conduct is known or ought reasonably to be known to be unwelcome; or making a sexual solicitation or advance where the person making the solicitation or advance is in a position to confer, grant or deny a benefit or advancement to the Employee and the person knows or ought reasonably to know that the solicitation or advance is unwelcome.

Workplace Violence: Workplace Violence means an action (oral, written, or physical) which causes, is intended to cause, is an attempt to cause, is capable of causing, or could reasonably be interpreted as a threat to cause death or bodily injury to oneself or by a person against an Employee in the Workplace or property damage.

Roles and Responsibilities

Employer

• Ensure all employees are aware of, and understand, this Policy and the expectations contained within.

- Ensure that all procedures in the harassment and violence prevention Programs are carried out.
- Ensure compliance by all who work with the organization.
- Ensure that training and education is provided for all employees.
- Ensure that there is proper reporting process for incidents of workplace discrimination, harassment, and violence.
- Ensure that all reports or threats of discrimination, harassment or violence are investigated in a fair, respectful, and timely manner, take corrective action as needed, and provide response measures.
- Promote and facilitate a culture of respect, dignity, and inclusion.
- Ensure that incidents of workplace violence are reported to the Joint Health and Safety Committee (JHSC) if an employee is disabled from performing their own work or receives medical attention as a result of an incident.

Employee

- Act respectfully towards other individuals in the workplace and while participating in any work-related activity.
- Understand and comply with this Policy and all related procedures.
- Complete education and training Programs related to this Policy so that they can respond appropriately to any incident of workplace discrimination, harassment, or violence.
- Report any and all incidents of workplace discrimination, harassment, or violence.
- Ensure their own immediate physical safety in the event of workplace violence and then immediately report the incident.
- Notify emergency services, if an incident involves an assault or life-threatening situation so that site-specific emergency procedures can be actioned as the situation warrants.
- Co-operate with any efforts to investigate and resolve matters arising under this Policy.
- Inform Human Resources about their concerns regarding the potential for discrimination, harassment, or violence.

Management

- Understand and comply with this Policy and all related procedures.
- Complete education and training Programs related to this Policy so that they can respond appropriately to any incident of workplace discrimination, harassment, or violence.
- Promote a working environment free of discrimination, harassment and violence.
- Strive to create a work environment in which employees feel comfortable reporting incidents and raising concerns or questions.
- Manage interpersonal conflicts within the team before they escalate.
- Report any and all incidents of workplace discrimination, harassment, or violence.

Human Resources

Develop a comprehensive harassment and violence prevention Policy and Program in accordance with the applicable laws and regulations by which the City is governed. Ensure that the Policy is communicated effectively to all Employees.

- Implement regular training Programs for employees and managers on discrimination, harassment, and violence prevention. Conduct awareness campaigns to educate employees about their rights and responsibilities under this Policy.
- Develop clear and accessible procedures for reporting incidents of workplace discrimination, harassment, or violence.
- As the designated recipient of complaints of workplace discrimination, harassment, or violence, the General Manager of Human Resources will ensure that all complaints are investigated in a fair, respectful, and timely manner, take corrective action as needed, and provide appropriate response measures.
- Offer support services and resources for victims of workplace discrimination, harassment, or violence.
- Promote a positive workplace culture that values respect, inclusivity, and diversity and encourage leadership to set an example by promoting respectful behaviour and addressing inappropriate conduct promptly.
- Periodically review and update this Policy to align with legislated requirements and address emerging issues.
- Maintain thorough and accurate records related to discrimination, harassment, and violence prevention, including training sessions, investigations, and resolutions.

Joint Health and Safety Committee

- Provide consultation when developing the workplace violence and harassment Policy and Programs.
- Provide input and feedback with respect to the implementation and maintenance of this Policy and related processes and procedures.
- Participate in the investigation as deemed necessary if there is a report of a refusal to work where the employee has reason to believe that workplace violence is likely to endanger them.
- Assess the vulnerabilities and risks of workplace violence while carrying out their regular functions, such as workplace inspections.
- Act and investigate as deemed necessary if notified about a death, disability or critical injury that has occurred due to workplace violence.

Unions

- Provide confidential consultation to employees if they approach union representatives with their complaints or concerns.
- Provide representation to the complainant, respondent and witnesses if requested by the employees who are part of the bargaining unit.
- Properly report any concerns or issues for which they are aware of direct or indirect potential Workplace Harassment & Violence in the workplace.
- Participate in and encourage their members to participate in regular training Programs for employees on discrimination, harassment, and violence prevention.
- Work collaboratively with management to promote a positive workplace culture at the City that values respect, inclusivity, and diversity.

Reporting Procedures

Step One – Assess Urgency and Self-Advocate, if appropriate

- Assess Urgency: If the incident is urgent and serious in nature, where appropriate, notify authorities such as the police or 911 and ensure you are in a safe space, and then immediately notify a Manager and the General Manager of Human Resources (proceed to Step Two).
- **Self-Advocate:** Where Employees feel confident or comfortable doing so, tell the offending individual in clear terms that their behaviour is unwelcome and ask them to stop.
- **Exception:** The City recognizes that sometimes an individual may not feel confident or comfortable confronting the offending individual or doing so simply does not achieve the desired results. In that case, make a written record of the date, time, details of the conduct, and witnesses, if any, and proceed to Step Two.

Step Two – Notify Human Resources

If you experience, witness, or become aware of discrimination, harassment, or violence, and <u>Step</u> <u>One</u> is not appropriate or does not resolve the situation, then the individual has an obligation to report the incident to the General Manager of Human Resources as soon as possible so they can provide support and assistance to resolve the situation.

Managers/Supervisors who receive a complaint or become aware of a potential violation of this Policy are required to immediately notify the General Manager of Human Resources, so they can provide appropriate support and guidance.

Formal Complaints¹ shall be filed within a reasonable period following the occurrence of the alleged incident(s). A complaint under these procedures shall be made as soon as possible after the alleged incident occurred and <u>no later than one year</u> after the last incident occurred unless there are valid reasons why it was not brought forward sooner. Where failure to make a complaint in a timely fashion (no later than one year) affects the ability of the City to conduct a full and complete investigation, the City may decline to investigate the complaint.

Exceptions:

- If the General Manager of Human Resources is the person accused of engaging in inappropriate behaviour, report the incident to the Chief Administrative Officer (CAO).
- If the alleged inappropriate behaviour is against the CAO, submit a sealed written complaint, using the "Reporting Workplace Harassment & Violence Reporting Form" in Appendix A of this Policy, to the Mayor and City Council, who will refer the complaint to an independent third-party investigator. The complaint will not be reviewed by the Mayor or City Council, except if required to do so at the Investigator's direction.
- If the alleged inappropriate behaviour is against the Mayor or a Member(s) of the City Council, submit a sealed written complaint, using the "Reporting Workplace Harassment & Violence Reporting Form" in Appendix A of this Policy, to the General Manager of Human Resources or CAO, who will refer the complaint to the Integrity Commissioner in accordance with the *Code of Conduct for Members of Council and Local Boards*.

Step Three – Determine Complaint Type

¹Formal complaints should be raised by completing the "Reporting Workplace Harassment & Violence Reporting Form" in Appendix A

- Informal Complaint Once you notify the General Manager of Human Resources, under <u>Step Two</u>, in appropriate circumstances, you may wish to have the matter treated as an informal complaint. In that case, the General Manager of Human Resources or a third party of their choice, will attempt to resolve the situation in an informal context. Where an informal complaint process would not be appropriate or proves to be ineffective, in the City's discretion, then a formal complaint would be initiated.
- Formal Complaint To file a formal complaint, prepare a written complaint using the "Reporting Workplace Harassment & Violence Reporting Form" in Appendix A of this Policy and submit it to the General Manager of Human Resources. Please keep a copy of the form for your reference. Upon receipt of this documented complaint, the General Manager of Human Resources will initiate an investigation.

Investigation Procedures

Commitment to Investigate

When a complaint (Informal or Formal) is received, the City will take appropriate steps to investigate and resolve the complaint. What is appropriate in each situation will depend on the nature of the complaint and other relevant circumstances. All complaints will be handled in as confidential and timely a manner as possible, consistent with the City of Cornwall's obligations to conduct a thorough investigation. In appropriate situations, the City may involve external legal counsel and/or investigators.

Timing of the Investigation

The investigation will be completed in a timely manner and generally within 60 days or less of receipt of the complaint, unless there are extenuating circumstances warranting a longer investigation as determined by the investigator.

Investigation Process

In most cases, the investigator will interview, separately, both the Complainant and the Respondent. The Complainant and the Respondent will be kept informed about the status of the investigation. The investigator may also interview additional individuals who may be able to provide relevant information.

The circumstances of the complaint and investigation will be documented in detail, including responses of the Respondent and witnesses. Upon receiving consent from parties involved, investigation meetings will be recorded. These recordings will only be used for the purpose of the investigation and will be kept confidential.

Following the investigation, the Investigator may make a finding of:

- sufficient evidence to support a finding of violation of this Policy;
- insufficient evidence to support a finding of violation of this Policy; or
- no violation of this Policy.

Where warranted, the City will promptly take appropriate corrective measures including but not limited to training, counselling, verbal/written warning, suspension, or dismissal. In appropriate circumstances, the City may initiate legal action.

Where a complaint is not substantiated, as long as the complaint was made in good faith, there

will be no repercussions against the complainant. However, if a complainant falsely accuses someone of violating this Policy, knowingly or in a malicious or retaliatory manner, that false accusation constitutes a breach of this Policy, and the City may impose disciplinary action, up to and including dismissal.

Once the investigation is complete, both the Complainant and the Respondent will be advised in writing that the investigation has concluded and will be provided with a copy of the results of the investigation.

Confidentiality

Information about complaints and incidents shall be kept confidential to the extent possible and will be shared only on a strictly "need to know basis". Information obtained about an incident or complaint of workplace discrimination, harassment, or violence, including identifying information about any individuals involved, will not be disclosed unless disclosure is necessary to protect employees, to investigate the complaint or incident, to take corrective action, or otherwise as required by law.

While the investigation is ongoing and after it has been concluded, the Complainant, the Respondent, and any witnesses have an obligation not to discuss or share the incident, complaint, or investigation with one another or with other employees, unless necessary to obtain advice about their rights. The investigator may discuss the investigation and disclose the incident or complaint-related information only as necessary, and only to those who need to know. Unwarranted breaches of confidentiality may result in corrective and/or disciplinary action up to and including dismissal.

Record Keeping

The documents corresponding to any investigation will be kept on file in a secure location, separate from the employee's personnel file. Records of any remedial action taken will be placed in the appropriate employee's personnel file in accordance with the applicable Collective Agreement, or two years for non-unionized employees.

The City will keep records of the investigation, including:

- A copy of the complaint or details about the incident;
- A record of the investigation including any notes, recordings, and transcripts of recorded interviews;
- A copy of the investigation report (if any);
- A summary of the results of the investigation that was provided to the Complainant and the Respondent;
- A copy of any corrective action taken to address the complaint or incident of workplace harassment, discrimination, or workplace violence.

All records of the investigation will be kept confidential. The investigation documents, including the report, will not be disclosed unless necessary to investigate an incident or complaint of workplace harassment, workplace violence or discrimination, take corrective action, as part of a grievance procedure, or otherwise as required by law.

Consequences

Violations of this Policy may be subject to disciplinary action, up to and including immediate termination for or without cause. The City reserves the right to put the respondent on leave or change their duties pending the resolution of the complaint or outcome of the investigation.

Additionally, the City may impose discipline, up to and including immediate termination for or without cause, on the following individuals in the following circumstances:

- a) On supervisors and managers who were aware or made aware of workplace discrimination, harassment, or violence and failed to act in accordance with this Policy and/or permitted it to take place;
- b) On employees who have made a false accusation of workplace discrimination, harassment, or violence, knowingly or in a malicious manner.

The City reserves the right to take corrective action in the absence of a specific complaint, or where a complaint is initiated by a person other than the alleged victim.

Prohibition of Retaliation

The City will not tolerate reprisals or retaliatory measures against any employee who in good faith raises a complaint of workplace discrimination, harassment, or violence within the meaning of this Policy. Disciplinary action may be taken against any person who takes any reprisal against a person who reports workplace harassment, discrimination, or violence.

Retaliation is when someone penalizes or treats another person in a negative manner for any of the following reasons:

- Reporting what they believe in good faith to be discrimination, harassment, violence and/or a violation of this Policy;
- Expressing an intent to report what they believe in good faith to be discrimination, harassment, violence and/or a violation of this Policy;
- Assisting another employee to report discrimination, harassment, violence and/or a violation of this Policy; or
- Participating in any investigation under this Policy.

Training

The City requires all employees, within three (3) months of their date of hire or of this Policy coming into effect, to undergo training on workplace discrimination, harassment, and violence prevention with respect to specific rights and/or obligations arising from the *Human Rights Code* and/or the *Occupational Health and Safety Act.*

The City will further provide employees with information and instruction regarding workplace harassment, workplace violence and discrimination and the contents of this Policy at least once every year or as often as necessary.

Complaints Involving Clients, Visitors or Members of the Public

This Policy equally applies to discrimination, workplace harassment, and workplace violence that may be perpetrated by and against people who are not employees of the City, including but not limited to, contractors, suppliers, clients, visitors, or other members of the public.

11

If an allegation of discrimination, workplace harassment or workplace violence is made against a non-employee, the General Manager of Human Resources shall contact the person or the authorized representatives and inform them of the allegations and take appropriate action to ensure that the employees are not subjected to further discrimination, harassment, or violence.

Where a party other than an employee of the City has been asked to stop harassing an employee or engaging in workplace violence and does not, the City's employees are authorized to tell such individual that their behaviour is inappropriate, politely decline service, or ask the individual to leave the premises. Employees must notify their manager if such a situation arises.

If a third party is found to have violated this Policy, the City has a duty to take reasonable steps to protect the safety, security, and dignity of individuals affected by those actions and to resolve the situation. Remedies for these types of situations will depend on the circumstances of the complaint, but may include one or more of the following actions:

- Removing contractors, consultants, or other employees who participate in discrimination and harassment from the premises, and/or terminating their contracts;
- Barring the person from the City's facilities;
- Refusing service to the person;
- Taking legal action against the person; and/or
- In appropriate circumstances, the City may modify schedules or other working arrangements to avoid the Complainant coming into contact with the person.

Policy Review Process

The City is committed to continuing to enhance its respectful workplace policies, practices, and procedures. This Policy will be reviewed as often as necessary, but at least annually, to ensure it remains current and is appropriately implemented. Employees and their representatives are encouraged to provide input and feedback to Human Resources.

Policy Revisions and Updates

Original Policy	Xxxx,20xx,
Policy updated, modernized and Approved	<mark>Xxxx</mark> ,2024,

Upon the effective date of this Policy, all prior versions of the Policy are hereby repealed and rendered null and void.

Related Policies:

- Code of Conduct for Members of Council and Local Boards
- Health and Safety Policy
- <mark>xxx</mark>

Appendix "A" - Workplace Harassment and Violence Reporting Form

The purpose of this report is to officially report an incident(s) under the Workplace Harassment and Violence Policy .

Please complete this form and forward it in a sealed envelope marked <u>PRIVATE AND</u> <u>CONFIDENTIAL</u> to the General Manager of Human Resources, or as directed in this Policy.

Please provide the details of the alleged incident(s) below:

Date:	Time:
Location:	
Complainant Name and Contact Information	n, including department and work location:
Respondent Name and Contact Information	n (if known):
Relationship: Co-worker Client	Member of the Public
Other:	
Name of Witnesses and/or those providing	assistance:

Details of the complaint of workplace discrimination, harassment or violence Please describe in as much detail as possible the incident(s), including:

- the names of the parties involved;
- any witnesses to the incident(s);
- the location, date and time of the incident(s);
- details about the incident(s) (behaviour and/or words used);
- any additional details.

(Attach additional pages if required)

Individual's Explanation of Events:

What impact has this conduct had on you (if any)?

What steps, if any, did you take to immediately make it clear to the offender that their behaviour was unwelcome and offensive?

15

Recommendations (if any) / Remedy sought:

Please attach any supporting documents, such as emails, handwritten notes, or photographs. Physical evidence, etc. as part of this complaint. If you are not able to attach documents and that are relevant to your complaint, please list the documents below. If someone else has relevant documents, please note them below as well.

Reported by (please print):

Signature of Employee:

Report received by:

Date of Report:

The City of Cornwall takes every complaint of discrimination, harassment, or violence very seriously. A person making a complaint is encouraged to provide as much information and detail as they can to assist the City in handling the complaint.

Please note that a deliberately false or malicious complaint is considered to be a serious matter and will be subject to disciplinary action up to and including immediate dismissal for just cause.

17



Health and Safety Policy

Category: Legislated Policy Department: Human Resources Effective Date: TBD 2024

Table of Contents

Purpose	2
Application and Scope	2
Principles	2
Policy Statement	
Legislation and applicable regulations	Error! Bookmark not defined.
Definitions	
Roles and Responsibilities	
Employees	
Supervisors and Managers	7
Senior Managers and Directors	7
Human Resources	
Joint Health and Safety Committees	
Chief Administrative Officer	
Visitors	Error! Bookmark not defined.
Union	
Policy Communication and Awareness	
Complaint Procedure	
Monitoring and Compliance	Error! Bookmark not defined.
Consequences of non-compliance	10
Review and Revisions	10
Related programs and procedures	10



Purpose

The Corporation of the City of Cornwall ("The City" or "Cornwall") is committed to creating a work environment where all Workplace parties including employees, supervisors, managers, Joint Health and Safety Committees, unions and associations, contractors, sub-contractors, students, interns, and volunteers actively play a vital role in their safety, health and well-being through prevention and continuous improvement.

The City is committed to the prevention of workplace injuries and the promotion of practices that ensure that all employees are able to work in an environment that is free of hazards that could affect their health and safety. The City is committed to protecting employees from injury and illness by establishing safe work practices in compliance with occupational health and safety legislation.

Scope

This policy applies to all Workplace parties including employees, supervisors, managers, Joint Health and Safety Committees, unions and associations, contractors, sub-contractors, students, interns, and volunteers. This policy also applies to elected officials including Mayor, members of Council.

Principles

The City values the health and safety of its employees and intends to maintain a healthy and safe work environment and will comply with health and safety legislation, regulations, and orders as the minimum standards. The City will accomplish this by providing resources adequate for the occupational health and safety management system. The City is committed to:

- Engaging, communicating, and encouraging the active participation of all employees in Health and Safety programs;
- Identifying and eliminating hazards and reducing occupational health and safety risks, injuries, and illnesses;
- Providing appropriate training and education;
- Continually improving the City's organizational health and safety management system, and its health and safety culture.



Legislation and applicable regulations

<u>Ontario Occupational Health and Safety Act</u> provides the legal framework and governs the requirements for Health and Safety regulations.

Policy Statement

The City is committed to working in collaboration with its Workplace Parties to create a physically and psychologically safe and healthy work environment. This Policy is intended to ensure that the workplace parties understand their roles and responsibilities and ensure they are adhering to them with respect to the Ontario Occupational Health & Safety Act and all City health and safety policies and procedures. The policy focuses on the City's responsibilities to:

- Ensure existence of a strong system and processes for successfully managing health and safety at the City;
- Comply with the Occupational Health and Safety Act and applicable Regulations.
- Development, maintenance, and promotion of relevant policies, standard operating procedures, programs, and guidelines;
- Ensure Supervisors are Competent Persons;
- Proactively managing risks and hazards to prevent Workplace injury, illness or loss to Employees, contractors, suppliers, volunteers, and the public;
- Provide education, training, and competency evaluations to ensure Employees understand and meet their health and safety responsibilities;
- Recognize the importance of supporting Joint Health and Safety Committees and its representatives in meeting their legislative obligations and of consulting and co-operating with Joint Health and Safety Committees and representatives when developing and implementing health and safety policies, programs, and procedures;
- Acknowledge that the Internal Responsibility System is essential for maintaining City's ongoing commitment, communication, and co-operation;
- Measure and monitor progress through audits, inspections, investigations, and evaluations

Definitions

Competent Person: means a person who is qualified for a position because of knowledge, training, and experience to organize the work and its performance, is familiar with the



Occupational Health and Safety Act and applicable Regulations that apply to the work; and, has knowledge of any potential or actual danger to health or safety in the Workplace.

Critical injury: An injury of a serious nature that:

- Places life in jeopardy;
- Produces unconsciousness;
- Results in substantial loss of blood;
- Involves the fracture of a leg or arm, but not a finger or toe;
- Involves the amputation of a leg, an arm, a hand, or a foot, but not a finger or toe;
- Consists of burns to a major part of the body; or
- Causes the loss of sight in an eye.

Employee or Worker: means any of the following:

- a person who performs work or supplies services for monetary compensation;
- a secondary school student who performs work or supplies services for no monetary compensation under a work experience program authorized by the student's school board;
- a person who performs work or supplies services for no monetary compensation under a program approved by a college of applied arts and technology, university, private career college or other post-secondary institution; or,
- such other persons as may be prescribed who perform work or supply services to the City for no monetary compensation.

Emergency: A present or imminent event or circumstance that:

- Is caused due to an incident, fire, explosion, technical failure, or the forces of nature, and
- Requires prompt coordination of action or special regulation of persons or property to protect the health, safety, or welfare of a person or to limit damage to property.

Hazard: Source with potential to cause injury or ill health, damage to property or the workplace, or a combination of these.

Health and safety management system: A health and safety management system is a framework, set of guidelines or tool that helps those responsible manage health and safety in the workplace methodically.

Incident: Means an undesired event which could or does result in injury, illness, or damage to people, equipment, or the work environment. It may include fatality, critical injury, disabling



injury, serious injury, occupational illness, workplace violence, first aid injury, property damage, near miss etc.

Internal Responsibility System (IRS): The IRS is a system, within an organization, where everyone has direct responsibility for health and safety as an essential part of their job, irrelevant of their position or role in the organization. Each person takes initiative on health and safety issues and works to solve problems and make improvements on an on-going basis.

Joint Health and Safety Committee: A committee of employees and supervisory representatives who are mutually committed to improving health and safety conditions in the Workplace. Committees meet on a regular basis to identify potential health and safety issues, bring them to the employer's attention, and conduct Workplace inspections monthly.

Member of Council: Any elected or appointed official on Council, including the Mayor.

Near Miss: An incident in which there is no injury or property damage, but, given a slight shift in time or position, injury or damage could have occurred.

Occupational Illness: A condition that results from exposure in a workplace to a physical, chemical, or biological agent to the extent that normal physiological mechanisms are affected, and the health of the worker is impaired.

Psychologically Safe Workplace: Psychological safety is the absence of harm and/or threat to mental health and well-being that an employee might experience in the workplace.

Record: Documentation of business transactions, decisions, and activities, such as investigation notes, training records, etc.

Manager or Supervisor: A person who has charge of a workplace or authority over a worker or another person. The determination as to whether a person is a supervisor does not depend on that person's job title. Rather, it depends on whether the person is responsible for a location (for example, an office or laboratory) where work is performed on a paid or unpaid basis or whether the person gives direction to complete work performed by workers, students, visitors, or volunteers. Depending on the workplace relationship, a supervisor may include, for example, the manager, the Director, the supervisor, etc.

Unsafe act: An activity conducted in a manner that may threaten the health and/or safety of individuals or cause damage. An unsafe act may include using defective equipment, operating equipment without training or authorization, use of tools/equipment for other than their intended purposes, etc.

Unsafe condition: A condition or situation in the workplace that may threaten the health and/or safety of individuals or cause damage. An unsafe condition may include inadequate guards or warning systems, congestion in the workplace, etc.

5



Workplace: Any land, premises, location, or thing at, upon, in, or near which an Employee works and may include but is not limited to:

- physical and virtual work environments (including vehicles)
- locations visited by Employees while travelling on City related business; or,
- locations of work-based social gatherings, training, and conference or travel.

Workplace Parties: Means Supervisors, Employees, Joint Health and Safety Committees, unions and associations, contractors, sub-contractors, students, interns, and volunteers.

Work Refusal: A situation in which a worker may refuse to work or do particular work given that the worker has reason to believe that:

- Any equipment, machine, device, or thing the worker is to use or operate is likely to endanger the worker or another worker;
- The physical condition of the workplace, or the part thereof, in which the worker works, or is to work, is likely to endanger the worker;
- Workplace violence is likely to endanger the worker; or
- Any equipment, machine, device, or thing the worker is to use or operate, or the physical condition of the workplace, or the part thereof in which the worker works, or is to work, is in contravention of the Act or the regulations and such contravention is likely to endanger the worker or another worker.

Roles and Responsibilities

Health and Safety is a shared responsibility of all Workplace Parties.

Employees

- Have thorough knowledge of and maintain compliance with this Policy;
- Be familiar with their rights and responsibilities under this Policy;
- Contribute to a safe and healthy work environment through acceptable behaviours and actions;
- Understand, participate in training, and work in compliance with the *Occupational Health and Safety Act* and applicable Regulations, this Policy, and accompanying materials;
- Use or wear the equipment, protective devices or clothing required to safely perform the job duties;
- Work and act in a way that will not endanger themselves or anyone else;



- Report hazards or any contraventions of the *Occupational Health and Safety Act* and applicable Regulations, this Policy, and accompanying materials to their Supervisor;
- Report all Workplace Incidents immediately to their Supervisor;
- Not remove or make ineffective any protective device required by law and accompanying materials;
- Refuse unsafe work;
- Refrain from using or operating any equipment, machine, device or thing or work in a manner that may endanger themselves, or any other worker;
- Not to engage in any prank, contest, feat of strength, unnecessary running, or rough and boisterous conduct;
- Co-operate with the Joint Health and Safety Committee members.

Supervisors and Managers

- Lead by creating and maintaining a safe and healthy Workplace while being a role model for others;
- Understand and comply with the Occupational Health and Safety Act and applicable Regulations, this Policy, and accompanying materials;
- Ensure Employee awareness of and monitor and enforce compliance with the Occupational Health and Safety Act, applicable Regulations, this Policy, and accompanying materials;
- Provide information, written instruction as needed, training, and supervision to protect Employees;
- Identify, assess, communicate, and control hazards specific to the work performed;
- Advise Employees of any potential or actual danger to their safety or health of which the Supervisor is aware;
- Ensure that Employees wear the necessary equipment, clothing and protective equipment and ensure it is maintained in good condition; and,
- Take every precaution reasonable in the circumstances for the protection of Employees.

Senior Managers and Directors

- Ensure an Occupational Health and Safety Policy is in place and a program is in place to implement this Policy;
- Appoint Managers and Supervisors who are Competent Persons and ensure they are held accountable for complying with the Occupational Health and Safety Act and applicable Regulations, this Policy, and accompanying materials;
- Ensure the working environment is maintained in a healthy and safe condition.
- Evaluate the health and safety performance of all departments and take necessary actions as needed.
- Ensure that personal protective equipment, where required, is provided and used.
- Investigate and report accidents/cases of occupational disease to appropriate authority.



 Identify departmental reports and information required in consultation with the Joint Health and Safety Committees for the purpose of meetings or to evaluate the performance of the programs.

Human Resources

- Prepare, maintain, and facilitate the review of this Policy at least once, annually;
- Establish and maintain a written health and safety program, with objectives and standards consistent with applicable legislation, in consultation with Workplace Parties, and review the program as often as necessary;
- Provide support and guidance to Supervisors, Managers and Employees to ensure compliance with the *Occupational Health and Safety Act* and applicable Regulations, this Policy, and accompanying materials;
- Establish a comprehensive system to record incidents, meeting minutes etc. for the City's Health and Safety program in consultation with departments and the Joint Health and Safety Committees;
- Analyze and track the statistical information related to workplace incidents and take remedial actions to reduce the number of incidents.
- Identify significant trends and directions of workplace hazards and accidents and notify departments;
- Maintain an inventory of current and past information regarding preventative measures;
- Require Employees to review this Policy at least once annually;
- Post this Policy in a visible location in the Workplace and ensure Employees are able to locate this Policy in the Workplace and digital location;
- Assess and evaluate the effectiveness of current safety training and accident prevention programs in the workplace;
- Manage JHSC program to ensure compliance; record and maintain JHSC meeting minutes.

Joint Health and Safety Committees

- Ensure compliance with their duties under the Occupational Health and Safety Act;
- Foster an atmosphere of open communication and co-operation between the employer and the workers;
- Identify situations that may be a source of danger or hazard to workers and make recommendations for improvement of the health and safety of workers;
- Recommend the establishment, maintenance and monitoring of health and safety programs;
- Obtain information from the employer on actual or potential hazards;
- Inspect the workplace on a monthly basis;
- Designate members to investigate work refusals and critical or fatal injuries;
- Joint Health and Safety Committees shall meet at least once every month and keep minutes of these meetings and make the minutes available to all workers and the Ministry of Labour;



- Joint Health and Safety Committees shall have at least two certified members, one representing management and one representing workers;
- Joint Health and Safety Committees shall establish a written Terms of Reference and it shall be reviewed annually.

Chief Administrative Officer

- Ensure the requirements of this policy are fulfilled throughout the Corporation;
- Oversee the framework of Occupational Health and Safety activities of the City;
- Hold all levels of the organization accountable for their safety performance;
- Ensure the corporation complies with the Corporate Health and Safety Policy, as well as all relevant health and safety legislation;
- Ensure appropriate standards in safety training and orientation are established and that compliance to these standards is on-going;
- Monitor the health and safety program to ensure compliance with existing policy, regulations, and standards and that appropriate commendations and/or corrective measures are applied;
- Ensure Joint Health and Safety Committee establishment and functions are carried out as prescribed;
- Take all reasonable care to ensure that contractors and visitors comply with their health and safety responsibilities;
- Take every precaution reasonable in the circumstances for the protection of a workers.

Unions

- Support and promote a culture of safety and raise awareness among employees;
- Provide guidance to members on the proper procedures to be followed and encourage safe practices;
- Cooperate fully with the City to ensure safe and healthy workplace for all employees;
- Encourage employees to participate in the Joint Health and Safety Committee programs.

Policy Communication and Awareness

The City will provide awareness programs to employees to educate them about the importance of Health and Safety at workplace as well as the potential hazards that can be found in the workplace.

Complaint Procedure

Employees are encouraged to report any workplace hazards, incidents and health and safety related concerns to their immediate supervisor and members of the Joint Health and Safety Committee. If the issue remains unresolved after the discussion with immediate supervisor, or if



the employee is uncomfortable addressing it directly with their supervisor, they may contact the Joint Health and Safety Committee or General Manager of Human Resources for support and investigation, if necessary.

Consequences of non-compliance

Any violations of this policy will be addressed in accordance with the City of Cornwall's disciplinary procedures up to and including dismissal or other action as appropriate. The severity of the violation will be taken into consideration when determining appropriate consequences.

Review and Revisions

The City will review and update this policy at least once every year to ensure it effectiveness and compliance with any changes in laws or regulations. Any necessary revisions to this policy will be made to align with changes in legislation and work practices. If the policy is changed, employees will provide with the updated copy of the policy.

Related policies, programs, and procedures

- Internal Responsibility System
- Emergency Response Plan and Evacuation Procedures
- Return to Work Plan
- Hazard Identification and Analysis
- Joint Health and Safety Committee
- Health and Safety Training
- Monthly Inspections
- Workplace Incidents and Investigations
- Accommodations Process
- Hazard and Risk Control
- Workplace Violence and Harassment Policy



Х

Manon L. Levesque City Clerk

Х

Tracey Bailey General Manager, Financial Services

Х

Matthew Stephenson Interim General Manager, Human Services

Х

Mathieu Fleury Chief Administrative Officer



Whistleblower Policy

Category: Legislated Policy Department: Human Resources Effective Date: TBD 2024

Table of Contents

Policy Statement	>
Scope)
Definitions 2	>
Purpose	3
Responsibilities	3
Whistleblower(s)	3
Senior Management Team	3
Managers and Supervisors4	ŀ
Employees	ŀ
General Manager of Human Resources 4	ŀ
Unions 4	ŀ
Designated Recipient(s)4	ŀ
Third-Party Confidential Reporting5	5
Whistleblower Reporting Procedures 5	5
Confidentiality	5
Protection Against Retaliation 5	5
Investigation Process	5
Timing of the Investigation6	3
Record Keeping	3
Consequences	3
Remedial Actions	7
Legal Consequences	7
Communications	7
Monitor and Review	7



Policy Statement

The Corporation of the City of Cornwall ("The City") is committed to conducting its affairs with the highest standards of integrity, transparency, and accountability. To support this commitment, the City encourages employees to come forward with information about any serious wrongdoing or unethical behaviour within the organization. This Whistleblower Policy is designed to protect whistleblowers from retaliation and to provide a framework for reporting and addressing concerns.

Scope

This policy applies to all employees, contractors, and consultants associated with the City of Cornwall.

Definitions

For the purpose of this Policy, the following definitions shall apply:

Confidentiality: The protection of the identity and information provided by whistleblowers to the extent allowed by law. While the City of Cornwall is committed to maintaining confidentiality, there may be circumstances where disclosure is necessary for a thorough investigation.

Corrective Actions: Measures taken by the City of Cornwall in response to the findings of an investigation to address and rectify any identified wrongdoing. Corrective actions may include disciplinary measures, policy changes, process improvements, or other remedial steps.

Designated Recipient: This is a specific individual(s) within an organization who is designated to receive and handle whistleblowing reports. This person or team is responsible for ensuring that reports are promptly and appropriately addressed, maintaining confidentiality, and following up on reports to ensure they are thoroughly investigated and resolved. The designated recipient is often a member of senior management or an individual with sufficient authority and independence to handle whistleblowing reports impartially.

Independent Investigator: An individual or entity with the necessary expertise and independence to conduct a thorough and impartial investigation into reported concerns. The independent investigator may be internal or external to the City of Cornwall.

Retaliation: Any adverse action taken against a whistleblower in response to their reporting of wrongdoing. This includes, but is not limited to termination, demotion, harassment, intimidation, or any other form of discriminatory treatment.

Serious Wrongdoing: Any illegal, fraudulent, unethical, or dishonest activity that violates laws, regulations, or City of Cornwall policies.

Whistleblower: Any individual who discloses information about suspected wrongdoing or unethical behaviour related to the City of Cornwall.

Wrongdoing Report ("a report"): A formal or informal communication that discloses information about suspected wrongdoing or unethical behavior within the City of Cornwall.



Purpose

The main objective of this policy is to establish a framework that promotes transparency, integrity, and accountability within the organization. The specific objectives include:

- Encourage reporting of serious wrongdoing This policy is designed to ensure that the City of Cornwall complies with relevant laws and regulations related to whistleblowing and reporting of serious wrongdoing. This includes adherence to the Public Service of Ontario Act, 2006, and other applicable legislation.
- **Protect whistleblowers** This policy aims to establish clear protections for individuals who come forward with information about serious wrongdoing. This policy includes safeguards against retaliation, ensuring that whistleblowers are shielded from adverse actions such as harassment, demotion, or termination as a result of their disclosures.
- Strengthen the ethical culture at the City of Cornwall By providing a secure avenue for reporting and addressing concerns, the policy sends a clear message that the City of Cornwall values integrity and ethical conduct, promoting a culture of trust and accountability.
- Detect and prevent fraud and misconduct This policy aims to detect and address instances of fraud, corruption, and other forms of misconduct early on. This proactive approach helps prevent financial losses, reputational damage, and legal consequences for the City.
- Facilitate Investigation and Resolution This policy establishes procedures for the proper investigation of reported concerns. It outlines the steps to be taken in response to a disclosure, ensuring a fair and thorough examination of the reported wrongdoing. This contributes to effective resolution and corrective actions.
- Improve internal controls Through the reporting and investigation of wrongdoing, this policy contributes to the identification of weaknesses in internal controls. This allows the City of Cornwall to implement corrective measures and strengthen its governance processes.

Responsibilities

Whistleblower(s)

- Report concerns promptly, providing as much detail as possible.
- Use appropriate channels for reporting.
- Cooperate with any subsequent investigations if required.
- Refrain from making malicious or false accusations, as such actions may result in disciplinary measures.

Senior Management Team

- Support and promote a culture of transparency and accountability at the City of Cornwall.
- Ensure that the Whistleblower Policy is effectively communicated to all stakeholders.
- Allocate resources necessary for the implementation and maintenance of the Whistleblower Program.



- Receive periodic updates on whistleblower activities and outcomes.
- Review and endorse changes to the Whistleblower Policy as necessary.

Managers and Supervisors

- Encourage an environment that promotes openness and the reporting of concerns without fear of reprisal.
- Respond promptly and appropriately to any reports of serious wrongdoing within their areas of responsibility.
- Cooperate fully with any investigations and provide necessary support.
- Ensure that employees under their supervision are aware of the Whistleblower Policy.

Employees

- Familiarize themselves with the Whistleblower Policy and reporting mechanisms.
- Report any suspected serious wrongdoing promptly through appropriate channels.
- Cooperate fully with any investigations related to reported concerns.
- Refrain from engaging in retaliation against whistleblowers.

General Manager of Human Resources

- Regularly review and update the Whistleblower Policy to ensure its relevance and compliance.
- Ensure that employees are aware of the Whistleblower Policy and their rights under it.
- Implement training programs to educate employees about the importance of reporting concerns and the protection offered by the policy.
- Keep records of whistleblower reports and investigations in a secure and confidential manner.
- Provide guidance on legal and regulatory matters related to whistleblowing.
- Ensure that the Whistleblower Policy is compliant with all applicable laws and regulations.

Unions

- Support and promote a culture of transparency and accountability at the City of Cornwall.
- Provide guidance to members on the proper procedures for filing whistleblower complaints.
- Cooperate fully with any investigations related to reported concerns.
- Refrain from engaging in retaliation against whistleblowers.

Designated Recipient(s)

- Responsible for receiving reports of misconduct or violations, reviewing the details of the report, and initiating an investigation process.
- Ensure that investigations are conducted in a manner that protects the confidentiality of the reporter and the integrity of the process.
- Responsible for maintaining appropriate documentation, ensuring that information is shared on a need-to-know basis, and protecting individuals involved from retaliation.
- Facilitate appropriate corrective actions based on investigation outcomes.



Third-Party Confidential Reporting

- Receive and acknowledge all wrongdoing reports promptly.
- Forward reports to the Designated Recipient at the City.
- Facilitate follow-up communication with the individual that made the report, as applicable.

Whistleblower Reporting Procedures

The purpose of this reporting procedure is to establish a clear and confidential process for reporting observed or suspected serious wrongdoing within the City. Whistleblowers are encouraged to report concerns about wrongdoing through the following channels:

- 1. Initial Reporting to Manager or member of Management
 - If you suspect wrongdoing or unethical behaviour in the workplace, report it promptly to your immediate supervisor or a member of management.
 - Complete the reporting form in Appendix A and provide specific details of the incident, including dates, times, and any evidence or witnesses, if available.
- 2. Escalation to Confidential Whistleblower Third-Party Firm
 - If you are uncomfortable reporting to your manager or if you believe the issue is not being addressed properly, you can escalate your report to a confidential third party whistleblower firm as follows:
 - [INSERT CONTACT INFORMATION/PROCESS]

Confidentiality

The City of Cornwall is committed to protecting the confidentiality of whistleblowers to the fullest extent permitted by law. Information related to the whistleblower's identity will only be disclosed to those individuals involved in the investigation as required by law. Whistleblowers may choose to report anonymously through the third-party Whistleblowing Firm.

Protection Against Retaliation

Any form of retaliation against a whistleblower will be strictly prohibited and treated as a serious violation of this policy.

Corrective action will be taken against individuals found to have engaged in retaliation, which may include disciplinary measures, up to and including termination.

Investigation Process

When a report is received, the City will take appropriate steps to investigate and resolve the matter. What is appropriate in each situation will depend on the nature of the report and other relevant circumstances. All reports will be handled with confidentiality and in a timely manner as possible, consistent with the City of Cornwall's obligations to conduct a thorough investigation. In appropriate situations, the City may involve external legal counsel and/or investigators.



The investigation process for whistleblowing will typically involve several key steps to ensure fairness, thoroughness, and compliance with legal requirements as follows:

- 1. **Receipt of the Report**: The City receives the whistleblowing report through the designated channel.
- 2. **Initial Assessment:** The Designated Recipient will conduct an initial assessment to determine the credibility, seriousness, and urgency of the report. This may involve gathering preliminary information and identifying potential risks.
- 3. **Appointment of Investigator(s):** A qualified and impartial investigator or investigation team will be appointed to conduct the investigation. The investigator should have the necessary skills and training to handle the specific nature of the allegations. The City may involve legal counsel and/or external investigators.
- 4. **Investigation:** During the investigation, the appointed investigator gathers evidence, interviews witnesses, and analyzes the information to determine the validity of the allegations and prepares a detailed report of findings
- 5. **Decision Making:** Based on the investigation findings, the City will make a decision on how to address the whistleblowing report. This could involve taking corrective actions, implementing new policies or procedures, or other measures.
- 6. **Communication with Stakeholders:** The City will communicate the outcome of the investigation to relevant stakeholders, including the whistleblower, alleged wrongdoer, if applicable, and other affected parties. Confidentiality is maintained to the extent possible.
- 7. **Follow-Up and Monitoring:** The City will follow up on any corrective actions taken as a result of the investigation and monitor the situation to prevent future wrongdoing.

Timing of the Investigation

The investigation will be completed in a timely manner and generally within 60 days or less of receipt of the report, unless there are extenuating circumstances warranting a longer investigation as determined by the investigator.

Record Keeping

The documents corresponding to any investigation will be kept on file in a secure location. Records of any remedial action taken against an employee, if applicable, will be placed in the appropriate employee's personnel file.

Consequences

Violations of this Policy may be subject to disciplinary action, up to and including immediate termination for or without cause. The City reserves the right to put an employee on leave or change their duties pending the resolution of the investigation.

6



Additionally, the City may impose discipline, up to and including immediate termination for or without cause, on the following individuals in the following circumstances:

- On supervisors and managers who were aware or made aware of serious wrongdoing and failed to act in accordance with this Policy and/or permitted it to take place;
- On employees who have made a false Whistleblower report, knowingly or in a malicious manner.

Remedial Actions

In addition to disciplinary measures, the City will take remedial actions to address the consequences of the misconduct and prevent its recurrence. Remedial actions may include implementing process improvements, additional training, or other measures to rectify the issues identified.

Legal Consequences

If the investigation uncovers illegal activities, the organization may take legal action against the responsible parties, which may involve reporting the matter to law enforcement authorities.

Communications

In accordance with ESA, the City of Cornwall will present a copy of this policy to all employees within 30 calendar days of the policy being prepared or changed. In addition, new employees will be provided with a copy of this policy within 30 days of being hired.

Monitor and Review

The City will periodically review and update this policy to ensure it remains effective and compliant with any changes in laws or regulations.

\mathbf{V}	
Λ	

Manon L. Levesque City Clerk Х

Matthew Stephenson Interim General Manager, Human Services



Tracey Bailey General Manager, Financial Services Х

Mathieu Fleury Chief Administrative Officer



Media Relations Policy

Category: Legislated Policy Department: Human Resources Effective Date: TBD 2024

Table of Contents

Table of	of Contents	Error! Bookmark not defined.
Purpos	se	2
Scope		2
Author	ized Spokespersons	2
Proced	dures	2
1.	Media Inquiries	2
2.	Press Releases and Statements	
3.	Social Media	
4.	Crisis Communication	
5.	Training	
6.	Monitoring	
Extern	al Media	
Vision	Alignment	

Purpose

To ensure effective and consistent communication with the media and the public, maintaining the City's commitment to transparency, accountability, and community engagement.

Scope

This policy applies to all City of Cornwall employees, elected officials, and representatives.

Authorized Spokespersons

Mayor and City Council Members: Official statements and positions on policy, governance, and strategic initiatives.

Chief Administrative Officer (CAO): Operational matters and administrative policies.

General Managers and Directors: Specific departmental issues, projects, and programs.

Subject Matter Experts: Project leads, highly specialized individuals who have technical project knowledge, as identified, and approved, by the Manager of Communications.

First Responders: Emergency Response personnel with on-scene knowledge of emergent situations and operational updates, as identified, and approved, by the Manager of Communications.

Manager of Communications & Communications Team Members: Media inquiries, press releases, and crisis communication.

Procedures

- 1. Media Inquiries:
 - Employees must inform the Communications Manager and Communications Team of any request for comment in writing or any request for appearance on radio or TV programming.
 - Direct all media inquiries received directly to the Communications Manager/Team.
 - Employees must not respond to media requests unless authorized by the Manager of Communications.

- 2. Press Releases and Statements:
 - Press Releases are to be drafted and actioned by the Manager of Communications or Communications Team.
 - Drafts must be approved by the CAO or Director of Government Relations and Corporate Priorities, and any quoted individual (including but not limited to the Mayor, Councillors, CAO, Department Heads, External Stakeholders, etc.).
 - All Press Releases will be published in English and French via the City's website.
- 3. Social Media:
 - Official City social media accounts are managed by the Communications Team.
 - City employees must abide by the City's Social Media Policy at all times, whether on or off the clock.
- 4. Crisis Communication:
 - In crisis situations, the Manager of Communications coordinates all media responses.
 - In emergencies, every effort will be made to communicate proactively and accurately in a timely way, across communications channels, including via mainstream and social media.
 - A designated Crisis Communication Team will be activated as necessary. This team will work in close collaboration with any necessary Emergency Services and aligned with the Emergency Notification Policy.

5. Training:

- City Staff identified as official spokespersons will be provided with Media Training
- Best practice baseline and refresher courses will be provided on a regular basis.
- Requests for such training can be made via Communications.

6. Monitoring

• The Manager of Communications and Communications Team will monitor media coverage and public sentiment as appropriate.

Non-compliance with these procedures may result in disciplinary action.

External Media

All media requests are to be submitted to <u>communications@cornwall.ca</u>. Requests submitted through any other channels will be deemed unofficial and may not be responded to. Any responses solicited through inappropriate/unofficial channels (i.e., not provided by Communications and approved per the procedure outlined above) will not be considered the official position of the City of Cornwall.

Vision Alignment

This policy supports Cornwall's vision of being a diverse and progressive community, ensuring residents and partners are well-informed and engaged. By maintaining clear and consistent communication, we foster a safe and welcoming environment that upholds our commitment to high-quality, sustainable services.

For more details or inquiries about this policy, please contact the Communications Team at communications@cornwall.ca.



Social Media Policy

Category: Legislated Policy Department: Human Resources Effective Date: TBD 2024

Table of Contents

	. 1
Overview and Purpose	2
Policy Statement	2
Policy Scope	2
Definitions	2
Administration of Official Social Media Pages	3
Intent of Official Social Media Pages	4
Content on Official Social Media Pages	5
Branding of Official Social Media Pages	5
Personal Use of Social Media by City Staff (Terms of Use)	6
Social Media and Staff' Right to Privacy	7
Related Policies and Obligations	8
Violation(s) of this Policy	8

Overview and Purpose

The purpose of the social media policy is to protect the City of Cornwall's (hereinafter 'the City') reputation and ensure consistency and professionalism with how the City and its Staff communicate with the public via social media platforms. It further provides the City's Staff and the public with an understanding of the acceptable use of social media pages as they relate to the City.

This policy will outline:

- Monitoring and administration of the City's social media platforms, including approved and prohibited social media platforms.
- Monitoring and triaging messages received through social media.
- Content suitable for social media platforms, and
- Personal usage of social media by City Staff.

Policy Statement

Social media platforms are powerful tools and communication channels that have become, in many cases, the primary source of information for many individuals. With this shift from print to digital information-seeking, the City encourages the use of social media platforms to further its strategic goals.

The City's website (<u>www.cornwall.ca</u>) will remain the primary source of information and Internet presence. However, the City is committed to using social media in a professional and accessible way to complement it.

Policy Scope

This policy applies to all City Staff.

Definitions

Staff: Refers to all full-time, part-time, casual, seasonal and term Staff, and contractors, subcontractors, consultants and any other person works with or acts on behalf of the City.

Official Social Media Page(s): Official accounts approved, created and maintained by the City. Official Social Media Pages are:

2

- Twitter/X: https://twitter.com/CityofCornwall
- Facebook: https://www.facebook.com/thecityofcornwall/
- Instagram: https://www.instagram.com/cityofcornwall/?hl=en
- LinkedIn: https://ca.linkedin.com/company/city-of-cornwall

NOTE: Other social media pages/accounts/groups that have "Cornwall", "City of Cornwall", "Cornwall, Ontario", "City of Cornwall, Ontario" in their page name or reference the City are NOT official, City-administered pages. The posts and/or discussions on these pages do not reflect the views or corporate identity of the City. Official, City-administered pages will be clearly identified where appropriate

Social Media Content: Planned content that has been developed with the intent to be posted on any of the City's official social media pages. This may include, but is not limited to text, links, photos, blogs, and videos.

Designated Employees: City employees whose employment duties and responsibilities include posting, updating, monitoring and reviewing content on Official Social Media Pages.

Administrative Employees: City employees who have access to Official Social Media Pages for administrative purposes such as, but not limited to, removing/adding Designated Employees and managing Official Social Media Pages during an emergency situation. Administrative Staff include the Chief Administrative Officer and the Director, Government Relations & Corporate Priorities.

Administration of Official Social Media Pages

Designated Employees are to be identified by the Manger of Communications, and approved by the Director, Government Relations & Corporate Priorities.

Only Designated Employees and Administrative Employees may have access to Official Social Media Pages, including holding any passwords or access credentials. When a Designated Employee or Administrative Employee leaves the employ of the City, all passwords of all Official Social Media Pages shall be changed. Designated Employees monitor the City's Official Social Media Pages during regular business hours which are Monday to Friday, 8:30 am to 4:30 pm. Monitoring includes responding to comments, posts and messages posted on Official Social Media Pages, when appropriate. The City retains the right to remove any information or content from Official Social Media Pages at any time.

Where required, specific department representatives may be consulted by Designated Employees to ensure that posts and responses are accurate and up to date.

Due to the high volume of messages received through Official Social Media Pages, the Communications Team may, at its sole discretion, choose which messages they respond to or do not respond to. In all cases, members of the public sending messages will receive an automated message indicating that:

- 1) these accounts are not monitored 24/7;
- 2) for emergencies, please contact 9-1-1; and
- 3) for further help, automated messages will push to Cornwall Connect for resolution of some of the most common service requests.

The Manager of Communications shall provide oversight and accountability of the City's Official Social Media Pages.

New platforms may be evaluated at any time, and the creation of Official Social Media Pages are at the discretion of the Manager of Communications.

Intent of Official Social Media Pages

While audiences and interests may differ from page to page, and channel strategies may differ from one to another, the general intent behind leveraging Official Social Media Pages for the City are:

- Increase awareness of core municipal services and term-of-Council priorities
- Complement and enhance existing corporate communication methods
- Inform the public of time-sensitive situations
- Reinforce corporate brand identity and key messaging

Content on Official Social Media Pages

City departments are responsible to provide content and context to the Communications Team on any events, resources, or updates pertaining to their department that they wish to share on Official Social Media Pages. This content should be provided with as much advance notice as possible, but no later than seven (7) business days prior to the requested posting date.

Content provided within seven (7) business days, unless defined as an emergency, may or may not be posted, at the discretion of the Manager of Communications.

Content posted on all Official Social Media Pages will be shared in English and French.

All content, including videos and visual images, produced with City funds will always remain the property of the City of Cornwall and must be stored in a central repository to be identified by the Communications Team for ease of access.

Content shall not include information that:

- Is false or misleading;
- Violates copyright, trademark, or other material of a similar nature; or
- Is discriminatory;
- Involve profanity or offensive language; or
- Is defamatory, libelous, pornographic, proprietary, or harassing.

Branding of Official Social Media Pages

All Official Social Media Pages shall bear the City's logo and contact information. Contact information on all Official Social Media Pages, where applicable, should read:

City of Cornwall 360 Pitt Street Cornwall, ON, K6J 3P9 Telephone: 613-930-2787 cornwall.ca

Personal Use of Social Media by City Staff (Terms of Use)

City Staff are invited to participate on the City's Official Social Media Pages by interacting with and amplifying content shared, such as by commenting, liking, or sharing.

Staff are free to express themselves and their opinions as they see fit if they clearly represent themselves as an individual and not as an employee of the City. However, the public and residents of the City may expect that City Staff, when commenting or interacting with posts on Official Social Media Pages, are speaking on behalf of the City, regardless of whether the employee is 'on shift'/'on the clock' or not.

City Staff who choose to comment on social media will be accountable for using approved, up-to-date City messaging, even on their personal accounts. When in doubt, Staff should consult the Communications Team, who can confirm whether messages ought to be shared or if members of the public ought to be engaged. Employee training is also available via Communications.

The following principles apply to any personal use of social media when referencing the City, or whenever a personal account may be connected in the eyes of the public with the City or the City's Official Social Media Pages, including when interacting with Official Social Media Pages posts:

- Staff are always to represent the City in a professional and business-like manner as would be expected in any other public forum or medium, and should exercise discretion, thoughtfulness, honesty, and respect for others.
- Staff should be aware of the effect their actions may have on their image, as well as the City's image and public reputation.
- Staff should use their best judgment to ensure that they do not post material or engage in dialogue that is inappropriate or harmful to the City.
- Staff must never publish, post, or release any information with respect to the City that is considered private, confidential, or not public. If there are questions about what is considered private, confidential, or not public, Staff should first check with management.

- Staff should never comment on legal matters, litigation, or any parties with whom the City is in litigation without first obtaining appropriate approval from their General Manager/Director or their delegate.
- Commenting and two-way discussions with other users should be done with caution especially in emotionally charged contexts or in situations where information and facts may be evolving or change quickly.
- Staff shall not post information or images that:
 - Is false or misleading in regard to the City or its affairs;
 - Adversely impact the business interests of the City;
 - Violate copyright, trademark, or other material of a similar nature;
 - Is discriminatory;
 - Involve profanity or offensive language;
 - o Is defamatory, libelous, pornographic, proprietary, or harassing; or

Otherwise irreparably undermine the trust that is required in the public relationship of the City and the public

Social Media and Staff' Right to Privacy

Before posting or engaging with any content online, know that there is no reasonable expectation for privacy on any social media platform. Even when an Employee or Worker uses a private account, the content shared:

- Lives for a long time;
- Can be shared easily and spread rapidly, including screenshots of deleted content;
- Can be linked to the City even when the Employee or Worker is not identified as an employee or worker of the City; and
- Can be misunderstood or misconstrued by the reader.

Therefore, when communicating on any social media platform, regardless of whether it is in a professional or personal capacity or context, on a public or private social media account, Staff must follow the expectations and obligations set out in this Policy to protect both their personal brand and reputation, as well as the City's.

Related Policies and Obligations

City Staff understand and agree that, in engaging in social media activities, whether professionally or in a personal capacity, they must comply at all times with their workplace obligations in regard to loyalty and confidentiality, as well as all applicable policies, as amended from time to time.

Violation(s) of this Policy

Staff who breach this Policy may be subject to disciplinary action up to and including termination of employment.



The Corporation of the City of Cornwall Regular Meeting of Council

Report

Department:	Financial Services
Division:	Finance
Report Number:	2024-85-Financial Services
Meeting Date:	August 13, 2024
Subject:	2024 Annual Report for the Municipal Grants Program

Purpose

The purpose of this report is to provide Council with information on the results of the 2024 Municipal Grants Program.

Recommendation

That Council receive Report 2024-85-Financial Services for the 2024 Annual Report for the Municipal Grants Program.

Financial Implications

Grants are intended to provide modest levels of support and assistance to community non-profit organizations. Support is provided each year for different community organizations from the City's operating budget through an annual application process. Unused funds in the Municipal Grants Program at the end of each year will be carried over to the next year. The combined total of carryover of funds and current year funding that will be available in any year will not exceed \$170,000.

At its meeting of April 11, 2023, Council named the Cornwall Triathlon, Optimist Club of Cornwall Ribfest, and the Cornwall Waterfest Dragon Boat Race as signature community festivals in the City of Cornwall and therefore would recognize the financial support the City provides separate from the Municipal



Grants Program. Council reduced the Municipal Grants Program budget by \$30,000 and transferred this amount to the respective City departments that provide support to these events. The Municipal Grants envelope was changed from \$200,000 to \$170,000.

The 2024 application period was open from Sunday, October 1, 2023 to Friday, October 27, 2023.

Advertisements and program promotion included the following:

- City of Cornwall Newsletter (published monthly in both the Sports Energy and Local Seeker newspapers)
- Snippets in the Seaway News (published monthly)
- Radio Ads on 104.5 and 101.9 (running all the month of October) "Your information update is brought to you by the City of Cornwall. The Municipal Grants Program is now open for applications. Visit <u>www.Cornwall.ca/grants</u> to apply by October 27th."
- Social media posts on the City of Cornwall's platforms and short 15-30 second clips outlining the Program.

Twelve (12) applications were received requesting \$144,435 of funding (both financial grants and services in-kind grants).

Eleven (11) applications were approved, totaling \$134,435

- 9 applications through Program 1 (\$74,435)
- 2 applications through Program 2 (\$60,000)

Strategic Priority Implications

The Municipal Grants Program aligns with the City's Strategic Plan's mission of providing services that enable a financially sustainable community which will care and provide for the needs and the values of its residents. The Program assists the City in achieving its vision of a welcoming and healthy community.

Background / Discussion

In 2020, Council endorsed Policy FI-2020-01-27-4 Municipal Grants Program Policy to recognize the valued contributions being provided through the volunteer efforts of community organizations and agencies for the citizens of Cornwall. The Policy identified the need for a Municipal Grants Review Committee to examine and award grants based on the eligibility criteria and available funds.



Municipal Grants Programs

There are two (2) types of Municipal Grants Programs:

- Program 1 Financial and In-Kind Assistance: provides one time eligible financial grants and in-kind contributions to support specific initiatives that promote inclusiveness and a broad community benefit through improving the well-being of the community and the quality of life for its residents.
- Program 2 Multi-Government Funding Support provides one time assistance to organizations in obtaining defined federal and/or provincial government grants when these government bodies require that the municipality participate in funding the initiative.

Committee Meetings

Following the 2022 Municipal Election, on February 27, 2023 Council appointed Councillor Bennett, Councillor Gardiner, and Councillor Dupelle to the Municipal Grants Review Committee.

The Committee met and reviewed the 2024 applications in accordance with the Municipal Grants Program Policy and Guidelines on February 13, 2024.

At this time, the Municipal Grants Review Committee is not recommending any changes to the Program for the 2025 budget year.

Annual Report

Annually, the Committee is to report to Council and the Public its activity during the current year. The Annual Report identifies the applicants who received funding in the year, how funds were used, and the benefit to the community (Appendix C).

Also attached to this report is the Municipal Grants Program Policy (Appendix A) and the Municipal Grants Program Guidelines (Appendix B). The Committee is not recommending changes to the Program at this time.

2025 Application Process

The Municipal Grants Program application period will open on Tuesday, October 1, 2024 and close on Friday, October 25, 2024.



Municipal Grants Program post 2025

Regular reviews of municipal programs are essential to ensure they remain aligned with the Corporation's strategic direction. During 2024/2025, Staff will conduct a thorough review and present any recommended changes to the Municipal Grants Program to Council for consideration. This process guarantees that all proposed modifications are carefully evaluated and meet the community's needs and priorities, thereby enhancing the Program's effectiveness and fairness.



Municipal Grants Program Policy

Department:	Financial Services
Policy Number:	FI-2020-01-27-4
Effective Date:	January 27, 2020
Amended Date:	November 22, 2021
Council Approval:	November 22, 2021

Policy Statement

The Corporation of the City of Cornwall recognizes the valuable contributions made by community organizations and volunteer groups to improve the well-being of the community and the quality of life for its residents. In recognition of these contributions, the Municipality is committed to providing modest assistance to such organizations through its Municipal Grants Program. Support is provided each year from the Municipality's operating budget to qualifying organizations through an annual application process.

Relationship to the City of Cornwall's Strategic Plan

The Municipal Grants Program aligns with the City's Strategic Plan's mission of providing services that enable a financially sustainable community which will care and provide for the needs and the values of its residents. The program assists the City in achieving its vision of a welcoming and healthy community.

Purpose

The purpose of the Municipal Grants Program is to ensure that funds are allocated in a fair and transparent manner to community-based organizations. This Policy identifies the funding available, establishes eligibility requirements, and outlines application and monitoring requirements.

Program Intent

Every year the Municipality receives more grant requests than it can fund. The objective of this Policy is to treat all organizations fairly and consistently. The aim of the Municipal Grants Program is to share available resources throughout the municipality. Grants are intended to provide modest levels of support and assistance to community non-profit organizations.

Types of Grants

The different types of grants awarded through the Municipal Grants Program Policy are identified as follows:

Program 1 – Financial and In-Kind Assistance: provides eligible financial grants and in-kind contribution grants to support specific initiatives that promote inclusiveness and a broad community benefit through improving the well-being of the community and the quality of life for its residents.

Program 2 – Multi-Government Funding Support: provides a required municipal contribution to access funding from the federal and/or provincial government(s).

Definitions

- **Annual Report** is the annual report submitted by the Municipal Grants Review Committee to Council.
- **Application Process** is the application-based process managed and reviewed by the Municipal Grants Review Committee to determine and approve grant funding to organizations.

Council shall mean the Council of the Corporation of the City of Cornwall.

- **Criteria** are used to evaluate grant applications based on how the organization's initiative will benefit the community (scale, inclusivity, direct and indirect benefits), soundness of business plan (including resources, own funds, and fundraising), the importance of the City's contribution, and how the success of the initiative will be determined.
- **Established Organization** is an organization that has existed in the community for more than 3 years.
- **Emerging Organization** is an organization that has existed in the community for 3 years or less.
- Financial Assistance is a grant that provides funding to an organization.
- **Grant Application** is the application form required to be completed and submitted prior to consideration of any grant funding.
- **Initiative** means any public undertaking of a project, program, and/or event carried out by an organization.
- **In-Kind Assistance** is a grant for the provision of municipal property/facilities, materials or resources to an organization. While cash funds are not provided in relation to in-kind grants, it is recognized that such grants will involve either an expense or foregone revenue for the municipality. In-kind grants will include the estimated value of the initiative.

- Letter of Agreement shall mean a document, signed by both the organization and the City of Cornwall, that outlines the terms and conditions and reporting required to receive funding.
- Letter of Award shall mean a written confirmation of an award to an applicant.
- **Methods of Communication** are methods used by the City to communicate to the public, including but not limited to: the City's website, social media, newspaper and press releases.
- Municipal Grants Review Committee (hereinafter called the "Committee") is an independent committee of Council, operating and appointed in accordance with its Council approved Terms of Reference, and delegated authority to review and approve grants in accordance with this Policy.
- **Organization** is a non-profit community group/organization that provides products or services to improve or benefit the community. Non-profit organizations are usually concerned with generating enough revenue to provide support to their community. Non-profit organizations reinvest any money earned back into its own operation to grow the organization and further support its mission.

Responsibilities

The Financial Services Department will inform the community of grant opportunities through updates to the City's website. The Financial Services Department will receive the applications.

Late or incomplete applications may not be forwarded to the Committee for consideration.

The Committee will evaluate applications and approve grants based on the grant criteria outlined in the Municipal Grants Program Guidelines and the available funds. All decisions of the Committee, or Council where applicable, will be final. The Committee shall submit an annual report to Council.

Eligible Grant Recipients and Program Principles

Applicants must be non-profit community groups and organizations whose primary focus is within the City of Cornwall.

An organization can only submit one application per year, whether it be for Program 1 or Program 2.

Municipal Grants are intended to be supplementary to an organization's main source(s) of revenue. The grant shall not be considered as the primary source of funding for the organization. The organization must show exploration of other financial and in-kind support (i.e.: fundraising and volunteer support).

All funding shall be for future initiatives. Retroactive funding will not be considered.

Evidence of service need or uniqueness of service provided (responsiveness to community) must be outlined.

Equity and accessibility to participants must be demonstrated.

Guaranteed funding is only for the funding calendar year in which the organization has applied. It is not to be regarded as a commitment by the Municipality to continue such assistance in future years.

Repeat Municipal Grants will only be available to organizations who have complied with the reporting requirements of any previous grants.

Funding requests may be reduced in value at the discretion of the Committee to support a wider range of initiatives.

Grants may be awarded with certain terms and conditions. The Letter of Award will state if any particular restrictions apply to the grant.

Grant applicants determined to be ineligible for funding or denied funding in any given year shall be notified in writing.

The Committee is not obligated to allocate funds to any organization regardless of the fact that they satisfy the eligibility criteria and meet all of the objectives of this Policy.

Exclusions

Individuals, businesses, publicly-funded institutions (i.e.: schools, hospitals, etc.) are not eligible to apply through the Municipal Grants Program.

Organizations that may be located within the City of Cornwall, but are more regionally oriented, or that represent or service a special interest group shall not be considered under the Municipal Grants Program unless the organization receives funding from regional or other municipal government(s) that would also benefit from the organization's initiative(s).

Consideration will not be given to requests for grants from recreational sports groups, nor will funds be used to sponsor an individual athlete or team for a competition, or to subsidize participation in a sports event.

Applications

The Municipal Grants Program supports innovative initiatives that provide direct and indirect benefit to Cornwall residents. The fund does not focus on providing funding for operating expenses of an organization.

Organizations seeking financial assistance must submit an application to the City of Cornwall as outlined in the Municipal Grants Program Guidelines.

It is the responsibility of the organization to submit a complete application with clear and sufficient information. Incomplete or unclear applications may be denied.

The Committee may, in its sole discretion, schedule a meeting with an organization to discuss matters related to the submitted application.

Submission of an application does not guarantee the organization will be awarded all or part of the grant requested.

The grant application process and evaluating criteria shall be followed in accordance with the Municipal Grants Program Guidelines.

Application Period

The application period will open annually on October 1 and close the last Friday in October. All applications will be date stamped and numbered when received.

Applicants will receive a notification that their application has been received. If the application is complete, it will be forwarded to the Committee for evaluation.

The determination of the grant awards will be completed by the end of December.

The allocation of Municipal Grants will occur in the following year after the annual budget is approved.

Financial Considerations

Unless otherwise approved by Council no grant funding will be paid until such time as the annual budget has been approved.

Organizations with outstanding balances or owing the City of Cornwall will not be eligible for grants.

A financial surplus or reserve held by any organization and not designated for a specific purpose may disqualify an organization from receiving a municipal grant.

Any municipal grant funding that has not been spent, in the year that it is received, shall be returned to the municipality.

Reporting

All organizations receiving funding from the Municipality shall provide a written report as outlined in the Municipal Grants Fund Program Guidelines.

NOTE: Any organization that does not submit a report will not be considered for funding in the future.

Annual Report to Council and the Public

The Annual Report submitted by the Committee to Council will identify: the applicants who received funding in that year, the use of the funds, and the benefit to the community from the grants. It will also identify any recommendations for changes in the Municipal Grants Program (Policy and/or Guidelines) that Council may consider. Any changes would require Council approval.

The Annual Report will be published on the City's website each year.

Unused amounts in the Municipal Grants Program at the end of each year will be carried over to the next year. The combined total of carryover of funds and current year funding that will be available in any year will not exceed \$200,000.00.

Program 1: Financial and In-Kind Assistance

Purpose

Program 1 is intended to provide modest levels of financial support and assistance to community non-profit organizations whose primary focus is within the City of Cornwall.

Program Funding and Eligibility

Municipal Grants Program 1 provides an opportunity for organizations to receive funding and/or in-kind contributions for initiatives benefiting the Cornwall community.

Organizations seeking funding must submit an application as outlined in the Municipal Grants Program Guidelines – Program 1 Financial and In-Kind Assistance.

The grant application process and evaluating criteria shall be followed in accordance with the Municipal Grants Program Guidelines – Program 1 Financial and In-Kind Assistance.

Only one application per organization can be submitted per year.

Organizations cannot submit an application for an initiative that has been reviewed and denied twice.

Applicants can have no more than 30% of the expenditures for administration costs. The maximum amount available to any one eligible organization in any one year is \$10,000.00, as determined by the Committee.

It is important to note that if an organization is also requesting an in-kind contribution, the total combined benefit to any organization in one year is \$10,000.00. Therefore, an organization that receives the full \$10,000.00 through the financial grant process will be ineligible for any in-kind contributions during the funding year.

The organization, within the funding calendar year, must spend the grant funding on the sole purpose for which is was approved.

Repeat grant applications must show how their initiative differs from their previous application(s) and applications illustrating new initiatives may be prioritized over returning applications.

If an organization has received grant funds for three consecutive years, they must wait two years before applying for a grant through this program.

Program 2: Multi-Government Funding Support

Purpose

Program 2 has been established to provide financial support to community nonprofit organizations that require a municipal contribution (in cash, in-kind, or a combination of both) in order to receive federal and/or provincial government grant(s).

Program Funding and Eligibility

Municipal Grants Program 2 provides assistance to organizations in obtaining defined federal and/or provincial government grants when these government bodies require that the municipality participate in funding the initiative.

Organizations seeking a municipal contribution must submit an application as outlined in the Municipal Grants Program Guidelines – Program 2 Multi-Government Funding Support.

The grant application process and evaluating criteria shall be followed in accordance with the Municipal Grants Program Guidelines – Program 2 Multi-Government Funding Support.

Only one application per organization can be submitted per year.

Organizations cannot submit an application for an initiative that has been reviewed and denied twice.

Applicants can have no more than 30% of the expenditures for administration costs.

The maximum amount available to any one eligible organization in any one year is \$30,000.00, as determined by the Committee. If an organization is requesting more than \$30,000.00, the Committee will review the application and through the Financial Services Department, may bring a report to Council for consideration. Council has the discretion to increase this maximum for an extraordinary, one of a kind initiative need or circumstance which may be considered and only if the annual budget allows.

Grant funding to any one organization in any one calendar year will be as stipulated in the program funding guidelines set by the Federal and/or Provincial Government.

The organization, within the funding calendar year, must spend the grant funding on the sole purpose for which is was approved.

Funding in any one year or over several years is not to be interpreted as a commitment to future year's funding.

Glen Grant Mayor

Maureen Adams Chief Administrative Officer



Municipal Grants Program Guidelines

Purpose

To outline the eligibility criteria, as determined by Council, for grant funding opportunities through the Municipal Grants Program Policy and to define the process for accepting applications.

Scope

This guideline applies to all organizations seeking funding through the Municipal Grants Program.

Definitions

Terms not otherwise defined in this Program Guideline have the meanings given in the City's Municipal Grants Program Policy.

Communication

The City will promote the Municipal Grants Program and the application process through various communication methods, including the City's website, social media, print materials, and other communication methods as appropriate. Timelines for application would be communicated and published on the City's website.

Accountability

Prior to the disbursement of any municipal funds, all grantees must sign a Letter of Agreement on the approved form, which specifies the terms and conditions of the grant.

Organizations awarded a grant will be held accountable for the expenditure of the funds in accordance with the stated objectives/plans. Grants in future years will be reviewed based on past demonstrated fiscal responsibility of the applicants.

Funds granted under this program must be used for the specific purposes outlined in the application. They are not transferable between initiatives or groups without prior Committee approval.

Any unspent funds at the end of the initiative must be returned to the City of Cornwall.

By the last Friday in October in the year the grant is received, a Final Report must be completed and submitted to Financial Services in order to qualify for future funding; OR if the funded initiative was not completed by this deadline the organization must submit

an Interim Report which shall include the requested date of extension and reason for extension of the Final Report filing.

The Final Report form is available on the City's website.

Failure to submit the report, and/or meet any of the grant conditions outlined above will result in the organization being ineligible to apply for funding in future years or any approved funds may be withheld until such time the above conditions are met.

Program 1: Financial and In-Kind Assistance

Municipal Grants Program 1 provides financial and in-kind assistance contribution grants to eligible non-profit organizations to support their initiatives.

Application Process

- a) The application and submission date shall be available on the City's website.
- b) The application is required to be completed and submitted to the City's Financial Services Department.
- c) The Committee shall meet in accordance with the Municipal Grants Review Committee Terms of Reference.
- d) Grant applications submitted will be evaluated and approved by the Committee for eligibility based on the criteria noted below and available funds.
- e) All decisions of the Committee are final.
- f) Applicants will be notified of the decision.
- g) Applicants recommended for funding will be forwarded to the Financial Services Department for payment.

Grant Application and Criteria

Applications will be completed and submitted electronically. The electronic version of the application has been designed to ensure all required information is submitted.

- a) The application period will open annually on October 1 and close the last Friday in October. No exceptions will be made. The application will no longer be accessible after that time.
- b) The application form outlines the documents that are to accompany the application.
- c) An organization can only submit one application per year, whether it be for Program 1 or Program 2.

- d) Organizations cannot submit an application for an initiative that has been reviewed and denied twice.
- e) Applicants can have no more than 30% of the expenditures for administration costs.
- f) The maximum amount available to any one eligible organization in any one year is \$10,000.00, as determined by the Committee.
- g) It is important to note that if an organization is also requesting an in-kind contribution, the total combined benefit to any organization in one year is \$10,000.00. Therefore, an organization that receives the full \$10,000.00 through the financial grant process will be ineligible for any in-kind contributions during the funding year.
- h) The Committee may or may not fund to the limit of the maximum grant amount at its discretion.
- i) The organization, within the funding calendar year, must spend the grant funding on the sole purpose for which is was approved.
- Repeat grant applications must show how their initiative differs from their previous application(s) and applications illustrating new initiatives may be prioritized over returning applications.
- k) If an organization has received grant funds for three consecutive years, they must wait two years before applying for a grant through this program.
- I) Funding in any one year is not to be interpreted as a commitment to future years' funding.

Program 2: Multi-Government Funding Support

Municipal Grants Program 2 provides assistance to organizations in obtaining defined federal and/or provincial government grants when these government bodies require that the municipality participate in funding the initiative.

Application Process

- a) The application and submission date shall be available on the City's website.
- b) The application is required to be completed and submitted to the City's Financial Services Department.
- c) The Committee shall meet in accordance with the Municipal Grants Review Committee Terms of Reference.
- d) Grant applications submitted will be evaluated and approved by the Committee for eligibility based on the criteria noted below and available

funds. If required, a recommendation made to Council for final approval.

- e) All decisions of the Committee (Council, if required) are final.
- f) Applicants will be notified of the decision.
- g) Applicants recommended for funding will be forwarded to the Financial Services Department for payment.

Grant Application and Criteria

Applications will be completed and submitted electronically. The electronic version of the application has been designed to ensure all required information is submitted.

- a) The application period will open annually on October 1, and close the last Friday in October. No exceptions will be made. The application will no longer be accessible after that time.
- b) The application form outlines the documents that are to accompany the application.
- c) An organization can only submit one application per year, whether it be for Program 1 or Program 2.
- d) Organizations cannot submit an application for an initiative that has been reviewed and denied twice.
- e) Applicants can have no more than 30% of the expenditures for administration costs.
- f) The maximum amount available to any one eligible organization in any one calendar year is \$30,000.00, as determined by the Committee. If an organization is requesting more than \$30,000.00, the Committee will review the application and through the Financial Services Department, may bring a report to Council for consideration. Council has the discretion to increase this maximum for an extraordinary, one-time project need or circumstance which may be considered and only if the annual budget allows.
- g) Grant funding to any one organization in any one calendar year will be as stipulated in the legislation set by the Province of Ontario – Ministry for Seniors and Accessibility.
- h) The Committee may or may not fund to the limit of the maximum grant amount at its discretion.
- i) The organization, within the funding calendar year, must spend the grant funding on the sole purpose for which is was approved.
- j) Funding in any one year or over several years is not to be interpreted as a commitment to future years' funding.

Evaluation Criteria (Programs 1 and 2)

Grants shall be evaluated using the following criteria:

First Stage Assessment

Are all eligibility criteria outlined in the Application Checklist provided?

Does the financial information provided indicate that the organization is financially stable?

Has the application indicated if the organization has received funding from the Municipal Grants program in the past? If so, have they listed the amount(s) received in the past three years?

Repeat grant applications must show how their initiative differs from their previous application(s) and applications illustrating new initiatives may be prioritized over returning applications. Is this a repeat application?

Has the application outlined funding from other sources of funding?

Second Stage Assessment

The following scores will be used to assess how each criterion has been met:

- 0 Points (0%) Response is unacceptable
- 1 Point (20%) Response is unsatisfactory
- 2 Points (40%) Response is weak or poor
- 3 Points (60%) Response meets minimum expectations
- 4 Points (80%) Response exceeds expectations
- 5 Points (100%) Response significantly exceeds expectations

Evidence of Need

- 1. Has evidence of need been demonstrated and is it clear how the initiative will address the need identified?
- 2. Is it clear how the initiative will support and provide direct and indirect benefit(s) to Cornwall residents?

Targets and Outcomes

3. Has clear targets and outcomes been stated? Has the organization provided clear measurements for targets and outcomes?

Access to the Initiative

- 4. Is it clear who the intended beneficiaries are and how they will be communicated with?
- 5. Is it clear how many and how the initiative will involve volunteers?

Cost of the Initiative / Financial Information

6. Has the applicant provided clear and reasonable costs that match the proposed initiative?

Additional information

Is there any other information you would like to include that is relevant to your application? Any relevant information provided can be used to adjust scores awarded in any of the sections above.

Total Score _____(Maximum Score 30)

Applications must achieve a minimum score of 70% (21 of 30). Applications that do not meet the minimum score may be rejected.

The application should be thoroughly reviewed for completeness prior to submission to ensure that it contains all the information required.

Applications are evaluated based on their relative merit, and funding in one year does not guarantee funding for an initiative in the following year.

Appendices

Appendix 1: Application Form – Program 1 Appendix 2: Letter of Agreement – Program 1 Appendix 3: Final Report – Program 1 Appendix 4: Application Form – Program 2 Appendix 5: Letter of Agreement – Program 2 Appendix 6: Final Report – Program 2

2024 Grant Applicants

Program 1: Financial and In-Kind Assistance

	-		Request			-Approved		20	24 Expenditure	
	Organization	In-Kind	Financial	Total	In-Kind	Financial	Total	In-Kind	Financial	Total
	Program 1									
	ACFO To continue the Urban Art Project by adding a new mural. To promote cultures, serve as an	\$0	\$10,000	\$10,000	\$0	\$10,000	\$10,000	\$0	\$10,000	\$10,000
benent.	educational tool, boost local tourism, strengthen community cohesion, and offer opportunities to businesses & artists.									
Use:	African Caribbean & International Association of Eastern Ontario To celebrate annual Black History Month events February 1 to 24, 2024 and to organize a BBQ in August 2024.	\$0	\$10,000	\$10,000	\$0	\$10,000	\$10,000	\$0	\$10,000	\$10,000
Benefit:	Promotes intercultural exchange, promotes diversity, brings awareness on the historical background and culture of the people that are living within the City of Cornwall.									
	AFIF Cornwall - SDG To offer educational talks in French to immigrant women so that they can successfully integrate into Canada and particularly in Cornwall. To assist immigrant women to successfully	\$0	\$10,000	\$10,000	\$0	\$10,000	\$10,000	\$0	\$10,000	\$10,000
	integrate into their new environment by educating them on different topics.									
	Alzheimer Society of Cornwall & District To assist with the Soup's On fundraising event on January 21, 2025. Brings awareness to the general public about dementia, unites people together and forms a sense of togetherness.	\$550	\$1,000	\$1,550	\$550	\$1,000	\$1,550	\$550	\$1,000	\$1,550

			Request			Approved		20	24 Expenditure	
	Organization	In-Kind	Financial	Total	In-Kind	Financial	Total	In-Kind	Financial	Total
	PROGRAM 1									
Use: Benefit:	Diversity Cornwall To assist with costs related to delivering the education program and weekly drop in activities for all ages. Increases the understanding and acceptance for those who live in Akwesasne SD&G, making it a safer place to live and visit.	\$0	\$10,000	\$10,000	\$0	\$10,000	\$10,000	\$0	\$10,000	\$10,000
	Junior Optimist Club of Cornwall To hold teen dances at the Civic Complex salons. Provides youth a safe place to have fun with adult supervision.	\$4,500	\$0	\$4,500	\$4,500	\$0	\$4,500	\$4,500	\$0	\$4,500
Use: Benefit:	Kozroots Community Empowerment Projects To assist with associated costs to organize, promote, and pay rental fees for the 10 Year Celebration of the Eastern Ontario Garlic Festival and Growing Together Conference on September 21, 2024. Connects citizens with farmers and local food, and provides opportunities for learning and community engagement, creates a more sustainable, resilient, and inclusive food system.	\$600	\$7,800	\$8,400	\$600	\$7,800	\$8,400	\$600	\$7,800	\$8,400
Benefit:	Festival International AFRO et Diversité To assist with festival related costs and to celebrate artistic and cultural diversity. Attracts tourism to the City of Cornwall and surrounding areas during the festival in July 2024.	\$0	\$9,985	\$9,985	\$0	\$9,985	\$9.985	\$0	\$9,985	\$9.985
Use: Benefit:	Centre 105 To assist with costs associated to the Drop- In Day Program meal and social services. Provides a safe place in the community to socialize and offers free meals as well as free laundry. Provides resources such as emergency food hampers, bike locks, shower coupons and information on the community programs.	\$0	\$10,000	\$10,000	\$0	\$10,000	\$10,000	\$0	\$10,000	\$10,000

Program 2: Multi-Government Funding Support

		Request			Approved			2024 Expenditure		
	Organization	In-Kind	Financial	Total	In-Kind	Financial	Total	In-Kind	Financial	Total
	PROGRAM 2									
	Centre Charles-Émile Claude	\$0	\$30,000	\$30,000	\$0	\$30,000	\$30,000	\$0	\$30,000	\$30,000
Use:	Recognized as a Seniors Active Living									
	Centre (SALC) and eligible to receive upper									
	levels of government funding, contingent									
	on a defined municipal contribution as per									
	the SALC Program policy. Funds to be used									
	to support SALC approved operating costs.									
Benefit:	The Centre provides meeting and exchange									
	spaces where various physical, social and									
	recreational activities are offered, in order									
	to encourage seniors to maintain an active									
	lifestyle and social contacts.									
	Seaway Senior Citizens Club	\$0	\$30,000	\$30,000	\$0	\$30,000	\$30,000	\$0	\$30,000	\$30,000
Use:	Recognized as a Seniors Active Living									
	Centre (SALC) and eligible to receive upper									
	levels of government funding, contingent									
	on a defined municipal contribution as per									
	the SALC Program policy. Funds to be used									
	to support SALC approved operating costs.									
Benefit:	To provide local seniors with a wide variety									
	of activities as well as a safe and healthy									
	place to socialize. Weekly curbside pickup									
	lunches, and monthly in-house dinners									
	offer healthy meals and socializing, while									
	the library offers books and puzzles for									
	enjoyment.									

Total Grant Funding Requests - Program 1 and 2	\$5,650	\$128,785	\$134,435	\$5,650	\$128,785	\$134,435	\$5,650	\$128,785	\$134,435
--	---------	-----------	-----------	---------	-----------	-----------	---------	-----------	-----------



The Corporation of the City of Cornwall Regular Meeting of Council

Report

Department:	Financial Services		
Division:	Purchasing		
Report Number:	2024-84-Financial Services		
Meeting Date:	August 13, 2024		
Subject:	Second Quarter Non-Competitive Procurement Report 2024		

Purpose

The purpose of this report is to provide Council with an update on the City's Non-Competitive Procurements for the second quarter of 2024 pursuant to Section 5.14 of the Procurement of Goods and/or Services Policy.

Recommendation

That Council receive the First Quarter Non-Competitive Procurement Report for the period ending June 30, 2024.

Strategic Priority Implications

This report addresses Council's accountability and transparency to the ratepayers of the City of Cornwall.

Background / Discussion

This report is issued quarterly in accordance with the Procurement of Goods and/or Services Policy.

Section 5.14 of the Procurement of Goods and/or Services Policy outlines the circumstances in which a non-competitive procurement process may be used.



Section 5.14 also requires that non-competitive procurements between \$50,000 and \$150,000 approved by senior staff be communicated to Council on a quarterly basis.

During the period April 1, 2024 through June 30, 2024, Staff approved two (2) purchases through section 5.14 Non-Competitive Procurements, as follows:

Requesting Department	Human Services Department	
Supplier	Canadian Corps of Commissionaires – Kingston and Region	
Goods/Services Procured	Security Guard Services for the Stepping Stones project	
Price	\$124,480.80 including HST	
Commentary	To provide facility surveillance and reception duties for the Stepping Stones project. The Commissionaires was contracted out by United Way when the Stepping Stone project started at Parisien Manor. As of June 1, 2024, the City will be operating and paying for costs associated with continuing the operation of the Centre until Massey Commons is operational. Commissionaires contract and pricing was ineffective until Oct 31/24 and due low rate and benefits of continuing services (familiarity of site, staff training etc.) it is beneficial for the City to continue with this contractor under a sole source requisition.	
Policy Reference	5.14 (e) (v) to ensure compatibility with existing Goods, or to maintain specialized Goods that must be maintained by the manufacturer of those Goods or its representative.	

Requesting Department	Planning, Development and Recreation	
Supplier	Fotenn Consultant Incorporated	
Goods/Services Procured	Planning Review Services. This cost will be partially offset by savings in salaries and benefits.	
Price	\$120,000.00 including HST	



ONTARIO CANADA				
Commentary	 The scope of work includes: Provide municipal planning services to the City of Cornwall. This includes review and processing of development applications including minor variances, site plan control applications, zoning bylaw amendments etc. It also includes planning policy services. 			
	 Review and propose updates to bylaws and internal department procedures. 			
Policy Reference	5.14 (g) if strictly necessary, and for reasons of urgency brought about by events unforeseeable by the Corporation (including Emergency), the Goods and/or Services could not be obtained in time using open tendering.			

The Policy for non-competitive procurements is used in narrowly defined circumstances where it is justified that the process for the general acquisition of goods and/or services could not be followed.



The Corporation of the City of Cornwall Regular Meeting of Council

Report

Department:	Financial Services	
Division:	Purchasing	
Report Number:	2024-82-Financial Services	
Meeting Date:	August 13, 2024	
Subject:	Tender 24-T14 Third Street Reconstruction	

Purpose

To obtain costing for the reconstruction of Third Street.

Recommendation

That Tender 24-T14 be awarded to Cornwall Gravel Company Limited at the total bid price of \$1,825,141.48 including HST, being the best bid meeting the tender specifications.

Financial Implications

The net cost of the project is \$1,643,596.43. The Corporation has budgeted \$1,650,974 in the Capital Budget. The Corporation is financing this project and will only borrow the required funds.

Strategic Priority Implications

This report addresses Council's accountability and transparency to the ratepayers of the City of Cornwall.



Background / Discussion

The work for this project involves the full reconstruction of Third Street West from Cumberland Street to York Street, including approximately 182m of watermain, 80m of storm sewer, and 200m of sanitary sewer. It also includes the full reconstruction of the Third Street West road corridor, including approximately 340 tonnes of asphalt, 325m of barrier curb and gutter, and 307m of sidewalk. The capital project also includes landscaping restoration and the planting of new trees.

Four (4) bids were received and opened by Purchasing Services on July 10, 2024.

The successful tender was received from:

Cornwall Gravel Company Limited

Total Bid Price including HST: \$1,825,141.48



The Corporation of the City of Cornwall Regular Meeting of Council

Report

Department:	Financial Services		
Division:	Purchasing		
Report Number:	2024-83-Financial Services		
Meeting Date:	August 13, 2024		
Subject:	Tender 24-T16 Asphalt Resurfacing on Various City Streets		

Purpose

To obtain costing for asphalt resurfacing on various City streets.

Recommendation

That Tender 24-T16 (excluding Part "I") be awarded to Malyon Excavation Limited at the total bid price of \$1,825,430.47 including HST, being the best bid meeting the tender specifications.

Financial Implications

The net cost of the tender is \$1,643,856.68. The Corporation has budgeted \$1,584,400 in various capital budgets. The various components of the tender have been funded from the following capital budgets from different departments: Infrastructure – Asphalt Resurfacing on Various City Streets; Active Transportation – Sidewalks; and Sewer Network Improvements; Transit Services – Bus Shelters & Accessible Bus Stops; Facilities – Parking Lot Resurfacing and Stair Replacements; Parks and Recreation – Milling Placement; and Municipal Works – Guide Rail Repair and Shouldering Improvements. Following the completion of construction, any excess funds remaining in the various accounts will be used to fund future capital projects. Refer to the following table for a detailed breakdown of budgeted costs and the associated capital accounts.



24-T16 – Asphalt Resurfacing on Various City Streets Account Summary				
Tender Part	Capital Account	Budget Amount Allocated to Tender		
A	Asphalt Resurfacing on Various City Streets 2024 & Sanitary Sewer Improvements	\$813,139		
В	Active Transportation – New Sidewalk Construction	\$286,184		
С	Transit Concrete Bus Pads – Transit Services	\$206,000		
D	Sewer Network Improvements – Sewer Spot Repairs	\$45,000		
E	Sewer Network Improvements – No Corrode Lateral Replacements	\$45,000		
F	St. Theresa Park Parking Lot – Parking Lot Rehabilitation - Recreation	\$75,000		
G	St. Columban's Concrete Stair Replacement – Facilities	\$50,000		
Н	Milling Placement – Parks and Landscaping	\$1,000		
I	410 Sydney St. (Interlock Walkway) – Water and Sewer Billings	Deleted		
J	Guide Rail Repair – Municipal Works	\$41,077		
K	Shouldering – Municipal Works	\$22,000		
Total \$1,584,400				

The tendered costs for the project exceed the amount available from the 2024 Capital Budgets for the work by a net amount of \$59,456.68. The local construction market has continued to see large increases in construction pricing, which exceeds the rate of inflation. As such, the scope of work for some projects has been reduced, and the remaining amount required will be funded from the Canada Community-Building Fund (CCBF) Reserve. The tendered cost for Part I exceeds the budgeted amount to complete the work and has therefore been deleted from the scope of work. This is further outlined in the background section of the report. It is recommended to proceed with this project; however, it may affect the ability to complete other Capital Projects.



Strategic Priority Implications

This report addresses Council's accountability and transparency to the ratepayers of the City of Cornwall.

Background / Discussion

Part "A"- Asphalt Resurfacing on Various Streets – The supply and placement of approximately 1,250 tonnes of asphalt, the replacement of approximately 925 metres of curb, and the replacement of approximately 155 square metres of sidewalk on various streets. The supply and placement of 14 new catch basin structures, 20 metres of sanitary sewer lateral and 20 metres of water service laterals.

Please note the tendered costs for the project exceed the amount available in the 2024 capital budget for the work. As such, the remaining amount estimated at \$54,770 will be funded from CCBF Reserve. Any unused funds will be returned to the reserve at the completion of the project.

Part "B" Active Transportation – New Sidewalk Construction – The construction of 800 square metres of new concrete sidewalk on Queen St.

Please note the tendered costs for the project exceed the amount available in the 2024 capital budget for the work. As such, the remaining amount estimated at \$95,756 will be funded from the CCBF Reserve. Any unused funds will be returned to the Reserve at the completion of the project.

Part "C" Transit Concrete Bus Pads – The work includes the construction of concrete bus stop pads at various locations throughout the City and the installation of a new bus stop and shelter on Nick Kaneb Drive.

Part "D" Sewer Spot Repairs on Various City Streets (Provisional) – The work includes the replacement of various storm and sanitary sewers in need of repair prior to the completion of asphalt resurfacing work.

Please note this item exceeds the allocated budget; however, as the work is provisional, Administration will strive to minimize costs to remain in budget.



Part "E" No-Corrode Lateral Replacements (Provisional) – The work includes the replacement of no-corrode laterals on various City streets at locations which will be resurfaced.

Please note this item exceeds the allocated budget; however, as the work is provisional, Administration will strive to minimize costs to remain in budget.

Part "F" St. Theresa Parking Lot – The work includes the construction of a new barrier free parking lot at St. Theresa Park including the supply and placement of 110m of asphalt.

Part "G' St. Columban's Concrete Stair Replacement – The work includes the removal and replacement of the concrete stairs at St. Columban's Church.

Part "H" Milling Placement– The work includes rental of equipment as needed, for improvements to the roadway at Guindon Park using asphalt millings reclaimed from milling operations on other streets.

Part "I" 410 Sydney St. – The work includes the supply and placement 15 square metres of interlock brick walkway.

Please note that due to being over budget, Part I has been removed from the scope of work included in the tender. The total value of work associated with this part is \$18,277.75 (incl. HST). The total bid price in the Recommendation section has been revised to reflect the removal of this part.

Part "J" Guide Rail Repair - The work includes the repair and reinstatement of guide rail on Mack Dr., Education Rd. and Boundary Rd.

Part "K" Shouldering – The work includes the placement of 365 tonnes of granular 'A' material to reinstate shouldering on various streets throughout the City.

Three bids were received and opened by Purchasing Services on July 25, 2024. The successful tender was received from:

Malyon Excavation Limited

Total Bid Price including HST: \$1,825,430.47



The Corporation of the City of Cornwall Regular Meeting of Council

Report

Department:	Financial Services		
Division:	Purchasing		
Report Number:	2024-86-Financial Services		
Meeting Date:	August 13, 2024		
Subject:	23-T48 Tender for Supply, Installation and Commissioning of Land Mobile Radio Infrastructure – Provisional Items and Additional Expenses		

Purpose

To obtain costing for the supply, installation and commissioning of land mobile radio infrastructures.

Recommendation

That Council approve proceeding with awarding Tender Provisional Items and with procuring additional radios for Police and Fire Services including cost for programming and installation with Motorola Solutions Canada Incorporated for the total cost of \$897,436.09 including HST.

Financial Implications

The project is being financed over a 10-year term.

Strategic Priority Implications

This report addresses Council's accountability and transparency to the ratepayers of the City of Cornwall.



Background / Discussion

Council, at its December 11, 2023, meeting, approved awarding the Tender 24-T48 for Supply, Installation and Commissioning of Land Mobile Radio Infrastructure.

The original tender invited bids from qualified suppliers for the provision of the services of supplying, installing, and commissioning land mobile radio infrastructure. This tender was awarded to the only tender submission being Motorola Solutions Canada Incorporated for a tender price of \$3,221,921.00.

The tender defined the technical requirements for an end-to-end trunked land mobile radio equipment and installation services for the City of Cornwall. The new equipment is intended to replace existing Police and Fire Very High Frequency (VHF) radio system owned and maintained by Cornwall.

Optional pricing was included in the original tender. At the time of opening, staff were not in a position to review and decide on these options. However, after thorough review, and with the advice of the City's contracted radio engineer, staff have determined that accepting these options is in the best interest of the Corporation. These options include:

3P: Consoles Installation & Commissioning - \$144,692.00

- Cold installation service
 - Networking equipment
 - 4 dispatch consoles
- Configuration et optimisation
- Commissioning and ATP

4P: Portable radios installation & commissioning - \$8,964.00

Various configurations in Provisioning Manager (PM) as per fleet map template

- Radio IDs importation
- Capability Profile creation and assignment (features and functionality)
- Talk Group creation and configuration
- Encryption CKR creation and assignment

Priority configuration

- Security Group creation and assignment
- Radio activation



7P: Mobile radios installation in vehicles & commissioning - \$86,891.00

Various configurations in Provisioning Manager (PM) as per fleet map template

- Radio IDs importation
- Capability Profile creation and assignment (features and functionality)
- Talk Group creation and configuration
- Encryption CKR creation and assignment
- Priority configuration
- Security Group creation and assignment
- Radio activation

8P: Desktop radios installation & Commissioning - \$23,209.00

Various configurations in Provisioning Manager (PM) as per fleetmap template

- Radio IDs importation
- Capability Profile creation and assignment (features and functionality)
- Talk Group creation and configuration
- Encryption CKR creation and assignment
- Priority configuration
- Security Group creation and assignment
- Radio activation

11P: Fleetmapping, codeplugs configuration and radio programming - \$100,852.00

- Fleet mapping service
 - understanding end user requirements and providing advisory input
 - developing and reviewing fleet mapping as per requirements
 - Template creation and review with CofC
 - Code plug creation, programming sample test radios and deliver for evaluation by end users
 - Code plug adjustment following end user comments
 - Code plug approval by CofC
- Transfer radio template info into dispatch consoles templates
- Applying latest firmware to all radios
- Programming all radios with the approved code plugs

<u>12P: Training plan (update) -\$104,485.00</u>

Proposed subscriber radios training:

• APX CPS Programming and template building (2 days) + APX Tailored



- Technical training (2 days)
- APX5000 portable & APX2500 Mobile Train-the-trainer (1 day)
- Proposed Avtec console training (update):
- Scout System Operator Train-the-trainer Training (2 sessions)
- Avtec Console Scout Administration (on-line) 2 seats each year & access to Avtec Connect, web-based information portal featuring product documentation, software release notes, training videos and other helpful data.

Total cost of options 3P, 4P, 7P, 8P, 11P, and 12P described above

= \$469,093.00 - 9.4% bulk discount = \$425,000.00.

Starting at the beginning of 2024, staff from CPS and CFS have actively participated in weekly management calls to support its progress. During these meetings, it was discovered that the original tender did not account for the total number of radios needed. To address this, Motorola submitted an addendum, offering the additional radios required for both Fire and Police at the same unit cost as the original tender, along with the necessary programming requirements.

These additional costs represent:

- Additional radios for both Police and Fire \$312,354.31
- Fleet Mapping, including Engineering and Project Management -\$144,560.09

Total cost of additional radios and associated programming = \$456, 914.40

\$425,000.00 for optional items + \$456, 914.40 for additional items = \$881,914.40 + HST

The collaborative efforts of Cornwall Police Services and Cornwall Fire Services staff have been instrumental in identifying and addressing the project's evolving needs. The proactive approach taken to secure the additional radios ensures that both Fire and Police services are adequately equipped to perform their duties effectively. This addendum not only maintains cost efficiency but also underscores our commitment to the project's success and the safety of our community.

Manon Levesque

From:	Mellissa Morgan
Sent:	Thursday, July 25, 2024 7:56 AM
То:	Councillors DL
Cc:	Senior Team DL; Jenelle Malyon; Manon Levesque
Subject:	RE: Inquiry - Massey Commons

Hello Mayor Towndale and Council,

Further to the Clerk's e-mail below, we want to assure you that we are committed to a fulsome response which will be provided to Council as soon as possible. That said, we can provide some critical information related to the inquiry and feel compelled to flag important risks arising from potential project scope review. In short, delaying this project will mean months' worth of delays, put at risk more than \$1.2 million worth of funding from other orders of government, and cost the city hundreds of thousands of dollars operationally. Changes to the scope of the property could also impact Housing's ability to meet the urgent housing needs in our community.

With respect to the inquiry, a study will need to be completed by our architects that involves 2 steps. Step one will include be to provide some preliminary concepts of a redesign of the former gymnasium space (as indicated by the inquiry) and they in turn will need to provide that information to the quantity surveyor. Step 2, the quantity surveyor would then complete a draft costing (Class B) of those concept designs which would then be compared to the current estimates (current design).

The study will require (earliest back to Council would be September 24th Council Meeting):

- Draft Architectural redesign (~ 2 3 weeks)
- Draft Quantity Surveyor review (~ 5 8 weeks)

Cost - \$12,000 (approximately) Note: the following fee for consulting services is inclusive of architectural, mechanical & electrical, and cost consultant work at this time.

As these would be drafts, final architectural redesign and final quantity surveyor reviews would then also be required and would create an additional delay of approximately 8 - 12 weeks and resulting in additional costs of approximately \$31,500 for the project.

In addition, further delays/costs incurred will also have an impact on:

- Building permit application
- Application to Planning for new zoning review
- Construction (start/finish, etc.)
- Potential loss of Provincial/Federal Funding (as much as \$1,282,000)
- Extension of Winter Housing Solution (Parisien Manor lease) increased additional costs for 2025 (\$27,383/monthly). NOTE: Parisien Manor is currently for sale and could

be sold at any time and our lease could be in jeopardy if a new owner is not willing to continue with or extend the lease with our department.

The sum of the delays could be close to \$1.5 million from early review. Further, any changes to the number of units will impact the project assumptions including the loss of ongoing rent revenue (from fewer units) and increases in annual municipal subsidy due to the loss of that rental revenue.

With respect to the release of a tender, each month delayed adds additional costs. The tender release date is planned for the week of August 13th.

Any delays will lead to increased costs due to rework, inflation, material price hikes, and labor shortages. In addition, there are other delays and cost implications related to splitting the project into phases. As such, this is not a practical approach, and it continues to be our strong recommendation that the project should proceed as currently envisioned. We also need to be cognisant that any updates relating to delays/increased costs would also be reported to the United Counties.

Massey Commons can deliver be an important element of the City's strategic priorities -Housing for All. Postponing construction can extend the timeline for providing much-needed housing to vulnerable and precariously housed residents, exacerbating the housing crisis, and potentially leading to increased social and economic costs for the City. In the view of Human Services, it is imperative that we move forward with issuing the construction tender as planned to avoid these negative outcomes and to demonstrate our commitment to fiscal responsibility as well as addressing the full range of housing needs of our community promptly and effectively.

It should also be noted that changing projects mid-stream creates reputational risk within the development community and could increase tender costs going forward as potential partners hedge against unreliable public sector partners.

If you have further questions, please don't hesitate to reach out.

Sincerely,

//

Bonjour Monsieur le Maire et chers (ères) membres du Conseil municipal,

Suite au courriel de greffière, nous tenons à vous assurer que nous nous engageons à fournir une réponse complète qui sera transmise au Conseil dès que possible. Cela dit, nous sommes en mesure de fournir certaines informations essentielles relatives à la requête et nous nous sentons obligés de signaler les risques importants découlant d'une éventuelle révision du projet. En bref, le report de ce projet entraînera des mois de retard, mettra en péril plus de 1,2 million de dollars de financement provenant de d'autres paliers de gouvernement et coûtera à la ville plusieurs centaines de milliers de dollars sur le plan opérationnel. Des changements dans la portée de la propriété pourraient également avoir un impact sur la capacité de l'équipe de la Ville à répondre aux besoins urgents en matière de logement dans notre communauté.

En ce qui concerne à la requête, une étude devra être réalisée par nos architectes en deux étapes. La première étape consistera à fournir des concepts préliminaires de réaménagement de l'ancien gymnase (comme indiqué dans la requête) et ils devront à leur tour fournir ces informations au métreur. À l'étape 2, le métreur réalisera un projet de chiffrage (classe B) de ces concepts, qui sera ensuite comparé aux estimations actuelles (conception actuelle).

L'étude nécessitera (le Conseil sera informé au plus tôt lors de sa réunion du 24 septembre) :

- Un projet de refonte architecturale (~ 2 à 3 semaines)
- Projet de révision par le métreur (~ 5 8 semaines)

Coût - 12 000 \$ (environ) Remarque : les honoraires suivants pour les services de conseil comprennent les travaux d'architecture, de mécanique et d'électricité, mais pas les coûts pour le travail du consultant à l'heure actuelle.

Étant donné qu'il s'agit d'avant-projets, un remaniement final de la conception architecturale et des examens finaux du métreur seraient également nécessaires, ce qui entraînerait un retard supplémentaire d'environ 8 à 12 semaines et des coûts supplémentaires d'environ 31 500 dollars pour le projet.

Les retards et les coûts supplémentaires auront également un impact sur les points suivants :

- la demande de permis de construction
- Demande de révision du zonage auprès du service d'urbanisme
- la construction (début/fin, etc.)
- Perte potentielle de financement provincial/fédéral (jusqu'à 1 282 000 \$)

- Prolongation de la solution de logement d'hiver (bail du Manoir Parisien) augmentation des coûts supplémentaires 2025 (27 383 \$/mois) NOTE : Le Manoir Parisien est actuellement à vendre et pourrait être vendu à tout moment et notre bail, à durée court terme, pourrait être menacé si un nouveau propriétaire n'est pas disposé à poursuivre ou à prolonger le bail avec notre ministère.

La somme des retards pourrait s'élever à près de 1,5 million de dollars d'après l'examen préliminaire. En outre, toute modification du nombre d'unités aura un impact sur la réalisation du projet, y compris la perte de revenus de loyer (du fait de la diminution du nombre d'unités) et l'augmentation de la subvention municipale annuelle en raison de la perte de ces revenus locatifs.

En ce qui concerne la publication d'un appel d'offres, chaque mois de retard entraîne des coûts supplémentaires. La date de lancement de l'appel d'offres est prévue pour la semaine du 13 août.

Tout retard entraînera une augmentation des coûts due à la reprise des travaux, à l'inflation, à la hausse des prix des matériaux et à la pénurie de main-d'œuvre. En outre, toute révision du projet en plusieurs phases entraîne d'autres retards et d'autres coûts. Il ne s'agit donc pas d'une approche pratique, et nous continuons à recommander vivement que le projet se poursuive tel qu'il est envisagé. Nous devons également être conscients que toute mise à jour concernant les retards et l'augmentation des coûts serait également communiquée aux Comtés unis comme bailleurs de fonds.

Massey Commons peut être un élément important des priorités stratégiques de la ville - le logement pour tous. Le report de la construction peut prolonger le délai pour fournir des logements indispensables aux résidents vulnérables et précaires, exacerber la crise du logement et potentiellement conduire à une augmentation des coûts sociaux et économiques pour la ville.

Pour les services sociaux, il est impératif de lancer l'appel d'offres pour la construction comme prévu afin d'éviter ces conséquences négatives et de démontrer notre engagement à faire preuve de responsabilité fiscale et à répondre rapidement et efficacement à l'ensemble des besoins de notre communauté en matière de logement.

Il convient également de noter que le fait de changer de projet en cours de route crée un risque réputationnel au sein de la communauté du développement et pourrait augmenter les coûts des appels d'offres à l'avenir, car les partenaires potentiels se protègent contre les partenaires du secteur public qui ne sont pas fiables.

Si vous avez d'autres questions, n'hésitez pas à nous contacter.

Sincèrement,



Mellissa Morgan General Manager, Human Services and Long-Term Care T 613.930.2787, ext. 2370 | mmorgan@cornwall.ca | www.cornwall.ca 340 Pitt St., 3rd Floor Cornwall, ON, Canada K6J-3P9

Do you really need to print this e-mail? Help preserve our environment. Devez-vous vraiment imprimer ce courriel? Pensons à l'environnement!

CONFIDENTIAL

The information in this e-mail is intended solely for the addressee(s) named, and is confidential. Any other distribution, disclosure or copying is strictly prohibited. If you have received this communication in error, please reply by e-mail to the sender and delete or destroy all copies of this message. Les renseignements contenus dans le présent message électronique sont confidentiels et concernent exclusivement le(s) destinataire(s) désigné(s). Il est strictement interdit de distribuer ou de copier ce message. Si vous avez reÇu ce message par erreur, veuillez répondre par courriel à l'expéditeur et effacer ou détruire toutes les copies du présent message.



The Corporation of the City of Cornwall Regular Meeting of Council

Report

Department:	CAO
Division:	Office of the City Clerk
Report Number:	2024-66-CAO
Meeting Date:	August 13, 2024
Subject:	Inquiries, Directions, Requested Action Reports Q2

Purpose

To provide Council with a list of Inquiries, Directions and Requested Reports for information purposes.

Recommendation

That Council receive the Inquiries, Directions, Requested Actions Reports for Q2, 2024.

Background

The following list is being presented to Council for information purposes.



Inquiries				
Title	Department	Initiator	Q	Date Returned to Council
Guindon Beach June 11, 2024 	Planning, Development and Recreation	Councillor Sarah Good Councillor Syd Gardiner	Q3	Memo Council Agenda July 9, 2024
City-Owned Property June 11, 2024 		Councillor Sarah Good Councillor Fred Ngoundjo	Q3	Email to Council July 9, 2024
Generators July 9, 2024	Infrastructure and Municipal Works	Mayor Justin Towndale Councillor Sarah Good		
Massey Commons Studio Apartments • July 9, 2024	Human Services	Councillor Sarah Good Councillor Elaine MacDonald		

Directions				
Title	Department	Initiator	Q	Date Returned to Council
Annual Report from Building and By-law • June 11, 2024	Infrastructure and Municipal Works	Councillor Sarah Good Councillor Dean Hollingsworth	Q3	



Requested Action Reports

Title	Department	Initiator	Q	Date Returned to Council
French ServicesSeptember 25, 2023	Corporate Services – Office of the City Clerk	Mayor Justin Towndale	Q1	February 13, 2024
Strategic Plan Vision and Mission • January 22, 2024	Office of the CAO	Councillor Claude McIntosh Councillor Syd Gardiner	Q1	March 26, 2024
Grading By-law April 26, 2021	Planning, Development and Recreation and Infrastructure and Municipal Works	Former Councillor Glen Grant Councillor Todd Bennett	Q2	May 14, 2024
Housing Report April 9, 2024	Human Services	Councillor Dean Hollingsworth Councillor Sarah Good	Q2	April 30, 2024
 (a) Vacant Land Use of 504 Fourth Street East (Former Bob Turner/Joe St. Denis Field) (b) Youth Space March 27, 2023 April 24, 2023 June 12, 2023 	Planning, Development and Recreation and Human Services	Human Services and Planning, Development and Recreation Presentation by Consultants	Q2	June 11, 2024



Climate Lens for Council Reports • March 26, 2024 • June 25, 2024	Infrastructure and Municipal Works	Councillor Sarah Good Councillor Syd Gardiner	Q3	July 9, 2024
Human Rights Lens for Council Reports • March 26, 2024 • June 25, 2024	Human Resources	Councillor Sarah Good Councillor Syd Gardiner	Q3	July 9, 2024
Height and Parking Restrictions • April 9, 2024	Planning, Development and Recreation	Councillor Sarah Good Councillor Fred Ngoundjo	Q3	July 9, 2024
 Procurement of Goods and Services Policy Deferred on July 9, 2024 		Councillor Dean Hollingsworth Council Fred Ngoundjo	Q3	August 13, 2024
South Glengarry Water and Wastewater support request • September 12, 2022	CAO Infrastructure and Municipal Works	Township of South Glengarry	Q3	September 10, 2024
DBIA Lighting ProjectAugust 14, 2023	Infrastructure and Municipal Works	Downtown BIA	Q3	September 10, 2024
Additional Tax on Vacant Buildings • November 27, 2023	Financial Services	Councillors Sarah Good Councillor Carilyne Hébert	Q3	
Review of Memorandums of Understanding • February 13, 2024	Office of the CAO	Councillor Sarah Good Councillor Dean Hollingsworth	Q3	



Tree Protection By-law	Infrastructure and	Councillor Sarah Good	Q4	
May 23, 2023	Municipal Works	Councillor Todd Bennett		
 May 9, 2023 				
 February 13, 2024 				
Historically Related	Office of the City	Councillor Todd Bennett	Q4	
Committees and Groups	Clerk	Councillor Claude McIntosh		
• June 11, 2024				
Terms of Reference for		Mayor Justin Towndale		
Youth Advisory Committee		Councillor Denis Sabourin		
 July 9, 2024 				
Regulatory Framework	Planning,	Councillor Elaine MacDonald	Q4	
Governing Taxis and	Development and	Councillor Maurice Dupelle		
Similar Ground	Recreation			
Transportation Services				
 July 9, 2024 				



The Corporation of the City of Cornwall Regular Meeting of Council Report

Department:	CAO
Division:	Office of the City Clerk
Report Number:	2024-69-CAO
Meeting Date:	Click or tap to enter a date
Subject:	Mid-Term Governance Review Initiative

Purpose

The purpose of this report is to seek Council's approval to initiate the City's first Mid-Term Governance Review. This report recommends that Council approve the approach set out below, whereby staff will consult and then prepare a further, more detailed report to address any modest governance changes, for Council's consideration by the end of this year.

Recommendation

That Council approve that the City Clerk initiate the consultation process and prepare a Mid-Term Governance Review Report as described in Report 2024-69-CAO.

Strategic Priority Implications

Council's Mid-Term Governance Review is a comprehensive assessment of the achievements, challenges, and opportunities in the first half of the term to assist in approving governance structure. The review aims to support the Council's strategic priorities of trusted governance, transparency and citizen engagement. Further, it also sets a strong foundation for "Cornwall- Future Ready".



Background / Discussion

The City of Cornwall's governance structure, like those of most other Ontario municipalities, facilitates the legislative process of Council to enact policies and to pass by-laws in accordance with the *Municipal Act, 2001*, as well as other Provincial statutes. As described in the Committees By-law, being By-law No. 2020-146, the governance framework consists of several different, deliberative and/or advisory bodies, namely Council, Committees, Advisory Committees and other arms-length Agencies, Boards and Commissions (ABCs) such as Mayoral Task Forces, Working Groups and some local boards such as the Business Improvement Areas.

This report is to introduce and recommend the process of the Mid-term Governance Review for the 2022-2026 Term of Council.

In the past year, Council has updated some key, statutory policies, including the Delegation of Powers and Duties Policy and the Accountability and Transparency Policy as well as several regulatory tools that govern those bodies, such as a comprehensive overhaul of its *Procedure By-law*. As municipalities are the level of government that is closest to residents, the City's governance structure is designed to enable formal, direct community input into decision-making through Advisory Committees and Standing Committee presentations to elected representatives. It also facilitates the legislative and governmental work of the elected officials at Standing Committee and Council meetings.

Following the passage of its revised *Procedure By-law* in December 2023, staff is suggesting that governance reviews occur twice over each four-year term of council. The first Governance Review would take place at the beginning of a term of council shortly after a new Council has been sworn in. It is suggested that this initial review is when major changes may be recommended to the governance structure, such as the establishment or elimination of Standing Committees, Advisory Committees or ABCs, along with any significant revisions to Council's legislative tools, like the *Rules of Procedure*.

In contrast, the Mid-term Governance Review would occur in the 18-to-24-month period of the term of council. This smaller exercise would be used to review Council's existing governance structure to address any minor issues that have arisen in the interim. Such changes could be characterized as "tweaks" and/or modest "housekeeping" revisions. For example, changing the name of an existing committee to more accurately reflect its terms of reference.



It is further recommended that this Review be guided by the following three principles, such that any proposed change must ensure that:

- 1. the governance structure and related processes remain transparent and accountable to the community at large
- 2. changes contribute to an efficient and effective decision-making process
- 3. the governance structure and processes are focused and aligned with identified City priorities
- 4. we remain compliant with any changes to the Municipal Act.

This Mid-term Governance Review process and the recommendations that may arise from it will be developed upon the existing statutory requirements set out in the *Municipal Act, 2001*.

In this regard, it is proposed that the City Clerk will begin consultations with the Mayor as the statutory "head of council", in light of the fundamental responsibilities set out in Subsections 225(c) and (c.1) of the *Municipal Act, 2001*:

"225. Role of the Head of Council

It is the role of the head of council.

(c) to provide leadership to the council; and

(c.1) without limiting Clause (c), to provide information and recommendations to the council with respect to the role of council described in Clauses 224(d) and (d.1)".

For convenience, those latter two clauses are set out below:



"224 Role of Council

It is the role of council,

(d) to ensure that administrative policies, practices and procedures and controllership policies, practices and procedures are in place to implement the decisions of council; and

(d.1) to ensure the accountability and transparency of the operations of the municipality, including the activities of the senior management of the municipality" [emphasis added].

Thereafter, the Clerk will meet individually with each Member of Council to obtain their input and insights into the Mid-Term Governance Review. Following this consultation with Council, the Clerk will meet with the Chairs of various ABCs and finally with the City's senior leadership group. Councillors who chair such bodies would already have provided their opinions during their earlier, one-onone meeting with the City Clerk.

Changes may also be forthcoming based on any statutory or regulatory requirements of the Province of Ontario.

Recommended changes would arise from a consensus for a change supported by a majority of Members of Council. The report would also indicate when the recommendation originates from the Mayor under his statutory authority or Members of Council. In some instances, staff may bring forward recommendations that arose after the consultations with Members of Council were complete. In all cases, any recommendations would align with the principles set out above.

It is anticipated that the Mid-Term Governance Review would also provide Council with an opportunity to review its Code of Conduct for Members of Council and Local Boards, the first time since it was enacted in June 2019. This matter would also ensure that Staff liaise with the City's Integrity Commissioner on any potential tweaks to the Code.



Staff also foresees the Mid-Term Governance Review as an opportune time to identify and specify in writing all powers and duties that have been delegated in the past by Council to Staff. This component of the Review would build on the existing requirements in the City's Delegation of Powers and Duties Policy and ultimately obtain Council's confirmation for such delegations under Sections 23.1 to 23.5 of the *Municipal Act, 2001*. For convenience, that provision, which is entitled, "Delegation of Powers and Duties", is set out in its entirety in Appendix A to this report. For example, while the Clerk operates the City's access to information requests submitted under the *Municipal Freedom of Information and Protection of Privacy Act*, Council's delegations, Staff would anticipate incorporating and updating all such delegations in a *Delegation of Authority Bylaw* for Council's consideration and approval



The Corporation of the City of Cornwall Regular Meeting of Council Report

Department:	CAO
Division:	Office of the City Clerk
Report Number:	2024-68-CAO
Meeting Date:	August 13, 2024
Subject:	Council Compensation Review

Purpose

The purpose of this report is to provide Council with an overview of the current compensation offered to members, to set direction for the remainder of this term of office (2022-2026), and seek direction to plan for the next term of office (2026-2030).

Recommendation

That Council consider the following as it relates to their annual renumeration and benefits.

- That an adjustment of base pay for Members of Council, on an annual basis, reflect the same rate of increase as the Non-Union group (2023 2%, 2024 2%, 2025 3%, 2026 3%) for this term of Council;
- 2. That Council provide direction based on the three options provided relating to health benefits;
- 3. That Council provide direction based on the option below based on pension benefits;
- 4. That the Clerk conduct a municipal review of Council's compensation for term starting in 2026 and that this review be presented to Council no later than July 1, 2025; and



5. Following Councils' decisions regarding its 2023-2026 annual remuneration and expenses, that Staff prepare and present a By-law to Council for adoption.

Financial Implications

Annual remuneration and expenses for Members of Council was last approved through By-law 2019-150 for the years 2019 through 2022. Council members have not had a change in their remuneration since Dec 31, 2022.

Currently, the Mayor's annual remuneration and expenses are as follows:

- a. Annual salary of \$59,220.72 (2022)
- b. Annual compensation as a Member of the Cornwall Police Services Board in accordance with the established remuneration (2023, \$3,500).
- c. A monthly car allowance at \$160.00 per month (2023, \$1,920.00).
- d. Benefits include dental, LTD, and life insurance (2023, \$4,093.92)
- e. Compensation for pension benefits as per the established payment rate under the Ontario Municipal Employees Retirement Plan paid out for the purchase of RRSPs (2023, \$5,330.29).

Currently, a Councillor's annual remuneration is as follows:

a. Annual salary of \$22,001.20 (2022)

Because Council has not yet set its annual remuneration for the years 2023 and 2024, the Accounting department has accrued estimated costs as payables to ensure expenses are recognized in the correct year. This measure ensures financial accuracy and compliance with accounting standards, maintaining the integrity of the financial statements. Once Council provides its direction on annual remuneration and expenses, Administration will calculate and pay a retro pay for the years 2023 and 2024 to date, and budget accordingly for future years.

Strategic Priority Implications

To ensure transparency, accountability, and fairness in local government, Council members can set clear structures for remuneration and expenses based on the responsibilities and workload associated with their roles. This process also helps to attract qualified individuals to the public service by offering appropriate compensation, while also ensuring that taxpayer money is used responsibly. Moreover, it aligns with Council's recently adopted strategic priorities, which emphasize strong and modern governance.



Background / Discussion

The *Municipal Act, 2001* provides Council with the authority to set its remuneration. Pursuant to the *Municipal Act*, municipal Councils have a legal obligation to conduct a review of its compensation at least once every four years.

Council compensation is meant to be a recognition for time commitments by the individuals while in public office and carrying out the duties associated with being elected officials.

While compensation is not the only factor when considering representation of local Councils, it is an important one. It ensures that individuals from diverse backgrounds can afford to serve without financial hardship. Adequate compensation helps attract qualified candidates who might otherwise be unable to participate due to economic constraints. This, in turn, promotes a more representative and effective governance, as Council members can focus on their duties without undue financial stress. Additionally, fair compensation acknowledges the significant responsibilities and time commitments involved in public service, encouraging dedicated and capable individuals to contribute to their communities, even on a part-time basis.

Benefits Section

Currently, Councillors do not have any benefits.

Currently, the Mayor has the following benefits:

- Basic Life: 200% of annual earnings to a maximum of \$450,000; reduces to \$15,000 at age 65 and terminates at the earlier of when they no longer hold a seat on Council or at the age of 75.
- Long term Disability: Is paid at 66.67% of current salary up to \$10,000, terminated at the age of 65.
- Dental: Basic services are reimbursed at 100%, major services at 75%, and orthodontic services at 75%. The calendar year maximums are unlimited for basic services, \$2,000 annually for major services, and \$5,000 lifetime for orthodontic services. The Mayor and dependents are eligible for orthodontic coverage.

In 2023, the premium for coverage cost the Corporation \$4,098.60 plus any claims submitted for dental.



Staff consulted with Sunlife for health benefit recommendations for the Mayor and Councillors and are providing the following options for consideration. The numbers referred below are at the current rate.

Option 1 Health Benefit Plans

Health Benefit Plan for Mayor

- Basic Life Insurance: Premium included with Extended Health Care. Current coverage is 200% of annual earnings, up to a maximum of \$450,000. Coverage reduces to \$15,000 at age 65. Terminates at the earlier of when the Mayor no longer holds a seat in Council or age 80.
- Extended Health Care (EHC): (massage, chiropractor, private nursing, hearing aid, out of Canada coverage, etc.): Premium is \$3,727.08 plus any claims submitted for EHC. EHC coverage terminates at the earlier of when the Mayor no longer holds a seat in Council or age 80. Out-of-Canada coverage terminates at age 75.
- Dental Coverage: Premium \$1,727.28 annually plus any claims submitted for dental. Basic services are reimbursed at 100%, major services at 75%, and orthodontic services at 75%. Calendar year maximums: unlimited for basic services, \$2,000 annually for major services, and \$5,000 lifetime for orthodontic services. Mayor and dependents are eligible for orthodontic coverage.

Annual Cost: \$5,454.36 + any claims submitted for reimbursement.



Health Benefit Plan for Councillors

- Basic Life Insurance: Premium \$1,468.80 (includes all members). Provides a flat \$25,000.00 of Basic Life coverage. Coverage reduces to \$15,000 at age 65. Terminates at the earlier of when the member no longer holds a seat on Council or age 80.
- Extended Health Care (EHC) (massage, chiropractor, private nursing, hearing aid, out of Canada coverage, etc.): Premium is \$27,468.84 plus any claims submitted for EHC. EHC coverage terminates at the earlier of when the member no longer holds a seat in Council or age 80.
- Dental Coverage: Premium \$12,760.80 annually plus any claims submitted for dental. (Includes all members of Council). Basic services are reimbursed at 100%, major services at 75% and orthodontic services at 75%. The calendar year maximums are unlimited for basic services, \$2,000.00 annually for major services and \$5,000 lifetime for orthodontic services. Additionally, Council members and dependents are eligible for orthodontic coverage.

Annual Total Cost: \$41,698.44 +any claims submitted for reimbursement.

Option 2 Mayor and Council - Health Spending Account

Add a Health Spending Account of \$1,500 per Council Member and Mayor, until earlier of when they no longer hold a seat in Council or at the age of 80. In addition, the Mayor would continue with the current benefit offering package.

Annual Cost: \$16,500 (Health Spending Account) + Mayor's current benefit package (\$4,098.60).

OMERS Retirement Plan

OMERS participation includes Mayor and Council as a whole and cannot be added only for individual members.

Cost of Mayor and Council participation in the OMERS Plan:

 Mayor and Council contributions: \$25,130.29 total cost annually based on 9% of hourly earnings with the City matching this contribution. (Council contribution of \$1,980.00 per year, per member / Mayor Contribution \$5,330.29). These contributions are based on current salary.



Health Benefit

	Mayor	Councillors	Total
OPTION 1	\$5,454.36	\$41,698.44	\$47,152.80
OPTION 2	\$5,598.60	\$15,000.00 (\$1,500	\$20,598.60
Health Spending	continuation of	per Council	
Account	current plan	Member)	
	(\$4,098.60) + HSA		
	(\$1,500) for EHC		
OPTION 3	\$5,454.36	\$0	\$5,454.36
No change from			
current			

Pension Benefit

	Mayor	Councillors	Total
RRSP	\$5,330.29	\$0	\$5, 330.29
No change from			
current			
OMERS (All members except members over 75 years old)		\$25,130.29	

Mid-Term Governance Review

Through the Mid-Term Governance Review, staff will be making recommendations surrounding:

- 1. Conducting a Council Compensation Review of Council based on comparators once every term of Council.
- 2. Conduct a benchmarking exercise of Ontario municipalities including roles of Members of Council to provide Council and the public a remuneration comparison review once every term of Council.

The Clerk provides an important role in supporting the functions and members of Council. It is important to regularly update the remuneration to reflect the current environment, ensuring that compensation remains fair. This is a key component of Council's Mid-Term Governance Review, aimed at maintaining transparency and attracting individuals to serve the important role as members of Council.



The Corporation of the City of Cornwall Regular Meeting of Council

Report

Department:	Financial Services
Division:	Purchasing
Report Number:	2024-80-Financial Services
Meeting Date:	August 13, 2024
Subject:	Procurement of Goods and/or Services Policy - Revised

Purpose

The purpose of the report is to recommend amendments to the Corporation's Procurement of Goods and/or Services Policy.

Recommendation

- 1. That Council receive the presentation by David Sherriff-Scott of Borden Ladner Gervais, LLP (appended to this report as Appendix 1) and Report 2024-80-Financial Services.
- That Council adopt the recommended revised Procurement of Goods and/or Services Policy effective September 1, 2024, as outline in Appendix 2, and
- 3. That Council rescind its Motion from November 12, 2019, which directed Administration provide a report to Council for input and approval for the Terms of Reference of an RFP valued greater than \$150,000 prior to the issuance of an RFP document.

Financial Implications

There are no financial implications arising from this report. Funding approval for procurement is contemplated through the annual Operating and Capital Budgets.



Background / Discussion

At the Council meeting of July 9, 2024, David Sherriff-Scott presented an update to the City's Procurement of Goods and/or Services Policy (Policy). The Policy is intended to govern the manner in which the municipality purchases goods and services. It outlines the financial guidelines, practices, and procedures for the purchase of goods and services to ensure the integrity and accountability for all financial transactions by the Corporation. The Policy was last reviewed in 2019. The Policy is to be reviewed and updated every 5 years.

Administration has been working with staff from BLG to complete a review of the Corporation's procurement framework. The Policy that has been drafted complies with recognized industry best practices. The revisions are consistent with current business, financial, economic, and regulatory updates and the need for streamlined operations that are required to support the delivery of municipal services.

Changes to the 2019 Policy are noted in the redlined version attached as Appendix 3 and noted as follows:

- Blue is a new addition.
- Red strikethroughs are deletions.
- Green notes that the section has been moved.

Additions (Blue):

- Administrative/Housekeeping: The Policy includes recommended changes to provide for greater clarity and readability. The proposed changes include a table of content, defining new terms, and improving existing definitions and provisions for clarity. The changes will provide greater consistency in interpreting and administering the Policy.
- Aligning with Council's Strategic Plan: It is an objective of this Policy to advance the protection of the environment and support sustainable development by integrating environmental performance considerations into the procurement decision-making process and to source goods and services in a manner that respects ethical considerations.
 - "Environmentally Preferred" goods and services are those that have a lesser or reduced impact on the environment over the life cycle of the good or service, when compared with competing goods or services serving the same purpose.



- "Ethically Preferred" goods or services are those that are sourced and produced under conditions that meet certain ethical standards, such as fair labour practices and animal welfare.
- **Application and Responsibilities:** The revised Policy emphasizes the importance of effective planning and confirms the necessity for all procurements to be executed in accordance with the Policy. The responsibilities as outlined Policy are of paramount importance as they serve as the cornerstone for ensuring the integrity and efficiency of our procurement processes. Adherence to these responsibilities guarantees that all procurements are conducted in a manner that is not only in alignment with our corporate objectives but also upholds our commitment to responsible resource management.
- **Conflict of Interest:** The Policy has expanded to include the scenarios under which a conflict of interest may arise with staff, providing more comprehensive guidelines to avoid any potential conflicts during the procurement process.
- Financial Limitations and Authority Levels for Awards: Section 5.1 defines the authority and responsibility within the procurement process. Changes include:

Table 1. Competitive Procurement – within budget, and Table 2. Non-Competitive Procurement – within budget

- Authority levels remain the same.
- Change: When a good or service is included in the budget is valued over \$150,000, the purchase will not require Council approval, but will be included in a quarterly report to maintain transparency. This process ensures that Council and the public are kept informed about procurement activities without necessitating individual approval for each budgeted purchase, streamlining the process while upholding our commitment to openness.

Table 3. Over-Budget Expenditures

- Authority limits:
 - Under \$50,000 General Managers, under \$75,000
 Treasurer, under \$250,000 CAO (staff: was \$150,000)



- Procurements between \$75,000 and \$250,000 will be reported to Council quarterly
- Any over-budget procurement above \$250,000 will go to Council for approval.

Table 4. Non-Budgeted Expenditures

- Was Section 4.3, now included as a Table in the revised Policy.
- Change to limits.
 - New: under \$10,000 Managers, under \$50,000 General Managers, under \$75,000 Treasurer (was \$20,000), under \$150,000 CAO (was \$50,000)
 - New: Procurements between \$75,000 and \$150,000 will be reported to Council quarterly
 - Any non-budgeted procurement above \$150,000 (was \$50,000) will go to Council for approval.
- **Purchasing Card:** The changes to this section of the Policy aim to further define processes and responsibilities to enhance clarity and accountability. These modifications are designed to ensure that the use of purchasing cards aligns with the Corporation's financial controls and procurement strategies.
- Electronic Submission: A revision of the Policy now includes a provision for electronic submissions. Previously, the Corporation issued solicitations electronically but required hardcopy submissions (proposals). The updated Policy accommodates electronic submissions which streamlines the procurement process and enhances accessibility for all potential suppliers.
- Emergency and Urgent Procurements: The revised Policy now includes dedicated sections addressing emergency procurements and urgency procurements. These sections are designed to provide clear guidance on the procedures to be followed when immediate action is required, ensuring that the Corporation can respond swiftly and effectively to urgent or unforeseen situations. By outlining the specific responsibilities and processes for these types of procurements, the Policy ensures that even in times of emergency, the Corporation's procurement activities support municipal services.
- **Collaborative Procurement:** The Co-operative Purchasing section has been replaced with a new section titled Collaborative Procurement. This



update reflects a shift towards a more unified and strategic approach to procurement, emphasizing the benefits of procuring with a Buying Group. The new section outlines the procedures and benefits of working together with other municipalities/organizations to leverage collective purchasing power, share expertise, and achieve better value for all parties involved.

- **Standardization:** Included in the Policy is provision to select a suppler that best fits the Corporation's requirements considering factors such as the need for compatibility with an existing product, facility, or service, or because the vendor possesses unique skills or has existing knowledge that is pertinent to the nature of the service required. This approach ensures that the procurement process remains efficient while meeting the specific functional needs of the Corporation.
- **Supplier Performance:** This section in Policy has been updated to ensure that suppliers adhere to the minimum performance standards, fulfill the terms of the contract, and comply with the applicable policies of the Corporation. This update is crucial as it holds suppliers accountable for their performance, ensuring that they meet the Corporation's expectations and requirements. By enforcing these standards, the Corporation aims to maintain high-quality services and products, safeguard its interests, and ensure the efficient use of public funds.

The Corporation has a Supplier Discipline Policy. This Policy is currently under review to include a Vendor Management Program. This Policy will be retitled Supplier Code of Conduct and Discipline Policy.

Limitation on Liability: For clarity, this section has been rewritten. It states that suppliers waive any claims against the Corporation for damages or costs, including lost profits or consequential loss, due to various reasons such as negligence or any alleged unfairness in the bidding process. For procurements to which the trade agreements apply, the liability is limited to the cost of the preparation of the bid. The waiver applies if no contract is awarded, a bid is canceled, or a non-compliant bid is accepted. It is included in all bid solicitations and contracts to protect the Corporation from liability.



Removals (Red):

- **Outdated Definitions and Roles:** To maintain relevance and clarity, certain terms and roles that are no longer applicable have been removed from the Policy.
- **Procedural Details:** Detailed procedural steps that are better suited for operational manuals or guidelines have been removed from the Policy to avoid redundancy and confusion.

Movements (Green):

• **Reorganization of Sections:** The Policy has been restructured to improve the flow and coherence of the document, making it easier to navigate and understand.

The revisions to the Policy aim to modernize the procurement process, emphasizing sustainability, ethics, and efficiency.

Administration has conducted a benchmarking exercise, comparing our monetary thresholds and reporting requirements with those of other municipalities to ensure we are in line with industry standards and adopting best practices. The Corporation's Policy is consistent with the practices from other municipalities. There would appear to be tolerance to adjust the financial levels as thresholds vary greatly between municipalities (\$100,000 and up to \$20M) and in the practices of other municipalities to extend the time periods for regular reporting (i.e. semi-annually).

Please note that this is a high-level summary of changes. All changes can be found in the attached redlined version. Also attached is a clean version of the Policy where all the changes have been incorporated in the document.

Also discussed at the July 9, 2024 Council meeting is a 2019 direction from Council that Administration provide a report to Council for input and approval for the Terms of Reference of an RFP valued greater than \$150,000 prior to the issuance of an RFP document. As discussed, it is a best practice that elected officials separate themselves and not be involved in the procurement process. In our comparison review with other municipalities, no other municipal Council reviews/approves Terms of Reference documents. CITY OF CORNWALL

Revised Procurement of Goods and/or Services Policy

Presented By

David Sherriff-Scott Senior Counsel <u>dsherriffscott@blg.com</u>



July 2024

Adoption of 2019 Policy

2

- The City of Cornwall (the "City") adopted a comprehensive Procurement of Goods and/or Services Policy (the "Procurement Policy") and the Supplier Discipline Policy in August 2019.
- The purposes of the Policies:
 - Protecting the City's interests;
 - Maintaining the integrity of the bidding process;
 - Defining authorities, roles and responsibilities within the City;
 - Enhancing efficient use of municipal funds; and
 - Ensuring the City's compliance with the Canadian Free Trade Agreement (CFTA) and the Comprehensive Economic and Trade Agreement (CETA) with Europe.

city of cornwall 2024 Policy Update

2024 Policy Update

- **Reason for the Update** Procurement obligations and best practices have evolved. updates have been developed to align the City's procurements with best practices, and to respond to legal and policy developments. The Procurement Policy updates include the following:
 - Ethical procurement considerations
 - Environmental procurement considerations
 - Electronic tendering policies
 - Defining responsibilities with respect to the use of purchasing cards
 - Defining roles and responsibilities relating to urgent procurements
 - Revising the threshold values for approvals and council reporting

Ethical Procurement

• Update to include the ethical standards of the City's suppliers (s. 1.0)

- (g) Promote ethical standards of behaviour and leadership by Suppliers, their subcontractors and in the supply chain in the production, manufacturing, and distribution of goods and services ultimately purchased and or consumed by the Corporation.

• "Ethically Preferred":

5

- "goods and or services that ... meet or exceed national, provincial or territorial standards for employment and human rights"
- To assess ethically preferred goods, the City may:
 - evaluate bidder's and their subcontractor's production and manufacturing processes, employment practices, the treatment of workers, and respect for and adherence to human rights
 - evaluate the adherence of the manufacturers of goods with the mandatory minimum employment standards and human rights of their country of origin,
 - insist that foreign goods comply with the minimum human rights and employment practices and standards of Canada and/or any Canadian province
- Solicitation documents may set out evaluation criteria and the weighting of such criteria for Ethically Preferred goods and services.

Environmental Considerations

Update to include environmental objectives

- (f) Promote ... opportunities through procurement to advance the protection of the environment, to support sustainable development and to procure and use goods and services that have a lesser impact on human health and the environment ...

• "Environmentally Preferred":

6

- "goods or services that have a lesser impact on human health and the environment when compared with competing goods or services"
- Can consider broad aspects of bidders' (or their subcontractors') impact on the environment, including their life cycle cost
- May require environmentally preferred goods or services to have a certified environmental product declaration or to meet the standards of a recognized third-party certification body
- Solicitation documents may set out evaluation criteria and the weighting of such criteria for Environmentally preferred goods and services.

Electronic Tendering

Update to define the process and responsibilities for electronic tendering

BLG

- "Electronic Tendering":
 - the use of a computer-based system directly accessible by Suppliers irrespective of their location that provides them with information related to bid solicitations and can accept vendor submissions.
- Guarantees and Performance (s. 7.3)
 - Purchasing supervisor may require that the bid bond or security be provided through Electronic Tendering.
- Two Stage Tendering (s. 5.9)

7

- The processes regarding two stage tendering have been updated to include both physical bid submissions (two envelope processes) as well as Electronic Tendering.

Purchasing Cards

BLG

Update on Purchasing Cards

- General Requirement (s. 5.2.1)
 - (f) cardholder authorizes the Corporation access to the account file, as well as to have both internal and external audits performed on the file.
 - No personal benefit:

8

- No elected official or employee shall gain personal benefit through the collecting of reward points, including air miles, gasoline company points, grocery store points, etc.
- Any rewards points that accrue from the use of a cardholder's purchasing card shall accrue or be converted to the use and benefit of the City.
- **Prohibitions** (s. 5.2.2) Credit card shall not be used:
 - (xi) for alcohol purchases, unless approved by the General Manager of the Department.
- Administration, Reconciliation and Audits (s. 5.2.3)
 - Cardholders must provide transaction report including all receipts.
- Cardholder Responsibilities (s. 5.2.4)
 - 2024 Policy outlines the obligations imposed on cardholders.

Emergency and Urgent Procurement

BLG

Urgent Procurement Update

- "Emergency Purchase" means a limited tender or non-competitive procurement made in accordance with defined conditions in this Policy. Emergency purchases generally do not have an approved budget prior to purchase.
- Emergency Procurements (s. 5.14.1)
 - In an emergency, the procurement of goods or services may be authorized without a competitive process.
- "Emergency": immediate threat to public health, maintenance of essential City service, or the welfare and protection of persons, property, or the environment ...
 - A list of pre-qualified suppliers or vendors will be used whenever possible.
 - Upon return to normal business, emergency procurements over \$75,000 are reported to Council.
- Urgent Procurements (s. 5.14.2)

9

- "urgent procurement": procurement that is strictly necessary for reasons of urgency brought about by unforeseeable events where the goods and services cannot be obtained by open tendering.
- Urgent procurements may be authorized without a competitive process.
- Urgent procurements over \$75,000 are reported to Council, with explanation of the unforeseeable circumstances and why open tendering was unavailable.

The Procurement Policy has refined approval authority for procurements within budget, over-budget, non-budgeted, or purchases on an urgent/emergency basis. Proposed authority levels are as follows:

1. Competitive Procurement Within Budget		
Financial Limits	Method(s)	Authority Level
Under \$5,000	Low-Value Procurement; Credit Card Request for Quotation; Request for Proposals; Request for Tender	Administrative Staff as designated by General Manager requisitioning department
\$5,000.01 to \$10,000	Request for Quotation Request for Proposals ; Request for Tender	Supervisor, requisitioning department
\$10,000 to \$20,000	Request for Quotation; Request for Proposals; Request for Tender	Manager, requisitioning department
\$20,000.01 to \$50,000	Request for Quotation; Request for Proposals; Request for Tender	General Manager, requisitioning department
\$50,000.01 to \$75,000	Request for Quotation; Request for Proposals; Request for Tender	General Manager, Financial Services
\$75,000.01 to \$150,000	Request for Proposals; Request for Tender Request for Quotation	CAO
\$150,000.01 or more	Request for Proposals; Request for Tender Request for Quotation	CAO and disclosed in Quarterly Report to Council

2. Non-Competitive Procurement Within Budget		
Financial Limits	Method(s)	Authority Level
Under \$100	Petty Cash	Administrative Staff as designated by Manager of requisitioning department
Under \$5,000	Credit Card or Negotiation	Manager of requisitioning department
\$5,000 to \$50,000	Negotiation	General Manager of requisitioning department
\$50,000 to \$75,000	Negotiation	General Manager, Financial Services
\$75,000.01 or more	Negotiation	CAO and disclosed in quarterly report to Council

Authority Level Update: Over Budget Expenditures

3. Over-Budget Expenditures		
Financial Limits	Authority Level	
1 \$50,000	General Manager of requisitioning department	

BLG

Over by less than \$50,000	General Manager of requisitioning department
Over by between \$50,000.01 to \$75,000	General Manager, Financial Services
Over by between \$75,000.01 to \$250,000	CAO and disclosed in quarterly report to Council
\$250,000.01 or more over budget	Council in a separate report

Authority Level Update: Non-Budgeted Expenditures

4. Non-Budgeted Expenditures			
Financial Limits	Method(s)	Authority Level	
Under \$10,000	Low-Value Procurement; Credit Card; Request for Quotation; Negotiation	Manager of requisitioning department	
\$10,000.01 to \$50,000	Request for Quotation; Request for Proposals; Request for Tender; Negotiation	General Manager of requisitioning department	
\$50,000 to \$75,000	Request for Quotation; Request for Proposals; Request for Tender; Negotiation	General Manager, Financial Services	
\$75,000.01 to \$150,000	Request for Proposals; Request for Tender; Negotiation	CAO and disclosed in quarterly reports to Council	
\$150,000.01 or more	Request for Proposals; Request for Tender; Negotiation	Council	
Emergency and Urgent	Methods outlined in ss. 5.14.1 and	CAO and disclosed in quarterly	

BLG

reports to Council

5.14.2

Procurements \$75,000.01 or more

Authority Level Update: Basis for Update

- The updated authority levels are based on a comprehensive review of Ontario municipal practice.
- Delegation of authority has increased significantly across the province since 2005, due to Justice Bellamy's report on the Toronto Computer Leasing Inquiry and Toronto External Contracts Inquiry. The report's recommendations included the following:
 - "Council should delegate the administrative, day-to-day operations of the City to staff and concentrate on matters of policy."

"Council should consider which matters are essential for Council to retain for legal, financial, strategic, or other risk related reasons. Everything else should be delegated."

- "Councillors should separate themselves from the procurement process. They should have no involvement whatsoever in specific procurements. They have the strongest ethical obligation to refrain from seeking to be involved in any way."

"Elected officials should set general procurement policy, priorities, and budgets, and debate particular procurements in public in committee or the Council chamber. But that is all. They should never intervene in active, ongoing tenders or other procurements."

- "Members of Council should not see any documents or receive any information related to a particular procurement while the procurement process is ongoing."

"Drafting tender documents should be left to the expertise of members of staff, and councillors should not have access to such drafts. It would put them in the awkward position of having information beneficial to individual vendors who might attempt to communicate with them."

Enhanced Reporting to Council

• Mandatory Quarterly Reporting (s. 3.8(k))

- Purchasing supervisor is responsible for quarterly information reports to Council listing the following procurements:
 - Competitive procurements over \$150,000
 - Non-competitive procurements over \$75,000
 - Procurements exceeding budget by between \$75,000 and \$250,000
 - Non-budgeted procurements valued between \$75,000 and \$150,000
 - Emergency and urgent procurements over \$75,000
- Additional Required Reporting (ss. 5.1.2 and 5.1.3)
 - Purchasing supervisor is responsible to provide separate information reports for Council for their review outside of the quarterly reporting process for the following procurements:
 - Budgeted procurements that exceed Council's approved budget by \$250,000 or more
 - Non-budgeted procurements over \$150,000
 - Emergency and Urgent Procurements of more than \$75,000



Thank You

For more information, contact:

David Sherriff-Scott

Senior Counsel

613.787.3527

dsherriffscott@blg.com

Scott Pollock

Counsel

613.787.3541

spollock@blg.com

Borden Ladner Gervais

The information contained herein is of a general nature and is not intended to constitute legal advice, a complete statement of the law, or an opinion on any subject. No one should act upon it or refrain from acting without a shorough examination of the law after the facts of a specific busidon are considered. You are urged to consult your legal advice in cases of specific operations are concerned. BLG does not warrant or guarantee the accuracy, concerned areas of the presentation. No part of the presentation may be regression written permission of Borden Ladre Greens LLP.

© 2024 Borden Ladner Gervais LLP. Borden Ladner Gervais is an Ontario Limited Liability Partnership.



Procurement of Goods and/or Services Policy

Department:	Financial Services, Purchasing
Policy Number:	FI-2019-09-09-2
Effective Date:	September 10, 2019
Council Approval:	September 9, 2019
Revision Date:	September 1, 2024

TABLE OF CONTENT

1.0	PURPOSE	2
2.0	DEFINITIONS	3
3.0	APPLICATION AND RESPONSIBILITIES	9
4.0	PROCEDURES	17
5.0	PROCUREMENT METHODS	23
6.0	SUPPLIER CONDUCT	49
7.0	CONTRACT DOCUMENTATION, EXECUTION AND PERFORMANCE GUARANTEES.	56
8.0	RESOLUTION OF CONFLICT	59
9.0	INTERPRETATION	61
ATTA	CHMENTS	62
APPE	ENDIX "A" - EXEMPTIONS	63
APPE	ENDIX "B" - IRREGULARITIES	67

1.0 PURPOSE

This is a policy of the Corporation to establish procedures for the procurement of Goods and/or Services, including for the purposes of section 270(1) of the *Municipal Act, 2001* (Ontario).

The purposes of this policy are to:

- (a) Protect the interests of the Corporation, the public and persons participating in the Corporation's procurements processes.
- (b) Maintain the integrity of the procurement process by ensuring that, appropriate methods of procurement will be used to obtain the best value for the Corporation.
- (c) Define the authorities, roles and responsibilities of those persons involved in the procurement process.
- (d) Enhance the efficient and effective use of municipal funds.
- (e) Ensure compliance with all legislative requirements and relevant trade agreements, including, without limitation, the Comprehensive Economic Trade Agreement (CETA) and Canadian Free Trade Agreement (CFTA) and any amendments to them or successor agreements which may bind the Corporation.
- (f) Promote, in the Corporation's discretion, opportunities through procurement to advance the protection of the environment, to support sustainable development and to procure and use goods and services that have a lesser impact on human health and the environment when compared to other competing goods and services.
- (g) Promote ethical standards of behaviour and leadership by Suppliers, their subcontractors and in the supply chain in the production, manufacturing, and distribution of goods and services ultimately purchased and or consumed by the Corporation.

2.0 **DEFINITIONS**

In this policy,

"Administrative Staff" shall mean employees designated by a General Manager, part of whose responsibilities relate to the Procurement of Goods and/or Services Policy.

"Affiliated Persons" shall include any company, enterprise, business venture, or partner owned by a Supplier or over which the Supplier can or is entitled to exercise any control or influence. Affiliated Persons also includes without limitation any owner in whole or in part, operator, partner, shareholder, officer, or director of a Supplier and each of their spouses, children, parents, grandparents, siblings, and extended family members. For the purposes of this definition, Spouse and Child shall have the same meanings identified in Section 1. of the *Municipal Conflict of Interest Act R.S.O. 1990, C. M-50.*

"Approved Budget" shall mean an operating or capital budget approved by Council subject to any Council approved adjustments.

"Award" shall mean the identification of a successful Supplier pursuant to a Bid Solicitation, subject to the reserved rights of the Corporation, any By-Law, this or any other policy of the Corporation, the terms and conditions of any Bid Solicitation, and the approval where indicated of Council, and "Awarded" shall have a corresponding meaning.

"Bid" shall mean an offer or submission from a Supplier in response to a Bid Solicitation which is subject to acceptance or rejection by the Corporation.

"Bid Solicitation" shall mean a solicitation issued by the Corporation, including without limitation a Request for Information, Request for Expression of Interest, Request for Supplier Qualifications, Request for Quotation, Request for Tenders Request for Proposals, or other procurement process whether completed through Electronic Tendering or otherwise.

"Bidder" shall mean any Supplier who has made an offer or submission in response to a Bid Solicitation.

"Buying Group" shall mean any other municipalities, regions, local boards and other public or not for profit agencies that provides collaborative procurement opportunities offering resources savings or economies of scale benefits to the Corporation.

"CAO" shall mean the Chief Administrative Officer of the Corporation or their designate.

"City Clerk" shall mean the City Clerk of the Corporation or their designate.

"Conflict of Interest" shall mean any situation or circumstances where a Supplier:

- (a) has commitments, relationships or financial interests or involvement(s) in any matter that:
 - (i) could or could reasonably be seen to exercise an improper influence over the objective, unbiased and impartial exercise of the independent judgment by any personnel of the Corporation or its advisors or agents; or
 - (ii) could or could reasonably be seen to compromise, impair or be incompatible with the effective performance of the Supplier's obligations under an agreement with that Supplier; or
 - (iii) has contractual or other obligations to the Corporation that could or could be seen to have been compromised or impaired as a result of its participation in a procurement process; or
- (b) has knowledge of confidential information or other information internal to the Corporation of strategic and/or possible relevance to a procurement process that is not available to others and that could or could reasonably be seen to give the Supplier an unfair competitive advantage.

"Contract" or **"Agreement"** shall mean an agreement between the Corporation and a Supplier for the procurement of Goods and/or Services, including a Purchase Order.

"Contractor" shall have the same meaning as "Supplier".

"Corporation" or "City" shall mean the Corporation of the City of Cornwall.

"Council" shall mean the Council of the Corporation, comprised by the Members of Council who were elected by the registered voters or who have been appointed by virtue of a vacancy.

"Designate" shall mean a person or persons assigned the duties or responsibilities of another person.

"Electronic Tendering" shall mean the use of a computer-based system directly accessible by Suppliers irrespective of their location that provides them with information related to bid solicitations and can accept vendor submissions. For greater clarity, the acceptable methods of Electronic Tendering for any individual procurement will be set out in that procurement's solicitation documents.

"Emergency" shall mean a situation brought about by unforeseeable events that makes the procurement of Goods and/or Services necessary to address an immediate risk to health, safety, security, property, the environment and/or to other public interests which the Corporation has jurisdiction to serve.

"Emergency Purchase" means a limited tender or non-competitive procurement made in accordance with defined conditions in this Policy. Emergency purchases generally do not have an approved budget prior to purchase.

"Environmentally Preferred" means goods or services that have a lesser impact on human health and the environment when compared with competing goods or services. Notwithstanding anything else in this Policy, this comparison may consider without limitation Bidders' practices, the environmental attributes of a Bidder, any certification or the absence thereof possessed by a Bidder, regulatory offenses or environmental violations by a Bidder, the participation by a Bidder in any greenhouse gas emission target setting, reduction and disclosure program, Bidders' infrastructure and equipment, employment and outsourcing practices, materials acquisition, production, manufacturing processes, life cycle costs, recycled content, recyclability, the use of refurbished reusable or reconditioned parts, waste management, packaging, distribution transportation, fuels, re-use, operational costs, maintenance or disposal practices, costs or features and the availability of energy, water or fuel saving features. The same criteria may be considered in relation to a Bidder's subcontractor. Environmentally preferred goods or services may in the discretion of the Corporation be required to have a certified environmental product declaration, or to meet the criteria or standards of a recognized third-party certification body selected by the Corporation from time to time where one exists for the product or service category being procured.

"Ethically Preferred" means goods and or services that are produced or delivered under conditions that meet or exceed national, provincial or territorial standards for employment and human rights. Notwithstanding anything else in this Policy, an assessment of ethically preferred goods and services may involve an evaluation of Bidder's and their Subcontractor's production and manufacturing processes, employment practices, the treatment of workers, respect for and adherence to human rights and the delivery by Bidders of foreign products and the adherence of the manufacturers of such goods with the mandatory minimum employment standards and human rights of their country of origin, Where foreign goods are supplied to the Corporation, it will have the right to insist in its discretion, that the manufacturing processes involved in the production of such goods comply with the minimum human rights and employment practices and standards of Canada and or any Canadian province.

"General Manager" shall mean the General Manager, Director or Chief of a department of the Corporation or their designate.

"General Manager, Financial Services" shall mean the General Manager of Financial Services and Treasurer of the Corporation or their designate.

"Goods" shall mean all tangible and intangible property including but not limited to supplies, products, wares, merchandise, materials, equipment, and property insurance.

"IT Manager" shall mean the Manager, Information Technology and Innovation of the Corporation or their designate.

"Legal Services" shall mean the Corporation's Legal Services Department.

"Life Cycle Cost" shall mean the cost of a good or service over the full lifetime of the good or service and not just the initial purchase price. An analysis of Life Cycle Cost may take into account, without limitation, durability, performance, disposal costs and cost savings that by be achieved over the lifetime of the good or service through environmental efficiencies or potential revenues.

"Manager" shall mean a Manager, Deputy Treasurer, Administrator, Deputy Chief or City Clerk of a division within a department of the Corporation or their designate.

"Mayor" shall mean the Mayor of the Corporation or their designate.

"Multi-use list" shall mean a list of Suppliers that the Corporation has determined satisfies the conditions for participation in that list, and that the Corporation intends (but is not obligated) to use more than once.

"Procurement" shall mean the acquisition of Goods and/or Services by purchase, lease, rental, or exchange transaction.

"Procurement Value" shall mean the estimated maximum total value of the Deliverables being procured over the term of the Contract, whether awarded to one or more suppliers, taking into account all forms of remuneration and all potential options.

"Purchase Order" shall mean the purchasing document used to formalize a purchasing transaction with a Supplier, setting out the terms and conditions applicable to the supply of Goods and/or Services by a Supplier, and which may include reference to any other contract documents and the contract value.

"Purchasing Supervisor" shall mean the Purchasing Supervisor of the Purchasing Services Department of the Corporation or their designate.

"**Purchasing Services**" shall mean the Department of Purchasing Services of the Corporation, and any successor thereto.

"Quotation" shall mean a response to a Request for Quotation.

"Request for Expression of Interest" shall mean a process used to gather information on future Supplier interest in an opportunity or information on Supplier capabilities and qualifications.

"Request for Information" shall mean a process where information is requested from potential Suppliers to gather general information, including in respect of Suppliers, Goods and/or Services.

"Request for Proposals (RFP)" shall mean a formal request for prices and details on Goods and/or Services from Suppliers, where the Goods and/or Services may not be able to be fully defined or specified or when alternate methods are being sought to perform a certain function or service, at the time of request. RFPs may be evaluated on the basis of price as well as other criteria as set out in the RFP and may include a negotiable process or provision for negotiations prior to Award.

"Request for Quotations" shall mean a solicitation issued to obtain competitive Bids for Goods and/or Services of pre-determined quantity and/or quality.

"Request for Supplier Qualifications" shall mean a solicitation that is issued to gather information on Supplier capabilities and qualifications with the intention of creating a list of pre-qualified Suppliers for future selective solicitations, including:

- (a) a one-time future solicitation; or
- (b) a multi-use list for solicitations of a predefined scope and duration.

"Request for Tenders" shall mean a formal request for prices on Goods and/or Services from Suppliers, where the Goods and/or Services are able to be fully defined or specified at the time of the request.

"Roster" or "Roster System" shall have the same meaning as "Multi-use List".

"Sealed Bid" shall mean a formal, sealed response received as a part of response to a Bid Solicitation.

"Selection Committee" shall mean the committee created to review proposals received by the Corporation based on the evaluation criteria, reach consensus on the final rating results and ensure that the final rating results, with supporting documents, are kept in the procurement file with the Purchasing Supervisor.

"Services" shall mean non-Goods, including all professional Services and construction Services, all Services in relation to real property and personal property including the installation, construction, maintenance, rental, repair, restoration, demolition or removal of real property or personal property.

"Subcontractor" shall mean companies that provide goods or services or both to Suppliers for inclusion in the goods or services ultimately purchased by the Corporation. Subcontractors do not have a direct business relationship with the Corporation.

"Supervisor" shall mean a supervisor within a department of the Corporation or their designate.

"Supplier" shall mean a person or group of persons that provides or could provide Goods and/or Services to the Corporation. A Supplier shall include affiliated persons.

"Supplier Arrangement" shall mean an arrangement where negotiated prices with predetermined terms and conditions are offered by one or more Supplier(s) to provide Goods and/or Services, to the Corporation on an as-required basis for a specific period of time.

"Supplier Code of Conduct and Discipline Policy" shall mean the Supplier Code of Conduct and Discipline Policy of the Corporation in use from time to time.

"Unbalanced Bid" shall mean, without limitation, a Bid that the Purchasing Supervisor believes has been manipulated created or developed in order to gain an advantage in the bidding process and can include without limitation circumstances such as where Bids contain overall prices or particular line item Bid prices that appear to be unreasonably high, inflated, excessive or exaggerated, unreasonably low; the inclusion of line items that have not been requested; wide disparities in Bid prices between one Bid submission and other Bid submission(s) and/or submission of artificially highly priced items in Bids or high overall Bid prices for the early stages of a project. "**Urgent Procurement**" shall mean a procurement that is strictly necessary to complete for reasons of urgency brought about by events which were unforeseeable for the Corporation and the goods and services which were the subject of the procurement could not be obtained in time using open tendering.

"Vendor Management Program" shall mean the program used to manage Supplier performance run by the Corporation as set out in the Supplier Code of Conduct and Discipline Policy.

"Vendor of Record System" shall have the same meaning as "Multi-Use List".

3.0 APPLICATION AND RESPONSIBILITIES

3.1 Application

All Goods and/or Services required by the Corporation, its Council, committees, and its departments shall be acquired and disposed of in accordance with:

- (a) the provisions of this policy;
- (b) any procurement procedures established by the Purchasing Supervisor;
- (c) any other applicable policies approved by Council; and
- (d) in accordance with the requirements of applicable laws, including the Ontario Human Rights Code, the Ontarians with Disabilities Act, 2001 and the Accessibility for Ontarians with Disabilities Act, 2005.

3.2 Exemptions

This policy does not apply to the procurement of Goods and/or Services set out in Appendix "A".

3.3 Mandatory Consultation

Mandatory consultation is required for Procurements involving:

(a) project management for municipal building assets, municipal accessibility plan initiatives, and security initiatives. Procurements involving any of the foregoing may only be issued if there has been prior consultation with the Facilities Division; and written approval of

the procurement requirements related to the Facilities Division has been provided by the Manager of the Facilities Division.

(b) information technology and office automation acquisitions or communications services. Procurements involving any of the foregoing may only be issued if there has been prior consultation with the Information Technology and Telecommunications Division and written approval of the procurement requirements related to the ITT Division has been provided by the IT Manager.

3.4 **Procurement Planning**

Procurement planning is essential in ensuring that the Procurement function serves as a conduit to achieving the Corporation's objectives. Effective planning ensures the responsible management of corporate resources and the timely delivery of goods and services as required.

- (a) All Procurements will be executed in accordance with this Policy, and any related or relevant policies and procedures.
- (b) Departments shall consult with Purchasing Services annually to establish and finalize their annual procurement plan which shall reflect both capital and operating expenditures.
- (c) Prior to initiating any Procurement process for Goods and/or Services the Department Contract Manager shall:
 - (i) Ensure that the Goods and/or Services are legitimately required for Corporation purposes;
 - (ii) Consider the Corporation's purposes for Procurement and determine the costs, quantities and supply duration, shortterm and long-term requirements, any ongoing maintenance, support and licensing requirements and overall project requirements to meet Corporation's needs;
 - (iii) Confirm availability of funding;
 - (iv) Allow sufficient time to complete the Procurement processes as required by Purchasing Services; and
 - (v) Prepare detailed unbiased specifications, statements of work and/or quantity requirements to encourage full, open, and fair competition.

- (d) Prior to issuing a competitive Procurement, the following may be issued for the purposes of gathering information, as determined by Purchasing Services: Request for Supplier Qualifications; Request for Information (RFI); or Request for Expression of Interest (RFEOI).
- (e) During the Procurement planning phase seek legal advice from Legal Services, as required.

3.5 Legal Review Requirements

Legal Services shall review and advise on a Procurement prior to Purchasing Services issuing a Procurement in the following circumstances:

- (a) Procurements with a term of more than 5 years including Contract extensions that when combined with the initial term exceed five (5) years;
- (b) Lease agreements;
- (c) Contracts not utilizing the Corporation's contract templates or where changes to the template are required;
- (d) Procurements where personal information will be collected, accessed, or maintained by the Corporation, or by a Supplier on behalf of the Corporation.
- (e) Any other Procurement matters at the discretion of the Purchasing Supervisor, or the General Manager of requesting department, in consultation with General Manager, Financial Services.

3.6 **Procurement Value**

The Procurement Value must be appropriately estimated in accordance with the section below in order to determine the appropriate Procurement method and to ensure compliance with the requirements of this policy.

In estimating Procurement Value, all forms of remuneration must be taken into account, whether awarded to one or more Suppliers, including:

- (a) all estimated premiums, fees, commissions and interest;
- (b) all estimated costs to the Corporation, including, if applicable, delivery, installation, training, operation, maintenance, replacement and disposal, but excluding sales taxes, and less applicable rebates or discounts; and

(c) if the Procurement provides for the possibility of contract renewal options, the total value of all such contract renewal options.

3.7 Purchasing Services Responsibilities

Purchasing Services shall have the following responsibilities, which are to be performed in the manner that is determined by the Purchasing Supervisor from time to time.

- (a) Be responsible for the overall administration of procurement policies, procedures and guidelines.
- (b) Providing all departments, on request, with advice on various procurement matters.
- (c) Reviewing the corporate use of Goods and/or Services to ensure the Corporation is receiving the best value.
- (d) Ensuring the Corporation's procurement and disposition transactions are conducted ethically and professionally.
- (e) Maintaining a system for notifying Suppliers who have expressed an interest in doing business with the Corporation of the availability of applicable procurement documents.
- (f) Conforming to good material management practice by simplifying and standardizing, wherever possible, procurement documents and processes for the Corporation.
- (g) Preparing Agreements in conjunction with the General Manager, Financial Services.
- (h) Maintaining records of procurement transactions pursuant to the Corporation's document retention policy and in accordance with the requirements of any applicable trade agreements, as required.
- (i) Consulting external advisors on procurement matters, as appropriate.
- (j) Any other matter which the Corporation decides from time to time is appropriate to be undertaken by Purchasing Services.

3.8 Purchasing Supervisor Responsibilities

The Purchasing Supervisor shall have the authority and responsibility:

- (a) Approving and prescribing procurement procedures not specifically provided for in this policy, in consultation with the General Manager, Financial Services and/or the CAO.
- (b) Coordinating Bid Solicitations on behalf of the Corporation, subject to the approval thresholds in Section 5.1.
- (c) Determining the appropriate form and method of procurement by which Goods and/or Services shall be procured on behalf of the Corporation, including Collaborative Procurement and limited tendering purchasing.
- (d) Reviewing procurement specifications and providing recommendations on improvements or changes to ensure consistency with the Policy.
- (e) Determining the appropriate means for issuing procurement information and receiving bid submissions, including through Electronic Tendering or any other means.
- (f) Establishing templates for procurement process documents.
- (g) Administering the Corporation's conduct of the procurement process, including planning, implementing, monitoring and supervising the appropriate:
 - (i) solicitation method;
 - (ii) development of evaluation criteria or related Supplier performance requirements;
 - (iii) advice and support on evaluation and Award; and
 - (iv) reporting to Council and the public, as required.
- (h) The identification of those Goods and/or Services which are more effectively acquired through a Supplier Arrangement.
- Establishing a procedure for analyzing Bids and proposals to determine if the Corporation has received an Unbalanced Bid and the actions the Corporation may take in response to a materially Unbalanced Bid, including rejection.

- (j) Administering the Supplier Code of Conduct and Discipline Policy, including any Vendor Management Program and any discipline or other actions taken by the Corporation pursuant to those policies.
- (k) Preparing quarterly information reports to Council listing procurement awards meeting the following conditions:
 - (i) Competitive Procurements, within the Approved Budget, with a value of \$150,000.01 or greater pursuant to Table 1, in section 5.1;
 - (ii) Non-Competitive Procurements, within the Approved Budget with a value of \$75,000.01 or greater pursuant to Table 2, in section 5.1;
 - (iii) Any Procurement exceeding the Approved Budget by between \$75,000.01 and \$250,000, approved by the CAO pursuant to Table 3, section 5.1;
 - (iv) Non-Budgeted Procurements with a value between\$75,000.01 and \$150,000 pursuant to Table 4, section 5.1;
 - (v) Emergency and Urgent Procurements with a value of \$75,000.01 or greater pursuant to Table 4, section 5.1.
- (I) Such other authorities and responsibilities as are set out in this policy or otherwise delegated to the Purchasing Supervisor.
- (m) Any other matter which the Corporation decides from time to time is appropriate to be undertaken by the Purchasing Supervisor.

The Purchasing Supervisor may delegate any aspect of a procurement process to a department as the Purchasing Supervisor may determine to be necessary or desirable.

3.9 General Manager / Manager / Supervisor Responsibilities

(a) Advising the Purchasing Supervisor of departmental procurement plans and specific upcoming procurements including attempts to determine the amount of time which is sufficient to complete the procurement as may be stipulated in the procurement policies or procurement procedures;

- (b) Participating in the development of template specifications, quality requirements, scopes of work and other stipulated requirements including the development of other Contract documentation for routine procurements conducted by their department;
- (c) Ensuring that procurements made by staff are carried out in compliance with the requirements of this policy;
- (d) Directing and overseeing the management of all Contracts led by or coordinated by their department including, without limitation, the approval of subcontracting, assignment, amendments, optional renewals, terminations, enforcement of warranties and performance securities and the adoption of related contract management procedures; and
- (e) Any other matter which the Corporation decides from time to time is appropriate to be undertaken by a General Manager.

3.10 Financial Services General Manager and Treasurer Responsibilities

- (a) The Financial Services General Manager and Treasurer is ultimately responsible for overseeing Purchasing Services and ensuring corporate compliance with this policy.
- (b) The Financial Services General Manager and Treasurer may assume some or all of the responsibilities of the Purchasing Supervisor.

3.11 Chief Administrative Officer (CAO) Responsibilities

- (a) Exercise general control and management of the affairs of the Corporation for the purpose of ensuring the efficient and effective operation of the Corporation and the staff placed under their supervision.
- (b) Any other duties outlined as being the responsibility of the CAO pursuant to this policy.

3.12 Council of the City of Cornwall Responsibilities

(a) It is the role of Council to establish policy and approve expenditures through the Corporation's Budget approval process.

(b) Council delegates authority to the Corporation's employees to incur expenditures through Procurements in accordance with this Policy.

3.13 All Employees Responsibilities

- (a) All City employees are responsible for complying with this policy. Individual employees involved in procurement activities shall clearly understand their obligations and responsibilities under this policy and shall consult with Purchasing Services in respect of any questions regarding the application or interpretation thereof.
- (b) Failure to adhere to the requirements outlined in this Policy may lead to disciplinary action up to and including termination of employment.

3.14 Conflict of Interest

- (a) Employees of the Corporation shall comply with the Corporation's policies on conflict of interest.
- (b) At no time during the Procurement process, beginning with the planning stage through to the Award and the Contract, shall any City employee accept, directly or indirectly, from any Bidder or Supplier, anything of any value, tangible or intangible, including but not limited to rebates, gifts, meals, money, or special privileges. No preference will be given to Bidders who provide solicited or unsolicited goods or samples to the Corporation or who demonstrate the operation of such goods or samples.
- (c) City employees and their immediate family shall not have a financial interest, either directly or indirectly, in any Contract or with any person acting for the Corporation in any Contract, unless such interest has been declared pursuant to the Code of Conduct for Employees. Such declaration shall be in writing, to their manager, with a copy to the Purchasing Supervisor, indicating the specific nature of the conflict of interest.
- (d) City employees must declare in writing to their manager, with a copy to the Purchasing Supervisor, any real or perceived conflicts of interest arising from interacting, managing, supervising, or overseeing the work of any family member, former employee of the City or anyone with whom they have a close personal relationship or personal interest, who is working for a Supplier in any capacity.

- (e) All City employees participating in the development of specifications and/or the evaluation process for a Procurement process will be required to declare any real or perceived conflict of interest in accordance with the applicable Procurement procedures.
- (f) Department Contract Managers must be impartial in their treatment of all Suppliers and in managing Contracts, including approval of any payments.

4.0 **PROCEDURES**

4.1 Financial Authorities

- (a) Unless otherwise approved by Council, no expenditures or commitments shall be incurred or made, and no account shall be paid, by the Corporation for Goods and/or Services, except as authorized in accordance with this policy.
- (b) Notwithstanding any provision contained herein, all expenditures shall be within the current Council-approved annual budget or within Council-approved estimates. In the event that the annual budget has not yet been approved by Council, expenditures can be made provided the expenditures are not more than fifty percent (50%) greater than the previous year's approved budget authority amount:
 - (i) for the same or substantially similar purchase of Goods and/or Services;
 - (ii) the expenditure is for routine operating and recurring expenditures;
 - (iii) the expenditure is required under applicable laws; or
 - (iv) unless otherwise directed by Council.
- (c) A Bid Solicitation may only provide for an option to renew where the total value of the original term and the renewal term of the proposed Contract is:
 - (i) within the authorization level of the person approving the purchase pursuant to Section 5.1;
 - (ii) within the Council-approved annual budget amount or estimate; or

- (iii) otherwise approved by Council.
- (d) Where Goods and/or Services are routinely purchased on a multiyear basis, the exercise of authority to Award a Contract is subject to:
 - (i) the identification and availability of sufficient funds in appropriate accounts for the current year, or other Council appropriation of funds; and
 - the demand for the Goods and/or Services continuing to exist in subsequent years, and where, in the opinion of the Purchasing Supervisor, the required funding can reasonably be expected to be made available.

4.2 Conditional Bid before Annual Budget Adoption

The Purchasing Supervisor is authorized to obtain, prior to the adoption of the current year's budget by Council, Bids for construction Services and/or additional or replacement equipment, provided that the procurement documents used include a clause specifically stating that the acceptance of any such Bid and any Award is subject to budget approval by Council, that the items specified are subject to change in quantity and/or deletion and that the Bid Solicitation may be withdrawn at any time in the discretion of the Corporation without any liability to the Corporation.

4.3 **Provisions / Practices**

All Bid Solicitations, Contracts and other procurement process documents shall include appropriate terms and conditions as determined by the Purchasing Supervisor in consultation with the General Manager, Financial Services.

4.4 **Process Integrity**

(a) All Bid Solicitations issued by the Corporation shall clearly identify the requirements of the procurement, the criteria that will be used in the evaluation of Bids and, where appropriate, generally, the methods of weighting and evaluating the criteria. In addition, all Bid Solicitations issued will, where the Purchasing Supervisor determines it is appropriate:

- (i) Outline mandatory, rated, and other criteria that will be used to evaluate Bids, including the weight of each criterion, but not necessarily sub-criteria.
- (ii) State that Bids that do not meet the mandatory criteria may be disqualified.
- (iii) Establish the formula for calculating the total price/cost.
- (iv) Allocate weighting to the price/cost component of the evaluation criteria.
- (v) Contain specifications that are not designed or written so as to clearly express a preference for any one Supplier or, that contain reference to a specific brand and model as a benchmark unless it is necessary to do so, in the view of the Purchasing Supervisor. However, notwithstanding this provision and the requirement in subsection (g) hereof, the Corporation may in its discretion give preference to Environmentally Preferred and or Ethically Preferred Goods and or Services.
- (b) The Corporation shall ensure that all information marked and identified in Bids by a Supplier as proprietary is kept secure prior to the closing date and during the evaluation period. Thereafter, the Corporation shall handle all such Supplier's proprietary information in accordance with, and subject to, the Municipal Freedom of Information and Protection of Privacy Act (Ontario) (MFIPAA).
- (c) The Corporation shall ensure that all Bid Solicitations, Bids, Contracts and other procurement process documents are kept on file in accordance with the Corporation's document retention policy.
- (d) The scheduling of a procurement process must not be intentionally delayed as a means of making the procurement qualify under any exception to a policy.
- (e) No requirement for the payment of Goods and/or Services received by the Corporation shall be divided, split or otherwise structured in order to reduce the Procurement value or contract value in order to avoid or circumvent any of the requirements of this policy.
- (f) Irregularities in Bid submissions will be addressed by the procedures outlined in Appendix "B" Irregularities.

- (g) No local preference will be given to any Supplier All procurement processes are to be conducted so as not to unduly exclude local vendors, while at the same time maintaining the duty to be fair, open, and transparent to all Bidders in accordance with legislation, trade agreements, and best practices. The Corporation endeavours to achieve the best value in its commercial transactions. Accordingly, the Corporation will not be bound to purchase Goods or Services based upon Canadian content, nor shall the Corporation practice local preference in Awarding contracts, unless specifically permitted to do so under the authority of the Province of Ontario or the Government of Canada.
- (h) Elected officials, appointed officers and employees of the Corporation shall not knowingly cause or permit anything to be done or communicated to anyone in a manner which is likely to cause any potential Supplier to have an unfair advantage or disadvantage in obtaining a contract for the supply of Goods and/or Services to the Corporation. This also includes a Contract with any other municipality, local board or public body involved in the purchase of Goods and/or Services either jointly or in cooperation with the Corporation.
- (i) Where it is determined that an Elected Official has contravened subsection (h), the Corporation in its discretion, may terminate any affected solicitation or contract entered into in such circumstances and any such termination shall be entirely without cost to the Corporation. No Supplier shall have any right to assert any claim for breach of contract, negligence, intentional interference with economic relations or inducing breach of contract, or damages of any kind including lost profits or lost opportunities in such circumstances.
- (j) Elected officials of the Corporation shall separate themselves from the procurement process and have no involvement whatsoever in specific Bid Solicitations. Elected officials of the Corporation should not see any documents or receive any information related to a particular Bid Solicitation while the procurement process is ongoing. Elected officials of the Corporation who receive inquiries from Suppliers related to any specific Bid Solicitation shall immediately direct those inquiries to the General Manager, Financial Services.

4.5 Notification of Procurement Opportunities

- (a) Notifications of procurement opportunities with a value less than \$100,000.00 for goods or services, excluding construction, or less than \$250,000.00 for construction or such increased sums as required by applicable trade agreements (as they may be amended) may be made by means of open Electronic Tendering, or any other method as determined by the Purchasing Supervisor.
- (b) Notifications of procurement opportunities with a value of \$100,000.00 or greater for goods or services, excluding construction, or \$250,000.00 or more for construction or such increased sums as required by applicable trade agreements (as they may be amended) from time to time must be made by means of Electronic Tendering.
- (c) If a method other than Electronic Tendering is used for notification of procurement opportunities, consideration shall be given to ensuring wide dissemination and equal opportunity for Suppliers.

4.6 Timelines for Posting Procurements

With regard to timelines for posting procurements, procedures shall be implemented that ensure Suppliers are provided with an adequate response time that meets the minimum requirements outlined in applicable laws, including trade agreements referred to in paragraph 1.0(e) hereof. Where no trade agreement applies, the Purchasing Supervisor will determine the appropriate response time for a Bid Solicitation. In absence of any other measure, a minimum response time of forty (40) days is required for Goods and/or Services valued in excess of three hundred thousand dollars (\$300,000) and for construction Services contracts valued in excess of eight million dollars (\$8,000,000) or such increased sums as required by applicable trade agreements (as they may be amended) from time to time. Response times may be further reduced as follows:

- (a) For open procurements, the minimum response time is reduced to thirty-five (35) days if the procurement notice is posted through Electronic Tendering means, to thirty (30) days if the procurement documentation is made available by Electronic Tendering means from date of publication notice, and further reduced to twenty five (25) days if submission by Electronic Tendering means is accepted.
- (b) The posting period for open procurements may be further reduced to ten (10) days if a notice of planned procurement is published at least

forty (40) days and not more than twelve (12) months in advance of the publication notice of intended procurement.

- (c) Bid posting periods for commercial Goods and/or Services may be reduced to thirteen (13) days if both the publication notice and procurement documentation are published through Electronic Tendering means and may be further reduced to ten (10) days if submissions are received through Electronic Tendering means.
- (d) For selective procurements using a Supplier list, response time may be reduced to ten (10) days by agreement between the municipality and the selected Suppliers.
- (e) Other than situations of Emergency, as herein defined, procurements shall be posted for not less than ten (10) days.

4.7 Confidentiality

This policy is subject to the MFIPPA. Persons applying this policy should be aware of this legislation when disclosing information received relevant to the issue of Bid Solicitations, Bids, or the Award of Contracts resulting from Bid Solicitations. The Corporation will disclose all information in accordance with MFIPPA.

4.8 Personal Purchases

No purchase shall be processed for personal items of employees of the Corporation or any member of Council except where permitted by this policy.

4.9 In-house Bids

Bids from a department or division of the Corporation may be obtained for the procurement of Goods and/or Services in circumstances where the CAO considers it appropriate. Otherwise in-house Bids will not be encouraged. If any Bid Solicitation permits the receipt of in-house Bids, all Suppliers shall be made aware of this fact in the Bid Solicitation documentation. In such situations the following clause, subject to any modifications approved by the Purchasing Supervisor, will be incorporated into the Bid Solicitation document:

"Suppliers should note that the Corporation has the capacity to supply the need described herein. Consequently, a division(s) of the Corporation has

been invited to submit a bid which will be included in our evaluation process."

In-house Bids will be received and evaluated in the same manner as external Bids. However, the evaluation of such In-house Bids may include an assessment of savings to the Corporation if an in-house Bid is accepted. Every Supplier acknowledges that In-house Bids have potential inherent advantages and waives any objection, compliant or cause of action of any kind to the use, evaluation, or acceptance of any In-house Bid.

4.10 Environmentally Preferred Procurement and Ethically Preferred Goods and Services

Notwithstanding anything else in this Policy, the purchase of environmentally preferred Goods and/or Services may be targeted by the Corporation and given preference during the evaluation stage of a procurement. In such circumstances, the procurement documents shall outline criteria and weighting which may be used in the evaluation of bids as well as Bidders and their subcontractors which may include in the Corporation's discretion, without limitation, the matters described in the definition of environmentally preferred goods or services as well as life cycle costs.

Notwithstanding anything else in this Policy, the Corporation may in its discretion target ethically preferred goods and or services in any Solicitation and give preference to Suppliers in any Solicitation whose production, distribution, transportation and or delivery or disposal of goods and services meets or exceeds national or provincial standards with respect to employment and human rights. Solicitation documents may set out both evaluation criteria and the weighting the Corporation may give to such criteria in respect of Ethically preferred goods and services.

5.0 PROCUREMENT METHODS

5.1 Financial Limitations and Authority Levels for Awards

- (a) The tables in this Section 5.1:
 - (i) Set out the applicable Bid Solicitation process available, based on the nature of the procurement; and
 - (ii) Establish the position within the Corporation which must approve an Award.

- (b) The amounts in this Section 5.1, value of Goods and/or Services are to be exclusive of HST and delivery charges.
- (c) All procurements of Goods and/or Services must otherwise comply with this policy, including the Council-approved budget or estimate requirements of Section 4.1.

5.1.1 Competitive and Non-Competitive Procurements within Budget (Tables 1 – 2)

(a) If the amount spent on the procurement is within the Approved Budget by Council, and no additional funds are required, the Purchasing Supervisor will include the procurement as part of a quarterly Council Report, if it has a value of \$150,000.01 or more.

Table 1 - COMPETITIVE PROCUREMENT within Budget				
Financial Limits (\$)	Method(s)	Authority Level		
Under \$5,000	Low-Value Procurement	Administrative Staff as designated		
	Credit Card	by General Manager		
		requisitioning department		
\$5,000.01 to \$10,000	Request for Quotation	Supervisor, requisitioning		
		department		
\$10,000.01 to \$20,000	Request for Quotation	Manager,		
	Request for Proposals	requisitioning department		
\$20,000.01 to \$50,000	Request for Quotation	General Manager, requisitioning		
	Request for Proposals	department		
	Request for Tender			
\$50,000.01 to \$75,000	Request for Quotation	General Manager, Financial		
	Request for Proposals	Services		
	Request for Tender			
\$75,000.01 to \$150,000	Request for Proposals	CAO		
	Request for Tender			
\$150,000.01 or more	Request for Proposals	CAO and disclosed in quarterly		
if within Approved	Request for Tender	Report to Council.		
Budget				
Table	Table 2 - NON-COMPETITIVE PROCUREMENT			
within Budget				
Financial Limits (\$)	Method(s)	Authority Level		
Under \$100	Petty Cash	Administrative Staff as designated		
		by Manager of requisitioning		
		department		
Under \$5,000	Credit card or Negotiation	Manager of requisitioning		
	pursuant to Section 5.14	department		
\$5,000.01 to \$50,000	Negotiation pursuant to	General Manager of requisitioning		
	Section 5.14	department		
\$50,000.01 to \$75,000	Negotiation pursuant to	General Manager, Financial		
	Section 5.14	Services		
\$75,000.01 or more if	Negotiation pursuant to	CAO and disclosed in quarterly		
within Approved Budget	• .	report to Council.		

5.1.2 Over-Budget Expenditure (Table 3)

- (a) If the procurement exceeds the Approved Budget by Council between \$75,000.01 to \$250,000, the Purchasing Supervisor will include the procurements approved by CAO in the quarterly Council Report noting the source of funding for the over-expenditure.
- (b) For the procurements that exceed the Approved Budget by Council by \$250,000.01 or more, a separate report shall be submitted to Council prior to award by the Purchasing Supervisor which shall include:
 - a general description of the Goods and/or Services to be procured;
 - (ii) information surrounding the circumstances for exceeding budget;
 - (iii) information on the proposed funding source for the overexpenditure.

Table 3 - OVER BUDGET EXPENDITURES			
Financial Limits (\$)	Authority Level		
Over the budgeted amount to a maximum of \$50,000	General Manager of requisitioning Department		
Over the budgeted amount between \$50,000.01 and \$75,000	General Manager, Financial Services		
Over the budgeted amount between \$75,000.01 to \$250,000	CAO and disclosed in quarterly report to Council.		
\$250,000.01 or more over budgeted amount	Council in a separate report		

5.1.3 Non-Budgeted Expenditures (Table 4)

Where a requirement exists to initiate a project for which Goods and/or Services are required and funds are not contained within the current year's approved budget to meet the proposed expenditure, then, prior to the commencement of the procurement process approval shall be required as per authority levels in table 4.

- (a) If the procurement value is between \$75,000.01 to \$150,000, the Purchasing Supervisor will include the non-budgeted procurements approved by CAO in the quarterly Council Report noting the source of funding.
- (b) For the procurements of a value of \$150,000.01 or more, a separate report shall be submitted to Council prior to award by the Purchasing Supervisor which shall include:
 - (i) information surrounding the requirement to initiate the procurement process;
 - (ii) a general description of the Goods and/or Services to be procured; and
 - (iii) information on the proposed funding source for the expenditure, which states that funding is both available and accessible.

Table 4 - NON-BUDGETED EXPENDITURES			
Financial Limits (\$)	Method(s)	Authority Level	
Under \$10,000	Low-Value Procurement Credit Card Request for Quotation Negotiation pursuant to Section 5.14	Manager of requisitioning department	
\$10,000.01 to \$50,000	Request for Quotation Request for Proposals Request for Tender Negotiation pursuant to Section 5.14	General Manager of requisitioning department	
\$50,000.01 to \$75,000	Request for Quotation Request for Proposals Request for Tender Negotiation pursuant to Section 5.14	General Manager, Financial Services	
\$75,000.01 to \$150,000	Request for Proposals Request for Tender Negotiation pursuant to Section 5.14	CAO and \$75,000.01 to \$150,000 disclosed in quarterly report to Council.	
\$150,000.01 or more	Request for Proposals Request for Tender Negotiation pursuant to Section 5.14	Council in a separate report	
Emergency and Urgent Procurements \$75,000.01 or more	Pursuant to Section 5.14.1 and 5.14.2	CAO and disclosed in quarterly report to Council.	

5.2 Purchasing Card / Credit Card

A credit card (purchasing card) is a mechanism to provide departments with a simplified, direct purchasing method for the purchase and payment of Goods and/or Services. The credit card (where possible) will be used instead of petty cash.

5.2.1 General Requirements

- (a) Cardholders must be designated employees of the Corporation. The General Manager shall approve in their discretion which employees are eligible to be cardholders. The General Manager, Financial Services, will have final approval regarding the issuance of all corporate credit cards.
- (b) A municipal department responsible for any purchase shall ensure that Goods and/or Services acquired using a credit card is within the approved budget for within the current operating year.
- (c) All credit cards will have a predetermine "single transaction limit", and a "monthly credit limit" as determined and authorized by the General Manager of the applicable department and approved by the General Manager, Financial Services.
- (d) Financial Services shall monitor the use of credit cards and ascertain that the spending limits approved fall under the approved format.
- (e) Every cardholder shall be informed in writing of their responsibilities and the restrictions regarding the use of the credit card and shall agree to them in writing.
- (f) By accepting to act as a cardholder, the cardholder authorizes the Corporation access to the account file, as well as to have both internal and external audits performed on the file. The Cardholder is deemed to accept that the Corporation can perform (or have a third party perform) audits at any time and reason within its discretion.
- (g) Every cardholder shall review any associated credit card terms and conditions from the issuer and ensure that they abide by such terms and conditions.
- (h) No Elected Official or employee shall gain personal benefit through the collecting of reward points, such as, but not limited to, air miles, gasoline company points, grocery store points, etc. while making a purchase on behalf of the Corporation. Any rewards points that accrue from the use of a cardholder's purchasing card shall accrue or be converted to the use and benefit of the City of Cornwall.

5.2.2 Prohibitions

- (a) The credit card shall not be used:
 - (i) when a contract is in effect for the Goods and/or Services (unless pre-authorized by the Purchasing Supervisor);
 - (ii) for personal purchases of any kind;
 - (iii) for information technology and office automation acquisitions or communications Services (unless preauthorized by the IT Manager;
 - (iv) for any purchase of Goods and/or Services that may be prohibited under any other policy approved by Council;
 - (v) for cash advances;
 - (vi) for telecommunication equipment such as telephones, cellular phones. Batteries for cell phones and cell phone accessories may be purchased with a credit card;
 - (vii) for splitting of total purchase cost, singly or between cardholders to avoid transaction limits;
 - (viii) for third party client purchases;
 - (ix) for clothing (small dollar value items are to be approved by Purchasing Services prior to purchasing);
 - for office equipment, office furniture (small dollar value items are to be approved by Purchasing Services prior to purchasing);
 - (xi) for alcohol purchases, unless approved by the General Manager of the Department; and
 - (xii) for souvenirs.
- (b) The credit card is not transferrable to any other employee and shall not be used by any person other than the authorized cardholder.
- (c) Cardholders will be held liable for any misuse or willful disregard of policies or operating procedures that result in a loss of money, fraud or collusion.
- (d) No cardholder may accept cash or a cheque from a Supplier who is making a refund pertaining to a transaction previously charged to a

credit card account. The Supplier in all cases must issue a credit voucher.

- (e) Financial Services will review the Purchasing Card Statements and documentation and advise the Supervisor of any employee who has not adhered to this policy.
- (f) Cardholders who do not adhere to the requirements set out in this policy, may have their credit card privileges limited and/or revoked or be subject to other discipline up to and including termination.
- (g) The Corporation may terminate access to a Purchasing Card or its associated account or permission to use a Purchasing Card at any time for any reason in its absolute discretion.

5.2.3 Administration, Reconciliations and Audits

- (a) Every month, cardholders must provide a transaction report including all receipts of all transactions detailing the itemized purchases to their Supervisor or Manager for approval.
- (b) Cardholders may not approve their own Statement.
- (c) Cardholders are required to attach to the Statement all sales receipts, packing slips and any other documents related to the transactions listed on the credit card statement in the order as they appear on the statement.
- (d) If a receipt cannot be obtained after a reasonable effort, the Cardholder shall complete the Lost Receipt Declaration Form. Continued failure to provide receipts may result in disciplinary action up to and including termination of employment.
- (e) The Cardholders' Supervisor or Manager shall review the monthly reconciliation of the Statements, and send them to the Financial Services by the prescribed deadline.
- (f) The Corporation may conduct internal or external audits of Cardholder purchases, the Logs and associated receipts/documentation at any time and for any reason at its discretion.

5.2.4 Cardholder Responsibilities

- (a) Cardholders are responsible for the following:
 - (i) Adhering to all conditions and restrictions imposed on the Purchasing Card by the Corporation and the issuing bank.
 - (ii) Completing the Purchasing Card Cardholder Agreement Form acknowledging, and submitting that they have read, understood and accept the conditions, once they have received the card.
 - (iii) Ensuring that the Purchasing Card and other documents bearing the Card number are kept in a secure location.
 - (iv) Immediately notifying the issuing bank and the Deputy Treasurer of the loss or theft of the Card.
 - (v) Informing the Deputy Treasurer of the cancellation, or change in the employee's area of responsibility.
 - (vi) Returning the Card to the Deputy Treasurer for cancellation, as appropriate.
 - (vii) Verifying the amount of Harmonized Sales tax (HST) paid, to allow for accurate rebates as applicable for the Corporation.
 - (viii) Resolving disputed but not fraudulent charges. Notify the Deputy Treasurer regarding potential fraudulent purchases.
 - (ix) Keeping supporting documentation (i.e., sales slips, cash register and credit card receipts, Supplier notices, etc.) related to all purchases made with the Purchasing Card for reconciliation, account verification and audit purposes. If no receipt is available, this must be noted in the Log.
 - (x) Completing a transaction report on a monthly basis, for all purchases made with the Purchasing Card.
 - (xi) For over-the-counter transactions, or services rendered, the cardholder will certify that the goods have been received when goods are shipped, the cardholder must ensure that the shipment matches the order or sales slip.
 - (xii) For telephone, online and over-the-counter orders, the cardholder should have the Supplier provide a copy of the

detailed receipt or instruct the Supplier to supply a copy of the receipt with the shipment.

5.3 Low-Value Procurements

Where the Procurement Value does not exceed \$5,000, the Corporation may procure by obtaining one or more informal quote(s) from Suppliers. Quotes may be obtained through several informal methods, including public advertisements, Supplier catalogs, or by contacting Suppliers directly. Departments-may conduct Low-Value Procurements independently but are required to keep all supporting documentation pertaining to the procurement.

5.4 Request for Quotations

- (a) When Quotations are sought from potential Suppliers the request should contain a list or description of all relevant Goods and/or Services intended to be purchased.
- (b) When a Request for Quotations is used, a minimum of three (3) written quotations shall be required before Purchasing Services makes an Award.
- Where it is impractical to request a minimum of three (3) written quotations or where three written quotations are not received, an Award may be made with the approval of the Purchasing Supervisor.
- (d) Requests for Quotations may be issued through a public process such as Electronic Tendering or depending on the value of the request by placing a notice in the appropriate print publications, or by "Invitation Only" to select Suppliers with proven expertise and experience.
- (e) The Manager or Supervisor of the requisitioning department shall be responsible to review the submissions and to verify that all requirements of the Request for Quotation are met. Once a recommendation is made by the Manager or Supervisor, the Purchasing Supervisor may issue a Contract, including a Purchase Order, to the selected Supplier.
- (f) Unless terms for a Request for Quotation states otherwise, the issuance of a Request for Quotation or receipt of a Request for Quotation shall not result in nor create any preliminary contractual or other obligations or duties on the Corporation.

5.5 Request for Tender

- (a) Requests for Tender can be used for the procurement of Goods and/or Services of any value.
- (b) Requests for Tenders may be used where the Goods and/or Services sought are able to be fully defined or specified at the time of the request.
- (c) A minimum of three (3) written Bids are to be requested wherever possible and practicable.
- (d) Where it is impractical to request a minimum of three (3) written Bids, or where three (3) written Bids are not received, the approval of the Purchasing Supervisor is required.
- (e) Requests for Tenders may be issued through a public process such as Electronic Tendering or depending on the value of the request by placing a notice in the appropriate print publications, or by "Invitation Only" to select Suppliers with proven expertise and experience.
- (f) Submissions in response to Request for Tenders are not formally opened in public, nor is it necessary to publicly disclose the prices or terms of a submission at the time of submission or Bid opening.
- (g) Submissions will be electronically sealed by the bidding system until the closing date and time.
- (h) Request for Tenders may or may not include pre-qualification or Expression Interest.
- (i) After Bids are opened they shall be reviewed by the Purchasing Supervisor to determine whether:
 - (i) all requirements of the tender have been met;
 - (ii) all unit prices have been correctly extended; and
 - (iii) the extensions have been correctly totaled.
- (j) Tender Awards shall generally, but not exclusively, be made to the lowest Bidder provided that the Bid meets requirements and specifications of the tender. However, in determining the lowest responsive Bidder, consideration may be given, in addition to price, to the Supplier's:

- (i) ability, capacity, skill and experience to meet the requirements of the procurement;
- (ii) financial capacity, commercial and technical abilities of the Supplier;
- (iii) the quality, availability and adaptability of the Goods and/or Services to the particular use required;
- (iv) past performance and past experience;
- (v) all criteria set out in the Bid Solicitation;
- (vi) such other criteria that the Purchasing Supervisor, in consultation with the General Manager, Financial Services, determines is appropriate in the circumstances.
- (k) Unless terms of a Request for Tender states otherwise, the issuance of a Request for Tender or receipt of a submission in response to a Request for Tender shall not result in or create any preliminary contractual or other obligations or duties on the Corporation.
- (I) Following approval of the Award under a Request for Tenders, the Purchasing Supervisor shall inform the successful Supplier that its Bid has been accepted and shall notify all other Suppliers of the Award, the name of the successful Supplier and such other information required to be disclosed by any applicable trade agreement.
- (m) Following approval of the Award, the results of the tender and such other information required to be disclosed by any applicable trade agreement are to be published in the same manner as the Request for Tender or such other method as approved by the Purchasing Supervisor.

5.6 Request for Proposals

- (a) Requests for Proposals can be used for a procurement of Goods and/or Services of any value.
- (b) Request for Proposals shall generally be used when:
 - (i) the requirements for Goods and/or Services cannot be precisely defined;

- (ii) the expectation is that Suppliers may propose solutions to arrive at the result desired by the Corporation;
- (iii) the evaluation criteria to determine best value may include more than factors such as price; and/or
- (iv) the Goods and/or Services are of a unique or complex nature.
- (c) Requests for Proposals shall contain the Terms and Conditions developed by the department in consultation with Purchasing Services and approved by the Purchasing Supervisor.
- (d) Requests for Proposals shall clearly establish required project scope, outcome and/or requirements.
- (e) Requests for Proposals shall clearly outline the technical and pricing evaluation criteria and applicable ratings assigned that will form the basis of the contract award. The bids shall be evaluated based on those criteria and weighting, subject to amendments to the same released by an Addendum. The effectiveness of the proposal is measured against a set of evaluation criteria, which may include but is not limited to: approach, experience and qualifications, methodology, past performance, scheduling, demonstration of the equipment, price and/or strategy.
- (f) A minimum of three (3) written proposals are to be requested wherever possible and practicable before an Award is made under a Request for Proposals.
- (g) Where it is not practical to request a minimum of three (3) written proposals or where three (3) written proposals are not received, approval of the Purchasing Supervisor is required.
- (h) Requests for Proposals may be issued through a public process such as Electronic Tendering, depending on the value of the request by placing a notice in the appropriate print publications, electronically or by "Invitation Only" to select Suppliers with proven expertise and experience.
- Request for Proposals are not formally opened in public, nor is it necessary to publicly disclose the prices or terms of a submission in response to a Request for Proposals at the time of submission or Bid opening.

- (j) Requests for Proposals may or may not include a pre-qualification process or an Expression of Interest. Depending on its terms, the process may involve negotiations subsequent to the submission of proposals on any or all of the specifications, contract terms, and prices, including without limitation, best and final offers from one or multiple bidders as outlined in a Request for Proposals document. Alternatively, the Corporation may Award a contract on the basis of initial offers received, without discussion.
- (k) After opening, each Bid shall be reviewed by the Purchasing Supervisor to determine whether all mandatory requirements of the Bid Solicitation have been met, in which case the Bid will be distributed to the Selection Committee.
- (I) A Selection Committee will be established prior to the closing time of the Request for Proposal and shall comprise of a minimum of two representatives with the relevant expertise from the initiating department and should include the Purchasing Supervisor.
- (m) A minimum of one representative from the Information Technology and Telecommunications Division of the Corporation must be on every Selection Committee for procurements involving software development that will interact with the Corporation's mainframe computer.
- (n) In order to maintain integrity and accountability in the procurement process, members of a Selection Committee shall only be comprised of individuals who are employees of the Corporation and/or employees of the other public body on behalf of whom the Corporation is procuring.
- (o) The Selection Committee will review all proposals based on the evaluation criteria, reach consensus regarding the final rating of the proposal and ensure that the final rating, with supporting documents, are kept in the procurement file with the Purchasing Supervisor. Unless the terms for a Request for Proposal states otherwise, the issuance of a Request for Proposal or receipt of a submission in response to a Request for Proposal shall not result or create any preliminary contractual or other obligations or duties on the Corporation.
- (p) Following approval of an Award, the Purchasing Supervisor shall, subject to the Corporation's reserved rights and the terms of the applicable trade agreements, inform the successful Supplier that its

Bid has been accepted and notify all other prospective Suppliers of the Award, the name of the successful Supplier and such other information required to be disclosed by any applicable trade agreement.

(q) Following approval of the Award, the results of the procurement process and such other information required to be disclosed by any applicable trade agreement are to be published in the same manner as the Request for Proposal or such other method approved by the Purchasing Supervisor.

5.7 Other Processes

5.7.1 Request for Supplier Qualifications

- (a) A Request for Supplier Qualification may be used for selective Bid Solicitations to establish a list of pre-qualified Suppliers that will later be eligible to respond to:
 - (i) a specific solicitation; or
 - (ii) a multi-use list.
- (b) A call-up protocol shall be disclosed in the Request for Supplier Qualifications which sets out the subsequent selection process and the general terms and conditions that will govern any future work assignments and, where applicable, any proposed framework pricing. The call-up protocol contained in a Request for Supplier Qualifications shall also disclaim any contractual commitment to call-up any specific amount of Goods and/or Services, or other obligation of the Corporation to call on any Supplier on the specific or multi-use list to provide Goods and/or Services.
- (c) Approval of any subsequent Award to a Supplier under the Request for Supplier Qualifications call-up protocol shall be made in accordance with the authority to Award open competitive Bid Solicitations.
- (d) When using a multi-use list, the Corporation shall allow Suppliers to apply at least annually, or if a Request for Supplier Qualification is published by Electronic Tendering means, it is made available continuously, for inclusion in accordance with the notice of intended procurement for the

Request for Supplier Qualifications. Notwithstanding the foregoing, if a multi-use list will be valid for three years or less, the Corporation may publish the Request for Supplier Qualification once only, at the beginning of the period of the validity of the list provided the Request for Supplier Qualification:

- (i) states the period of validity and that further Request for Supplier Qualification will not be published; and
- (ii) is published by Electronic Tendering means and is made available continuously during its period of validity.

5.7.2 Information Gathering

- (a) Prior to issuing a competitive Bid Solicitation, the following solicitation documents may be issued for the purpose of gathering information:
 - (i) a Request for Information (RFI); or
 - (ii) a Request for Expressions of Interest (RFEOI).
- (b) The receipt of a submission in response to a Request for Information or a Request for Expressions of Interest does not create a legal contract or legal duties or obligations on the part of the Corporation and the submission of a response to a Request for information or a Request for Expressions of Interest shall be deemed to be a waiver by a respondent of any claim, remedy, cause of action or complaint.
- (c) The Corporation shall not use a response from a Request for Information or Request for Expressions of Interest to prequalify potential Suppliers and shall not use the response to influence the chances of the participating Suppliers from becoming the successful proponent in any subsequent opportunity.

5.8 Purchase by Negotiation

(a) The Purchasing Supervisor may conduct negotiations with Suppliers if:

- (i) the Bid Solicitation indicates the intent to conduct negotiations; or
- (ii) it appears from the evaluation that no Bid is obviously the most advantageous in terms of the specific evaluation criteria set out in the Bid Solicitation.
- (b) The Purchasing Supervisor shall ensure that any elimination of Suppliers participating in negotiations is carried out in accordance with the evaluation criteria set out in the Bid Solicitation, and shall:
 - (i) if negotiations are conducted concurrently with multiple Suppliers, provide a common deadline for the participating Suppliers to submit any new or revised Bids; or
 - (ii) if negotiations are conducted consecutively with one Supplier at a time, provide a deadline for the participating Supplier to submit any new or revised Bid prior to proceeding to negotiate with the next ranked Supplier.

In the course of negotiations, the Corporation shall not give an unfair advantage to, or discriminate against, a Supplier.

5.9 Two-Stage Process

- (a) The two-stage Bid process may be used where it is deemed that the technical and qualitative information of a given Bid Solicitation is to be evaluated without being influenced by prior knowledge of the corresponding pricing information. The "two-stage" Bid process may be used when a Request for Proposal is issued. The Corporation shall advise all Suppliers when the two-stage Bid process is to be used.
- (b) The two-stage process means the proposal is submitted with the pricing sealed separately. The pricing is un-sealed if the Proponent meets the minimum threshold score listed in the RFP document.
- (c) In a two-stage Bid process, each Supplier must submit qualitative and technical information separately from pricing information. In instances where physical copies of bids are accepted by the Corporation, the qualitative and technical information must be placed in a sealed envelope, and the pricing information must be provided in a separate sealed envelope. In instances where electronic bids are submitted to the Corporation, bidders must submit the qualitative and technical information separately from their pricing information, in

accordance with the electronic submission service's process for "sealing" documents.

(d) The technical submission shall be opened and evaluated by the Selection Committee and rated according to a pre-determined point system. Only the pricing information of those Bids meeting the specifications of the Request for Proposal shall be opened and evaluated. If a proposal is not eligible to proceed to price evaluation, the Supplier shall be disqualified from further consideration and pricing submission shall not be opened.

5.10 Tied Bids

If the lowest compliant Bids from two or more Bidders are identical in cost or unit price, the Purchasing Supervisor, in consultation with the General Manager, Financial Services and the requesting department, are authorized to enter into negotiations with the Suppliers who have submitted the identical prices in an attempt to resolve the tied Bids. The Corporation, in its discretion, may consider any of the following options in the negotiations:

- (a) awarding the work to multiple Suppliers, if practical;
- (b) basing the price on an alternative factor submitted in the Bids i.e., several items may have been bid, but only one was the price used to Award;
- (c) providing an opportunity for the tied Suppliers to submit new prices;
- (d) In the case of tied Bids between more than two Suppliers, the successful Bidder may be determined with reference to which Bidder is able to supply the goods or services contracted for at the earliest date, if the Bid Solicitation documents provide for this method of tiebreak;
- (e) in the case where two Suppliers are tied, the successful Bidder may be determined by a coin toss; or
- (f) in the case of tied Bids between more than two Suppliers, the successful Bidder may be determined by the drawing of a name.

5.11 One Bid & Bids Exceeding Budget

(a) In any of the following circumstances, the Purchasing Supervisor, in consultation with the General Manager, Financial Services, may

choose to either cancel the Bid Solicitation and/or reissue the Bid Solicitation at a later date:

- (i) when only one compliant Bid has been received;
- (ii) when the lowest compliant Bid exceeds the available project budget for the Goods and/or Services;
- (iii) when all Bids received are non-compliant with the specifications or quotation terms and conditions, or
- (iv) when it is not in the public interest to award a contract.
- (b) Where only one compliant Bid has been received as outlined in Section 5.11(a)(i), the Purchasing Supervisor, in consultation with the requesting department, may also accept the Bid as submitted or negotiate changes required to achieve an acceptable Bid.
- (c) Where the lowest compliant Bid exceeds the available project budget as outlined in Section 5.11(a)(ii), the Purchasing Supervisor, in consultation with the requesting department, may also proceed to negotiate changes to pricing, terms or conditions with the lowest compliant Supplier to achieve an acceptable Bid.
- (d) Where all Bids received are non-compliant as outlined in Section 5.11(a)(iii), it is prudent to cancel the solicitation process and recall Bids if time permits. However, where time does not permit, the Purchasing Supervisor, in consultation with the requesting department, may make changes to the specifications, terms or conditions that were set out in the Bid Solicitation. In such cases all Suppliers who provided a response to the Bid Solicitation before the closing date shall have a further opportunity to present a new Bid based on the revised specification, terms or conditions.

5.12 Bid Withdrawal

Any prospective Supplier who has submitted a Bid may request that it be withdrawn. Withdrawal requests shall be directed to the Purchasing Supervisor in writing. Withdrawal shall be allowed if the request is made prior to closing. Generally, Bids withdrawn prior to closing shall be returned unopened to the Supplier. Whether Bids may be withdrawn post closing on any Bid Solicitation will be governed by the terms of that Bid Solicitation.

5.13 Cancellation of a Bid Solicitation

A General Manager with the concurrence of the Purchasing Supervisor and the General Manager, Financial Services may cancel a Bid Solicitation at any time for any reason, including that it is not in the public interest to award a contract, provided the contract has not yet been awarded.

If a Bid Solicitation is cancelled prior to the award of contract, the Corporation may decline to disclose the prices of the Bids received.

5.14 Non-Competitive Procurements

When the Purchasing Supervisor in consultation with the General Manager, Financial Services determines it is advisable, the Corporation may procure Goods and/or Services pursuant to a non-competitive procurement process of any nature acceptable to it. Without limiting the generality of the matters listed in (a) to (m) below, the following are circumstances where a non-competitive procurement process may be used:

- (a) no Bids were submitted, or no Suppliers asked to participate in a procurement process;
- (b) no Bids were submitted that conformed with the essential requirements of the tender documentation;
- (c) no Suppliers satisfied the conditions for participation of the Bid Solicitation;
- (d) the submitted Bids in an existing procurement process were collusive;
- (e) if the Goods and/or Services can be supplied only by a particular Supplier and no reasonable alternative, or substitute Goods and/or Services exist for any of the following reasons:
 - (i) the requirement is for a work of art;
 - (ii) the protection of patents, copyrights, or other exclusive rights;
 - (iii) due to an absence of competition for technical reasons;
 - (iv) the supply of Goods and/or Services is controlled by a Supplier that is a statutory monopoly;

- (v) to ensure compatibility with existing Goods, or to maintain specialized Goods that must be maintained by the manufacturer of those Goods or its representative;
- (vi) work is to be performed on property by a contractor according to provisions of a warranty or guarantee held in respect of the property or the original work; or
- (vii) work is to be performed on a leased building or related property, or portions thereof, that may be performed only by the lessor;
- (f) for additional deliveries by the original Supplier of Goods and/or Services that were not included in the initial procurement, if a change of Supplier for such additional Goods and/or Services:
 - cannot be made for economic or technical reasons such as requirements of interchangeability or interoperability with existing equipment, software, Services, or installations procured under the initial procurement; and
 - (ii) would cause significant inconvenience or substantial duplication of costs for the Corporation;
- (g) for Goods purchased on a commodity market;
- (h) if the Corporation procures a prototype or a first Good or Service that is developed in the course of, and for, a particular contract for research, experiment, study, or original development. Original development of a first Good or Service may include limited production or supply in order to incorporate the results of field testing and to demonstrate that the Good or Service is suitable for production or supply in quantity to acceptable quality standards, but does not include quantity production or supply to establish commercial viability or to recover research and development costs;
- for purchases made under exceptionally advantageous conditions that only arise in the very short term in the case of unusual disposals such as those arising from liquidation, receivership, or bankruptcy, but not for routine purchases from regular Suppliers;
- (j) if a contract is awarded to a winner of a design contest provided that:
 - (i) the contest has been organized in a manner that is consistent with the principles of this policy, in particular relating to the publication of a tender notice; and

- (ii) the participants are judged by an independent jury with a view to a design contract being awarded to a winner;
- (k) if Goods and/or Services regarding matters of a confidential or privileged nature are to be purchased and the disclosure of those matters through an open tendering process could reasonably be expected to compromise government confidentiality, result in the waiver of privilege, cause economic disruption, or otherwise be contrary to the public interest; or
- (I) such other circumstances as may be authorized by Council.

For purchases made pursuant to Table 2 in Section 5.14 that are greater than \$75,000, the Purchasing Supervisor will include the details of the circumstances of the purchase in the quarterly report to Council.

5.14.1 Emergency Procurements

For the purposes of this section, "Emergency" means an event or occurrence that the General Manager deems an immediate threat to:

- (a) Public Health;
- (b) The maintenance of essential City service; or
- (c) The welfare and protection of persons, property, or the environment; and the event or occurrence necessitates the immediate need for Goods and/or Services to mitigate the emergency and time does not permit for a competitive procurement process.

In an Emergency, the Procurement of Goods and/or Services may be authorized without a competitive process. The requesting Department shall contact the Purchasing Supervisor, if possible, for direction on an appropriate Procurement process and possible sources of supply. A list of pre-qualified Suppliers or Vendors of Record will be used to select Suppliers, whenever possible.

The General Manager shall notify the CAO, General Manager, Financial Services and the Purchasing Supervisor of all emergency purchases within 24 hours following the purchase(s).

Upon return to normal business operations, Emergency Purchases in excess of \$75,000 will be reported to Council, as information, to inform Council of the nature and cause of the Emergency and actions taken to resolve the Emergency.

If a formal declared Emergency exists, the Purchasing Supervisor, in conjunction with the General Manager, Financial Services and the CAO will determine the appropriate limits and procedure to be followed for P-Cards, Quotations, Proposals and Tenders, taking appropriate steps to obtain the necessary goods and/or services.

5.14.2 Urgent Procurements

For the purposes of this section, an "Urgent Procurement" is a procurement that is strictly necessary to complete for reasons of urgency brought about by events which were unforeseeable for the Corporation and the goods and services which were the subject of the procurement could not be obtained in time using open tendering.

An Urgent Procurement may be authorized without a competitive process. The requesting Department shall contact the Purchasing Supervisor, for direction on an appropriate Procurement process and possible sources of supply. A list of pre-qualified Suppliers or Vendors of Record will be used to select Suppliers, whenever possible.

The General Manager shall notify the CAO, General Manager, Financial Services and the Purchasing Supervisor of all Urgent Procurements within 24 hours following the procurement.

Urgent Procurements in excess of \$75,000 will be reported to Council, as information, to inform Council of the nature and cause of the urgency, what unforeseeable circumstances caused the need for the Urgent Procurement, and why the goods and services could not be obtained in time using open tendering.

5.15 Exercise of Contract Renewal Options

Where a Contract contains an option for renewal, the Purchasing Supervisor and the applicable Manager or Supervisor will consult on whether such renewal option should be exercised provided that:

- (a) the Supplier's performance in supplying the Goods and/or Services is considered to have met the requirements of the Contract;
- (b) the Purchasing Supervisor agrees that the exercise of the option is in the best interest of the Corporation, subject to the levels of authority set out in Section 5.1 of this policy;

- (c) funds are available in appropriate accounts within the Council approved estimates;
- (d) the Corporation may consider any other factor it considers relevant.

The Manager or Supervisor shall provide the Purchasing Supervisor with an explanation, in writing, as to why exercising the renewal option is in the best interest of the Corporation and include comment on applicable market situation and trends, if any. Any decision to exercise a renewal option shall be in the Corporation's sole discretion.

Where the Corporation exercises an option to renew and circumstances change such that the goods or services are no longer necessary or in demand, or the Corporations budget can no longer accommodate such expenses, then the Corporation shall be entitled to terminate any renewal after it is exercised without cost to the Corporation.

5.16 Collaborative Procurement

In lieu of a Corporation-run competitive process, the Corporation may participate with a Buying Group in collaborative procurement initiatives where it is in the best interests of the Corporation to do so, with the approval of Procurement Services, and where:

- (a) Combining the volume of Goods and/or Services to be purchased by the Corporation and the Buying Group would result in the Best Value for the Corporation;
- (b) Where the Buying Group is initiating the Procurement, the Procurement process will be conducted in accordance with the procurement policies or by-laws of the Buying Group;
- (c) Where the Corporation is initiating the Procurement, the Procurement process will be conducted in accordance with this Policy; and
- (d) Legal Services shall be consulted to determine the appropriate agreements required to conduct such initiatives with the other Buying Group.

The Buying Group initiating the Procurement may determine the Award. If the Award is not in the best interest of the Corporation or is in violation of this Policy, the Purchasing Supervisor may decline acceptance of the Award.

5.17 Disposal of Surplus Goods

- (a) Where any Goods, equipment or inventory stock are surplus, obsolete or not repairable, they shall be identified as surplus by the disposing department to the Purchasing Supervisor. The Purchasing Supervisor shall then circulate a list of surplus assets prior to the sale or disposal of such items.
- (b) If Goods, equipment or inventory stock which are identified as surplus by the disposing department are not required by any other departments, then the Goods may be declared surplus by the Purchasing Supervisor.
- (c) Goods, equipment or inventory stock declared surplus by the Purchasing Supervisor shall be disposed of by the Corporation in the following manner, set out by order of priority:
 - (i) trade-in as part of the procurement of other similar Goods being acquired by the Corporation;
 - be sold by external advertisement, formal request, auction or tender (where it is deemed appropriate, a reserve bid may be established);
 - (iii) donation to a not-for-profit charitable organization that is registered as such with the Canada Revenue Agency. Where there are several charitable organizations who have expressed interest in receiving a donation in the same items, the successful organization shall be selected by negotiation;
 - (iv) classifying as waste and recycling, scrapping, dismantling, destroying and/or disposing; and/or
 - (v) in any other way determined by the Purchasing Supervisor.
- (d) No disposition of such good(s) shall be made to employees, elected officials, or their family members unless such good(s) are sold through external advertisement, formal request, auction or public tender.
- (e) The net proceeds of the disposal of surplus assets shall be credited to the Corporation's appropriate reserve account or used to fund the replacement Goods, except if Council has otherwise directed.

5.18 Leasing

In certain circumstances, it may be economically advisable for the Corporation to enter into a Financing Lease to acquire the rights to use capital equipment rather than an outright purchase. In which case, the Corporation will follow the Municipal Act, 2001, and the Ontario Regulation 653/05 or as amended in addition to the other applicable requirements of this policy and the trade agreements.

5.19 Standardization

Standardization identifies specific procedures, documents, requirements, equipment, or manufacturers that best fit the Corporation's needs and may limit Suppliers. The Corporation may apply the following standardization provisions for procurements which are not subject to the requirements of any applicable trade agreements.

- (a) All standardization recommendations must be approved in accordance with authority levels in Section 5.1 and have a reasonable time limitation of no longer than five (5) years before a re-evaluation.
- (b) Following approval of the standardization, procurements (including any non-competitive procurements) may proceed with specific products, equipment, or Suppliers within the time limitation no longer than five (5) years.
- (c) Authorization to Award Contracts related to a Procurement of standardized, goods or services shall be in accordance with the authority levels (within the thresholds and method of procurement employed) and will be reported in accordance with Section 5.1.

6.0 SUPPLIER CONDUCT

6.1 Honesty and Good Faith

- (a) Suppliers must respond to the Corporation's Bid Solicitations in an honest, fair and comprehensive manner that accurately reflects their capacity to satisfy the requirements stipulated in the Bid Solicitation.
- (b) Suppliers shall submit a Bid only if they know they can satisfactorily perform all obligations of the proposed Contract in good faith.

- (c) Suppliers shall alert the Purchasing Supervisor to any factual errors, omissions and ambiguities that they discover in a Bid Solicitation as early as possible in the process to avoid the Bid Solicitation being cancelled. The failure of a Supplier to identify such error or omission or ambiguity prior to Bid closing shall result in the Supplier having deemed to accept such error, omission or ambiguity.
- (d) Suppliers and their subcontractors shall at all times comply with all federal, provincial, municipal and territorial laws, this Policy and the Supplier Code of Conduct and Discipline Policy. Failure to comply with applicable law, this Policy or the Corporation's Supplier Code of Conduct and Discipline Policy may lead to the disqualification of a Supplier under any Solicitation, or an exclusion from eligibility to bid on or be awarded any contract with the Corporation.

6.2 Confidentiality

Suppliers shall maintain confidentiality of all confidential information that the Corporation discloses to the Supplier as part of the Bid Solicitation process.

6.3 Conflict of Interest

Suppliers must declare and fully disclose any actual or potential Conflict of Interest related to the preparation of their Bid or where the Supplier foresees an actual or potential Conflict of Interest in the performance of the Contract, including, without limitation:

- engaging any family members, friends or private business associates of any public office holder which may have, or appear to have, any influence on the procurement process, or subsequent performance of the Contract;
- (b) prior involvement by the Supplier or affiliated persons in developing the technical specifications or other evaluation criteria for the Bid Solicitation;
- (c) prior access to confidential Corporation information by the Supplier, or affiliated persons that is related to the Bid Solicitation and that was not readily accessible to other prospective Suppliers or other information of the Corporation that was not readily accessible to other Suppliers or their affiliated persons;

(d) the Supplier or its affiliated persons are indebted to or engaged in past, ongoing or proposed litigation with the Corporation in relation to a previous contract.

6.4 Unethical Bidding Practices

No Supplier may discuss or communicate, directly or indirectly, with any other Supplier or their agents, officers, directors or employees about the preparation of the Supplier's submission including, without limitation, any connection, comparison of figures or arrangements with, or knowledge of any other Supplier making a submission for the same work. Suppliers shall disclose to the Purchasing Supervisor any affiliations or other relationships with other Suppliers that might be seen to compromise the principle of fair competition, including any proposed subcontracting relationships.

6.5 Illegal Conduct

A Supplier shall disclose to the Corporation any previous convictions, findings of guilt, misconduct or transgression by itself or its affiliated persons in relation to any conduct prohibited by the Criminal Code of Canada, (including without limitation for collusion, bid-rigging, price-fixing, bribery, fraud or other behaviour of any kind), prohibited under the Competition Act, or by any other federal, provincial, municipal or territorial law or regulation. The Corporation may consider any such information in the assessment of a bid under any Solicitation including as grounds not to award a Supplier a contract or as a basis for disqualification under the Corporation's Supplier Code of Conduct and Discipline Policy

6.6 Litigation

Suppliers shall disclose upon request any and all litigation, proceedings, matters, or investigations in which they, or any of their affiliated persons or subcontractors are involved or have been involved (for period of time specified by the Corporation) in the Superior Court of any province or territory, the Federal Court of Canada, or before any federal, provincial, municipal or territorial tribunal, board, commission or investigative body agency or police authority. The Corporation shall have the right to inspect and audit any document or thing associated with such matters. Suppliers will provide the Corporation with access to all documents related to such matter(s) or where necessary, a written consent to the Corporation to allow it to receive any and all information in relation to such matters from any third party. The involvement of a Supplier in any such matter may be considered by the Corporation as grounds not to award a Supplier a

contract under any Solicitation, or as grounds for disqualification of a Supplier for eligibility to bid on or be awarded any contract with the Corporation under its Supplier Code of Conduct and Discipline Policy.

6.7 Interference

- (a) No Supplier may lobby, threaten, intimidate, harass, or otherwise interfere with any Corporation employee or public office holder in relation to their procurement duties or otherwise communicate with any employee or agent of the Corporation in a manner inconsistent with the terms of a Bid Solicitation. No Supplier may likewise lobby threaten, intimidate, harass, or otherwise interfere with an effort by any other Supplier to respond to a Bid Solicitation or to perform any contract awarded by the Corporation.
- (b) No Supplier shall offer gifts, favours or inducements of any kind to the Corporation, or its employees, agents or public office holders, or otherwise attempt to influence or interfere with their duties in relation to the procurement process or management of a Contract.

6.8 Misrepresentation

Suppliers are prohibited from misrepresenting their relevant experience and qualifications in relation to any Bid Solicitation and must acknowledge that the Corporation's process of evaluation may include a review of information provided by the Supplier's references as well as records of past performance, past experience or reputation on previous contracts with the Corporation or other public or private bodies or such other information as is available from any other source.

6.9 Prohibited Communication during the Bid Solicitation

No Supplier, or affiliated person, may discuss or communicate either verbally, or in writing, with any employee, public office holder, or the media in relation to any Bid Solicitation between the time of the issuance of the Bid Solicitation to the Award and execution of final form of Contract. All Supplier communications shall be with the Purchasing Supervisor or the employee specifically designated for that purpose in the Bid Solicitation.

6.10 Failure to Honour Bid

Suppliers shall honour their Bids, except where they are permitted to withdraw their Bids in accordance with this Policy, the terms of a Bid Solicitation, or the process disclosed in the Bid Solicitation. Suppliers shall not refuse to enter into a Contract if they have not withdrawn their bid in accordance with this Policy, the terms of a Bid Solicitation, or the process disclosed in the Bid Solicitation or refuse to fully perform the Contract once their Bid has been accepted by the Corporation.

6.11 Supplier Performance

- (a) Suppliers shall fully perform their Contracts with the Corporation and follow any reasonable direction from the Corporation to cure any default.
- (b) Suppliers shall be fully responsible for the conduct of their employees, agents and subcontractors and shall ensure that any employees, agents and subcontractors fully perform all relevant terms and conditions of the Contracts with the Corporation as applicable..
- (c) No Supplier shall in the performance of a Contract with the Corporation fail to perform the terms and conditions of the Contract satisfactorily, including, without limitation, fail to comply in any way with this Policy or any other of the Corporation's applicable policies, including, but not limited to:
 - (i) Supplier Code of Conduct and Discipline Policy;
 - (ii) Harassment in the Workplace Policy
 - (iii) Workplace Violence Policy
 - (iv) Integrated Accessibility Policy
 - (v) Information Technology Polices, and

as the same may be amended from time to time.

(d) The Corporation shall have the right to evaluate a Supplier's performance pursuant to the Corporation's Vendor Management Program.

- (e) In the event that the Corporation awards a contract to the Supplier, the Corporation shall have at all times the right to demand, receive and inspect any document or thing associated with the work under any Contract or with respect to the Supplier's obligations under this or any other Policy of the Corporation. The Corporation shall have the right to enter any premises of a Supplier and a Supplier shall be deemed to consent to such entry by the Corporation to secure a copy (in electronic or other form) of any such document or thing.
- (f) The General Manager shall enforce all rights and remedies of the Corporation under a Contract in compliance with that Contract.
- (g) The General Manager shall ensure that evidence is documented and advise the Purchasing Supervisor in writing where the performance of a Supplier has been deficient. A Supplier shall be provided an opportunity to respond to allegations of poor performance or noncompliance in any manner contemplated in the associated Contract or as otherwise permitted by the Corporation's Supplier Code of Conduct and Discipline Policy.

6.12 Disqualification of Suppliers for Non-Compliance

- (a) Any contravention of Section 6.0 by a Supplier, including, without limitation, any failure to disclose actual or potential Conflicts of Interest, may be grounds for the Purchasing Supervisor to disqualify a Supplier or its affiliates from being awarded a Contract.
- (b) Any failing grade given by the Corporation to a Supplier as part of the Vendor Management Program, may be grounds for the Purchasing Supervisor to disqualify a Supplier or its affiliates from being awarded another Contract.
- (c) The Purchasing Supervisor, in consultation with the General Manager, Financial Services, may also disqualify any Supplier who may otherwise have a Conflict of Interest that cannot be resolved in relation to any procurement.
- (d) A contravention of Section 6.0 may also be grounds for the Purchasing Supervisor to terminate any Contract to that Supplier and require the return of any advance payments made to the Corporation.
- (e) Any contravention of any provision in this or any other Policy of the Corporation as amended from time to time may lead to the disqualification of any Supplier under any Solicitation or to its

ineligibility to bid on or be awarded any Contract with the Corporation.

- (f) The rights of disqualification set out in this policy are in addition to any rights set out in the Corporation's Supplier Code of Conduct and Discipline Policy as the same may be amended from time to time.
- (g) Nothing in Section 6.12 shall prohibit the Corporation from including additional terms relating to the disqualification of Suppliers in any Bid Solicitation.

6.13 Exclusion of Suppliers

- (a) The Purchasing Supervisor, in consultation with the General Manager, Financial Services, may prohibit a Supplier or its affiliates from participating in present or future Bid Solicitations under the following conditions:
 - (i) bankruptcy or insolvency of the Supplier;
 - (ii) false declarations of the Supplier;
 - (iii) significant or persistent deficiencies in performance of any substantive requirement or obligation under a prior contract or contracts;
 - (iv) final judgments or convictions for or in respect of crimes or other offences of the Supplier;
 - (v) professional misconduct or acts or omissions that adversely reflect on the commercial integrity of the Supplier;
 - (vi) failure to pay federal, provincial or municipal taxes by the Supplier; or
 - (vii) such other grounds as the Purchasing Supervisor in consultation with the General Manager, Financial Services, determines is appropriate.
- (b) Any Supplier being excluded from present or future Bid Solicitations due to any of the above grounds will be reported to the CAO and respective General Manager.
- (c) The rights of exclusion set out in this policy are in addition to any rights set out in the Corporation's Supplier Discipline Policy as the same may be amended from time to time.

(d) Nothing in Section 6.13 shall prohibit the Corporation from including additional terms relating to the exclusion of Suppliers in any Bid Solicitation.

7.0 CONTRACT DOCUMENTATION, EXECUTION AND PERFORMANCE GUARANTEES

7.1 **Procurement Documentation**

In order to maintain consistency, the Purchasing Supervisor may provide guidelines to Corporation's departments on all procurement policies and procedures and on the structure, format and general content of procurement documentation.

- (a) The Purchasing Supervisor shall be responsible for all procurement documents, in accordance with this policy.
- (b) Departments shall be responsible to prepare and provide, in writing, to the Purchasing Supervisor specifications and approved budget amount to support preparation of procurement documentation. The Purchasing Supervisor shall review all specifications, terms and conditions and have the authority to change the documentation as deemed necessary.

7.2 Contractual Agreement

Where an Award of a Contract has been made, then in addition to any other general or specific authority delegated by Council regarding contract execution:

- (a) The form of Contract may be disclosed in the Bid Solicitation, including any process and scope for contract negotiations.
- (b) All Awards are subject to the execution of a Contract or issuance of a Purchase Order by the Corporation.
- (c) Awards shall be made by way of a written notification to the selected Supplier.
- (d) No municipal employee is permitted to sign or forward an Agreement to a Supplier other than in accordance with this policy.
- (e) All Purchasing Contracts to be entered into by the Corporation, whether to be executed physically or digitally, shall be forwarded to

the City Clerk for signature endorsement. For physical contracts, the City Clerk shall ensure that the proper signatures and, if appropriate, the corporate seal are appended on the contracts in accordance with the relevant by-law or delegated authority, and subject to the approvals contemplated in Section 5.1. In the case of electronic contracts, in addition to the above requirements, as applicable, the City Clerk shall ensure that the signatures are digitally verified and the contract is otherwise in compliance with all relevant by-laws or delegated authority, and subject to the approvals contemplated in Section 5.1. The Mayor and City Clerk may enter into and execute any Contracts in relation to any Award.

- (f) Purchasing Services shall have the authority to execute written notification or Purchase Orders issued in accordance with these provisions.
- (g) The City Clerk shall be responsible for safeguarding the original Agreement in the case of a physical agreement, or in the case of a digital agreement, a copy with verified signatures, for archival purposes. Duplicate signed original or a signed copy will be forwarded to Purchasing Services and the Supplier for their records.

7.3 Guarantees and Performance

- (a) The Purchasing Supervisor may require that a Bid be accompanied by a bid bond or other similar security. The Purchasing Supervisor may determine that the bid bond or other similar security must be provided in a digital form, submitted through Electronic Tendering means, and/or conform to any additional requirements to confirm such security's validity, such as that it be encrypted with embedded digital certificates which are verifiable by the Corporation.
- (b) The Purchasing Supervisor shall select the appropriate means to guarantee execution and performance of a Contract. Means may include, without limitation:
 - (i) security deposits;
 - (ii) provisions for liquidated damages;
 - (iii) progress payments;
 - (iv) holdbacks;
 - (v) performance bonds;

- (vi) payment bonds;
- (vii) labour and materials bonds;
- (viii) irrevocable letters of credit; or
- (ix) any other types of bonds or security that is deemed appropriate.
- (c) The guarantee means selected will:
 - (i) be those which are necessary or desirable for the Corporation; and
 - (ii) comply with applicable laws.

7.4 Insurance

- (a) As part of any Solicitation and or prior to commencement of work and where deemed appropriate by the Purchasing Supervisor, evidence of Insurance Coverage satisfactory to the Purchasing Supervisor must be obtained by all Suppliers, ensuring indemnification of the Corporation from any and all claims, demands, losses, costs or damages of any kind, including without limitation resulting from the performance or failure of the Supplier to perform or adequately perform a Supplier's obligations under the contract.
- (b) Purchasing Services shall request from Suppliers providing Services to the Corporation a certificate of insurance. The certificate shall be in a form satisfactory to the Purchasing Supervisor either during the Solicitation or prior to the commencement of any work, for no less than the minimum amounts stated as determined by the Purchasing Supervisor and in force for the entire Contract period, including any warranty period.

7.5 Occupational Health and Safety Requirements

If the Purchasing Supervisor determines it is appropriate, a Supplier shall deliver a Certificate(s) of Clearance from the Workplace Safety and Insurance Board or such other board or authority prior to commencing any work pursuant to any Contracts stating that the Supplier and its subcontractors are in good standing with the Board as of the current date and every ninety (90) days thereafter ensuring ongoing good standing with the Workplace Safety and Insurance Board or such other board or authority.

8.0 **RESOLUTION OF CONFLICT**

8.1 Exercise of Delegated Powers

Should any ambiguity arise as to the authorizations which are applicable under this Policy, or inconsistent with the authorizations given under this Policy, any such inconsistencies shall be referred to the Purchasing Supervisor for resolution and direction.

8.2 Pre-Award Bid Dispute

Suppliers should seek a resolution of any pre-Award dispute by communicating directly with the Purchasing Supervisor as soon as possible from the time when the basis for the dispute became known to them. The Purchasing Supervisor may, in its discretion delay an Award, or any interim stage of a procurement, pending the acknowledgement and resolution of any pre-Award dispute.

8.3 Supplier Debriefing

The purpose of a debriefing is to assist the Supplier to understand both the Procurement process that occurred and how it may improve its future bids. The Corporation will not discuss or disclose information about other Bids or Suppliers during a debriefing.

- (a) For competitive procurement processes valued at \$50,000 or more, the Purchasing Supervisor shall inform all unsuccessful Suppliers about their entitlement to a debriefing.
- (b) The Purchasing Supervisor will allow unsuccessful Suppliers up to sixty (60) calendar days following the date of the Award notification to request a debriefing.

8.4 Post Award Bid Dispute Resolution

(a) Any dispute of an Award decision must be received in writing by the Purchasing Supervisor no later than ten (10) days after the date of the Award notification, or where a debriefing has been requested, ten (10) days after the debriefing has occurred. Any dispute that is not received in a timely way or in writing will not receive further consideration.

- (b) The complaint should contain the identity of the complainant and the procurement process at issue as well as a clear and detailed statement of the legal and/or factual grounds upon which the complaint is based. The complaint should also include, as attachments, any information or documents relevant to the complaint that are in the Supplier's possession.
- (c) For the purpose of a complaint under this policy, the Purchasing Supervisor will review and address any complaint in a timely and appropriate manner.
- (d) Any written dispute that cannot be resolved by the Purchasing Supervisor shall be referred by the Purchasing Supervisor to the General Manager, Financial Services and/or CAO for an impartial review.
- (e) The General Manager, Financial Services in consultation with the CAO and Legal Services, may dismiss the dispute or accept the dispute and direct the Purchasing Supervisor to take appropriate remedial action.
- (f) The Purchasing Supervisor may adopt and publish such further procedures as are necessary to ensure an independent and timely review and resolution of post Award bid disputes.

8.5 Limitation on Liability

The following are limitations on the Corporations liability with respect to procurements:

(a) For procurements to which the trade agreements do not apply. Each Supplier, by submitting a Bid, fully and irrevocably waives any right to claim or assert any action or proceeding against the Corporation or any of its employees, advisors, representatives, servants or agents for judicial review, injunctive relief, damages, expenses or costs including (without limitation), loss of profits, loss of opportunity or any consequential loss or damages. This waiver shall include an action or proceeding caused for any reason, including by reason of any tort, negligence, breach of contract, bad faith, any actual or alleged unfairness on the part of the Corporation at any stage of the Bid Solicitation process, if the Corporation does not Award or execute a contract, if the Corporation cancels a Bid Solicitation, or if the Corporation is subsequently determined to have accepted a noncompliant Bid or otherwise breached the terms of any Bid Solicitation, any of its own policies including this one or the provisions of any trade agreement. This section is deemed to be and shall be incorporated by reference into every Bid Solicitation and every Contract Awarded by the Corporation.

(b) For procurements to which the trade agreements apply, the provisions of subparagraph (a) apply, except that a Supplier can claim for costs of the preparation of its bid.

9.0 INTERPRETATION

- (a) Each section of this policy and every part of each section is an independent section or part of a section, and the holding of any section or part thereof to be void or ineffective for any cause shall not be deemed to affect the validity of any other sections or parts thereof.
- (b) Headings are for reference purposes only and shall not affect in any way the meaning or interpretation of the provisions of this policy.
- (c) References in this Policy to any statue, regulation, Corporation Policy, by-law, procedure, guide, or code of conduct, includes, in each case, any amendments made from time to time.
- (d) This policy includes the Appendices annexed hereto.
- (e) References to currency or to "\$" shall be deemed to be a reference to the currency of Canada.

ATTACHMENTS

APPENDIX "A" - EXEMPTIONS

APPENDIX "B" - IRREGULARITIES

APPENDIX "A" - EXEMPTIONS

Subject to compliance with applicable laws and trade agreements, the procurement of the following Goods and/or Services are exempt from this policy:

- 1. The acquisition or rental of land, existing buildings or other immovable property or the rights thereon
- 2. Non legally binding agreements
- 3. Any form of assistance, such as grants, loans, equity infusions, guarantees and fiscal incentives
- 4. Public employment contracts
- 5. Measures necessary to protect intellectual property, provided that the measures are not applied in a manner that would constitute a means of arbitrary or unjustifiable discrimination between parties where the same conditions prevail or are a disguised restriction on trade
- 6. Procurement or acquisition of:
 - (a) fiscal agency or depository services;
 - (b) liquidation and management services for regulated financial institutions; or
 - (c) services related to the sale, redemption, and distribution of public debt, including loans and government bonds, notes, and other securities;
- 7. Procurement of:
 - (a) financial services respecting the management of government financial assets and liabilities (i.e. treasury operations), including ancillary advisory and information services, whether or not delivered by a financial institution;
 - (b) health services or social services;

- (c) services that may, under applicable law, only be provided by licensed lawyers or notaries; or
- (d) services of expert witnesses or factual witnesses used in court or legal proceedings; or
- 8. Procurement of Goods or Services:
 - (a) financed primarily from donations that require the procurement to be conducted in a manner inconsistent with the trade agreements;
 - (b) by a procuring entity on behalf of an entity not covered by the trade agreements;
 - (c) between enterprises that are controlled by or affiliated with the same enterprise, or between one government body or enterprise and another government body or enterprise;
 - (d) by non-governmental bodies that exercise governmental authority delegated to them;
 - (e) from philanthropic institutions, non-profit organizations, prison labour, or natural persons with disabilities;
 - (f) under a commercial agreement between a procuring entity which operates sporting or convention facilities and an entity not covered by the trade agreements that contains provisions inconsistent with the trade agreements;
 - (g) conducted for the specific purpose of providing international assistance, including development aid, provided that the Corporation does not discriminate on the basis of origin or location.
- 9. Training and education in the nature of:
 - (a) Conferences
 - (b) Courses
 - (c) Conventions
 - (d) Seminars

- (e) Memberships
- (f) Subscriptions, books, magazines, newspapers, periodicals
- (g) Staff development and workshops
- 10. Employee/Council expenses in the nature of:
 - (a) Advances
 - (b) Expense Reimbursements
- 11. Employer's general expenses in the nature of:
 - (a) Employee Income
 - (b) Honoraria
 - (c) Payroll deduction Remittances
 - (d) Medical
 - (e) Licenses
 - (f) Temporary staffing agencies and services
 - (g) Grants to Agencies
 - (h) Payments of Damages
 - (i) Tax Remittances
 - (j) Loan Payments
- 12. Professional and special services in the nature of:
 - (a) Witness Fees
 - (b) Arbitrators, Mediators, Conciliators or judicial and like bodies
 - (c) Legal Settlements
 - (d) Insurance Premiums, Claim Settlements, and Adjuster Services

13. Utilities

- (a) Postage
- (b) Water and Wastewater
- (c) Electricity
- (d) Natural Gas
- (e) Cable or Television
- (f) Telephone (basic services), Cellular and Wireless Devices
- (g) Utility Relocation
- (h) Services and inspections of the Technical Safety Standards Association (TSSA)
- 14. Funding to service providers, including Human Services providers, childcare providers and housing providers.
- 15. Renewals of Licenses and annual maintenance, support for procured software or application.
- 16. Translation, interpretive services, Braille services, Text Telephone (TTY)
- 17. Advertising

Any exemption and/ or non-application that can be established to be in accordance with applicable trade agreements, as amended.

These exemptions do not preclude a procurement process where competition may exist. It is expected that the intent of the Policy is followed wherever possible to ensure the best interests of the Corporation are taken into consideration.

Approvals are to follow the authorization level pursuant to Section 5.1, this policy and practices. Proof of Insurance(s) and WSIB coverage as required wherever applicable.

APPENDIX "B" - IRREGULARITIES

IRREGULARITY

An irregularity is a deviation between the requirements (terms, conditions, specifications, special instructions) of a Bid request and the information provided in a Bid response. For the purposes of this policy, Bid irregularities are further classified as "major irregularities" or "minor irregularities".

A **"major irregularity"** is a deviation from the bid request that affects the price, quality, quantity or delivery, and is material to the Award. If the deviation is permitted, the Bidder could gain an unfair advantage over competitors. The Purchasing Supervisor in consultation with the General Manager, Financial Services must reject any Bid, which contains a major irregularity. However, the Corporation can decide, in its discretion, whether it will allow a process for correction of a major irregularity to be set out in any Bid Solicitation. The Corporation may, but has no duty to, issue a Bid Solicitation which provides for the correction of any major irregularity.

A "minor irregularity" is a deviation from the Bid request, which affects form, rather than substance. A minor irregularity is an effect on the price, quality, quantity or delivery is not material to the Award. If the deviation is permitted or corrected, the Bidder would not gain an unfair advantage over competitors. The Purchasing Supervisor in consultation with the General Manager, Financial Services may permit the deviation or allow the Bidder to correct the minor irregularity.

MATHEMATICAL ERRORS - RECTIFIED BY STAFF

The Purchasing Supervisor may correct errors in mathematical extensions and/or taxes, and the unit prices will govern. The responsibility for correcting mathematical errors may be delegated to the requisitioning department. The Corporation is under no duty to correct such errors.

ACTION TAKEN

The Purchasing Supervisor shall have the authority and responsibility, subject to Council policies, for assessing compliance with submission requirements by determining whether irregularities are major or minor and rejecting submissions with major irregularities.

The Purchasing Supervisor may establish procedures for resolving common Bid irregularities for open competitive Bid Solicitations. In the event of any conflict between the evaluation criteria disclosed in a Bid Solicitation and the list of

common irregularities contained in any purchasing procedure, the evaluation criteria disclosed in the open competitive Bid Solicitation shall govern.

In exercising judgment with respect to any Bid irregularity, the Purchasing Supervisor shall consider the advice of the General Manager, Financial Services. The Corporation shall have no liability for any breach regarding the Corporation's assessment of major or minor irregularities.



Procurement of Goods and/or Services Policy

Department:	Financial Services, Purchasing
Policy Number:	FI-2019-09-09-2
Effective Date:	September 10, 2019
Council Approval:	September 9, 2019
Revision Date:	September 1, 2024

TABLE OF CONTENT

1.0	PURPOSE	2
2.0	DEFINITIONS	3
3.0	APPLICATION AND RESPONSIBILITIES	9
4.0	PROCEDURES	17
5.0	PROCUREMENT METHODS	25
6.0	SUPPLIER CONDUCT	53
7.0	CONTRACT DOCUMENTATION, EXECUTION AND PERFORMANCE GUARANTEES.	59
8.0	RESOLUTION OF CONFLICT	62
9.0	INTERPRETATION	65
ATT	ACHMENTS	66
AP	PENDIX "A" - EXEMPTIONS	67
AP	PENDIX "B" - IRREGULARITIES	72

1.0 PURPOSE

This is a policy of the Corporation to establish procedures for the procurement of Goods and/or Services, including for the purposes of section 270(1) of the *Municipal Act, 2001* (Ontario).

The purposes of this policy are to:

- (a) Protect the interests of the Corporation, the public and persons participating in the Corporation's procurements processes.
- (b) Maintain the integrity of the procurement process by ensuring that, appropriate methods of procurement will be used to obtain the best value for the Corporation.
- (c) Define the authorities, roles and responsibilities of those persons involved in the procurement process.
- (d) Enhance the efficient and effective use of municipal funds.
- (e) Ensure compliance with all legislative requirements and relevant trade agreements, including, without limitation, the Comprehensive Economic Trade Agreement (CETA) and Canadian Free Trade Agreement (CFTA) and any amendments to them or successor agreements which may bind the Corporation.
- (f) Promote, in the Corporation's discretion, opportunities through procurement to advance the protection of the environment, to support sustainable development and to procure and use goods and services that have a lesser impact on human health and the environment when compared to other competing goods and services.
- (g) Promote ethical standards of behaviour and leadership by Suppliers, their subcontractors and in the supply chain in the production, manufacturing, and distribution of goods and services ultimately purchased and or consumed by the Corporation.

2.0 **DEFINITIONS**

In this policy,

"Administrative Staff" shall mean employees designated by a General Manager, part of whose responsibilities relate to the Procurement of Goods and/or Services Policy.

"Affiliated Persons" shall include any company, enterprise, business venture, or partner owned by a Supplier or over which the Supplier can or is entitled to exercise any control or influence. Affiliated Persons also includes without limitation any owner in whole or in part, operator, partner, shareholder, officer, or director of a Supplier and each of their spouses, children, parents, grandparents, siblings, and extended family members. For the purposes of this definition, Spouse and Child shall have the same meanings identified in Section 1. of the *Municipal Conflict of Interest Act R.S.O. 1990, C. M-50.*

"Approved Budget" shall mean an operating or capital budget approved by Council subject to any Council approved adjustments.

"Award" shall mean the identification of a successful Supplier pursuant to a Bid Solicitation, subject to the reserved rights of the Corporation, <u>any By-Law</u>, this <u>or</u> <u>any other</u> policy <u>of the Corporation</u>, the terms and conditions of any Bid Solicitation, and <u>the approval where indicated of Council</u>, and "Awarded" shall <u>have a corresponding meaning</u>.

"Bid" shall mean an offer or submission from a Supplier in response to a Bid Solicitation which is subject to acceptance or rejection by the Corporation.

"Bid Solicitation" shall mean a solicitation issued by the Corporation, including <u>without limitation</u> a Request for Information, Request for Expression of Interest, Request for Supplier Qualifications, Request for Quotation, Request for Tenders and Request for Proposals, or other procurement process whether completed through Electronic Tendering or otherwise.

"Bidder" shall mean any Supplier who has made an offer or submission in response to a Bid Solicitation.

"Buying Group" shall mean any other municipalities, regions, local boards and other public or not for profit agencies that provides collaborative procurement opportunities offering resources savings or economies of scale benefits to the Corporation.

"CAO" shall mean the Chief Administrative Officer of the Corporation or her or histheir designate.

"City Clerk" shall mean the City Clerk of the Corporation or <u>her or histheir</u> designate.

"Conflict of Interest" shall mean any situation or circumstances where a Supplier:

- (a) has commitments, relationships or financial interests or involvement(s) in any matter that:
 - could or could reasonably be seen to exercise an improper influence over the objective, unbiased and impartial exercise of the independent judgment by any personnel of the Corporation or its advisors or agents; or
 - (ii) could or could reasonably be seen to compromise, impair or be incompatible with the effective performance of the Supplier's obligations under an agreement with that Supplier; or
 - (iii) has contractual or other obligations to the Corporation that could or could be seen to have been compromised or impaired as a result of its participation in a procurement process; or
- (b) has knowledge of confidential information or other information internal to the Corporation of strategic and/or possible relevance to a procurement process that is not available to others and that could or could reasonably be seen to give the Supplier an unfair competitive advantage.

"Contract" or **"Agreement"** shall mean an agreement between the Corporation and a Supplier for the procurement of Goods and/or Services, including a Purchase Order.

"Contractor" shall have the same meaning as "Supplier".

"Corporation" or "City" shall mean the Corporation of the City of Cornwall.

"Council" shall mean the Council of the Corporation, <u>comprised by the Members</u> of Council who were elected by the registered voters or who have been appointed by virtue of a <u>vacancy</u>.

"Department Manager" shall mean the General Manager, Administrator, Director or Chief of a department of the Corporation or her or his designate. **"Division Manager"** shall mean a Manager, Division Manager, Deputy Treasurer, Deputy Chief or City Clerk of a division within a department of the Corporation or her or his designate.

"Designate" shall mean a person or persons assigned the duties or responsibilities of another person.

"Electronic Tendering" shall mean the use of a computer-based system directly accessible by Suppliers irrespective of their location that provides them with information related to bid solicitations and can accept vendor submissions. For greater clarity, the acceptable methods of Electronic Tendering for any individual procurement will be set out in that procurement's solicitation documents.

"Emergency" shall mean a situation of urgency brought about by unforeseeable events that makes the procurement of Goods and/or Services necessary to address an immediate risk to health, safety, security, property, the environment and/or to other public interests which the Corporation has jurisdiction to serve.

"Emergency Purchase" means a limited tender or non-competitive procurement made in accordance with defined conditions in this Policy. Emergency purchases generally do not have an approved budget prior to purchase.

"Environmentally Preferred" means goods or services that have a lesser impact on human health and the environment when compared with competing goods or services. Notwithstanding anything else in this Policy, this comparison may consider without limitation Bidders' practices, the environmental attributes of a Bidder, any certification or the absence thereof possessed by a Bidder. regulatory offenses or environmental violations by a Bidder, the participation by a Bidder in any greenhouse gas emission target setting, reduction and disclosure program, Bidders' infrastructure and equipment, employment and outsourcing practices, materials acquisition, production, manufacturing processes, life cycle costs, recycled content, recyclability, the use of refurbished reusable or reconditioned parts, waste management, packaging, distribution transportation, fuels, re-use, operational costs, maintenance or disposal practices, costs or features and the availability of energy, water or fuel saving features. The same criteria may be considered in relation to a Bidder's subcontractor. Environmentally preferred goods or services may in the discretion of the Corporation be required to have a certified environmental product declaration, or to meet the criteria or standards of a recognized third-party certification body selected by the Corporation from time to time where one exists for the product or service category being procured.

"Ethically Preferred" means goods and or services that are produced or delivered under conditions that meet or exceed national, provincial or territorial standards for employment and human rights. Notwithstanding anything else in this Policy, an assessment of ethically preferred goods and services may involve an evaluation of Bidder's and their Subcontractor's production and manufacturing processes, employment practices, the treatment of workers, respect for and adherence to human rights and the delivery by Bidders of foreign products and the adherence of the manufacturers of such goods with the mandatory minimum employment standards and human rights of their country of origin, Where foreign goods are supplied to the Corporation, it will have the right to insist in its discretion, that the manufacturing processes involved in the production of such goods comply with the minimum human rights and employment practices and standards of Canada and or any Canadian province.

"General Manager" shall mean the General Manager, Director or Chief of a department of the Corporation or their designate.

"General Manager, Financial Services" shall mean the General Manager of Financial Services and Treasurer of the Corporation or <u>her or histheir</u> designate.

"Goods" shall mean all tangible and intangible property including but not limited to supplies, products, wares, merchandise, materials, equipment, and property insurance.

"ITT Supervisor IT Manager" shall mean the Manager, Information, Technology and Telecommunications (ITT) Supervisor Innovation of the Corporation or his or her their designate.

"Legal Services" shall mean the Corporation's Legal Services Department.

"Life Cycle Cost" shall mean the cost of a good or service over the full lifetime of the good or service and not just the initial purchase price. An analysis of Life Cycle Cost may take into account, without limitation, durability, performance, disposal costs and cost savings that by be achieved over the lifetime of the good or service through environmental efficiencies or potential revenues.

"Manager" shall mean a Manager, Deputy Treasurer, Administrator, Deputy Chief or City Clerk of a division within a department of the Corporation or their designate.

"Mayor" shall mean the Mayor of the Corporation or her or histheir designate.

"Multi-use list" shall mean a list of Suppliers that the Corporation has determined satisfies the conditions for participation in that list, and that the Corporation intends (but is not obligated) to use more than once.

"Procurement" shall mean the acquisition of Goods and/or Services by purchase, lease, rental, or exchange transaction.

"Procurement Value" shall mean the estimated maximum total value of the Deliverables being procured over the term of the Contract, whether awarded to one or more suppliers, taking into account all forms of remuneration and all potential options.

"Purchase Order" shall mean the purchasing document used to formalize a purchasing transaction with a Supplier, setting out the terms and conditions applicable to the supply of Goods and/or Services by a Supplier, and which may include reference to any other contract documents and the contract value.

"Purchasing Supervisor" shall mean the Purchasing Supervisor of the Purchasing Services Department of the Corporation or <u>her or histheir</u> designate.

"Purchasing Services" shall mean the Department of Purchasing Services of the Corporation, and any successor thereto.

"Quotation" shall mean a response to a Request for Quotation.

"Request for Expression of Interest" shall mean a process used to gather information on future Supplier interest in an opportunity or information on Supplier capabilities and qualifications.

"Request for Information" shall mean a process where information is requested from potential Suppliers to gather general information, including in respect of Suppliers, Goods and/or Services.

"Request for Proposals (RFP)" shall mean a formal request for prices and details on Goods and/or Services from Suppliers, where the Goods and/or Services may not be able to be fully defined or specified or when alternate methods are being sought to perform a certain function or service, at the time of request. RFPs may be evaluated on the basis of price as well as other criteria as set out in the RFP and may include a negotiable process or provision for negotiations prior to Award.

"Request for Quotations" shall mean a solicitation issued to obtain competitive Bids for Goods and/or Services of pre-determined quantity and/or quality.

"Request for Supplier Qualifications" shall mean a solicitation that is issued to gather information on Supplier capabilities and qualifications with the intention of creating a list of pre-qualified Suppliers for future selective solicitations, including:

(a) a one-time future solicitation; or

(b) a multi-use list for solicitations of a predefined scope and duration.

"Request for Tenders" shall mean a formal request for prices on Goods and/or Services from Suppliers, where the Goods and/or Services are able to be fully defined or specified at the time of the request.

"Roster" or "Roster System" shall have the same meaning as "Multi-use List".

"Sealed Bid" shall mean a formal, sealed response received as a part of response to a Bid Solicitation.

"Selection Committee" shall mean the committee created to review proposals received by the Corporation based on the evaluation criteria, reach consensus on the final rating results and ensure that the final rating results, with supporting documents, are kept in the procurement file with the Purchasing Supervisor.

"Services" shall mean non-Goods, including all professional Services and construction Services, all Services in relation to real property and personal property including the installation, construction, maintenance, rental, repair, restoration, demolition or removal of real property or personal property.

"Subcontractor" shall mean companies that provide goods or services or both to Suppliers for inclusion in the goods or services ultimately purchased by the Corporation. Subcontractors do not have a direct business relationship with the Corporation.

"Supervisor" shall mean a supervisor within a department of the Corporation or <u>her or histheir</u> designate.

"Supplier" shall mean a person or group of persons that provides or could provide Goods and/or Services to the Corporation. <u>A Supplier shall include affiliated persons.</u>

"Supplier Arrangement" shall mean an arrangement where negotiated prices with predetermined terms and conditions are offered by one or more Supplier(s) to provide Goods and/or Services, to the Corporation on an as-required basis for a specific period of time.

"Supplier Code of Conduct and Discipline Policy" shall mean the Supplier Code of Conduct and Discipline Policy of the Corporation in use from time to time.

"Unbalanced Bid" shall mean, without limitation, a Bid that the Purchasing Supervisor believes has been manipulated <u>created or developed</u> in order to gain an advantage in the bidding process and can include <u>without limitation</u> circumstances such as where Bids contains <u>overall prices or</u> particular line item Bid prices that appear to be unreasonably high-<u>or</u>, <u>inflated</u>, <u>excessive or</u> <u>exaggerated</u>, <u>unreasonably</u> low; the inclusion of line items that have not been requested; wide disparities in Bid prices between one Bid submission and other Bid submission(s) and/or submission of artificially <u>highhighly</u> priced items <u>in</u> Bids <u>or high overall Bid prices</u> for the early stages of a project.

"Urgent Procurement" shall mean a procurement that is strictly necessary to complete for reasons of urgency brought about by events which were unforeseeable for the Corporation and the goods and services which were the subject of the procurement could not be obtained in time using open tendering.

"Vendor Management Program" shall mean the program used to manage Supplier performance run by the Corporation as set out in the Supplier Code of Conduct and Discipline Policy.

"Vendor of Record System" shall have the same meaning as "Multi-Use List".

3.0 APPLICATION AND RESPONSIBILITIES

3.1 Application

All Goods and/or Services required by the Corporation, its Council, committees, and its departments shall be acquired and disposed of in accordance with:

- (a) the provisions of this policy;
- (b) any procurement procedures established by the Purchasing Supervisor;
- (c) any other applicable policies approved by Council; and
- (d) in accordance with the requirements of applicable laws, including the Ontario Human Rights Code, the Ontarians with Disabilities Act, 2001 and the Accessibility for Ontarians with Disabilities Act, 2005.

3.2 Exemptions

This policy does not apply to the procurement of Goods and/or Services set out in Appendix "A".

3.3 Mandatory Consultation

Mandatory consultation is required for Procurements involving:

- (a) project management for municipal building assets, municipal accessibility plan initiatives, and security initiatives. Procurements involving any of the foregoing may only be issued if there has been prior consultation with the Facilities Division; and written approval of the procurement requirements related to the Facilities Division has been provided by the Manager of the Facilities Division.
- (b) information technology and office automation acquisitions or communications services. Procurements involving any of the foregoing may only be issued if there has been prior consultation with the Information Technology and Telecommunications Division and written approval of the procurement requirements related to the ITT Division has been provided by the IT Manager.

3.4 Procurement Planning

Procurement planning is essential in ensuring that the Procurement function serves as a conduit to achieving the Corporation's objectives. Effective planning ensures the responsible management of corporate resources and the timely delivery of goods and services as required.

- (a) All Procurements will be executed in accordance with this Policy, and any related or relevant policies and procedures.
- (b) Departments shall consult with Purchasing Services annually to establish and finalize their annual procurement plan which shall reflect both capital and operating expenditures.
- (c) Prior to initiating any Procurement process for Goods and/or Services the Department Contract Manager shall:
 - (i) Ensure that the Goods and/or Services are legitimately required for Corporation purposes;
 - (ii) Consider the Corporation's purposes for Procurement and determine the costs, quantities and supply duration, shortterm and long-term requirements, any ongoing maintenance, support and licensing requirements and overall project requirements to meet Corporation's needs;
 - (iii) Confirm availability of funding;

- (iv) Allow sufficient time to complete the Procurement processes as required by Purchasing Services; and
- (v) Prepare detailed unbiased specifications, statements of work and/or quantity requirements to encourage full, open, and fair competition.
- (d) Prior to issuing a competitive Procurement, the following may be issued for the purposes of gathering information, as determined by Purchasing Services: Request for Supplier Qualifications; Request for Information (RFI); or Request for Expression of Interest (RFEOI).
- (e) During the Procurement planning phase seek legal advice from Legal Services, as required.

3.5 Legal Review Requirements

Legal Services shall review and advise on a Procurement prior to Purchasing Services issuing a Procurement in the following circumstances:

- (a) Procurements with a term of more than 5 years including Contract extensions that when combined with the initial term exceed five (5) years;
- (b) Lease agreements;
- (c) Contracts not utilizing the Corporation's contract templates or where changes to the template are required;
- (d) Procurements where personal information will be collected, accessed, or maintained by the Corporation, or by a Supplier on behalf of the Corporation.
- (e) Any other Procurement matters at the discretion of the Purchasing Supervisor, or the General Manager of requesting department, in consultation with General Manager, Financial Services.

3.6 Procurement Value

The Procurement Value must be appropriately estimated in accordance with the section below in order to determine the appropriate Procurement method and to ensure compliance with the requirements of this policy.

In estimating Procurement Value, all forms of remuneration must be taken into account, whether awarded to one or more Suppliers, including:

- (a) all estimated premiums, fees, commissions and interest;
- (b) all estimated costs to the Corporation, including, if applicable, delivery, installation, training, operation, maintenance, replacement and disposal, but excluding sales taxes, and less applicable rebates or discounts; and
- (c) if the Procurement provides for the possibility of contract renewal options, the total value of all such contract renewal options.

3.3<u>3.7</u> Purchasing Services Responsibilities

Purchasing Services shall have the following responsibilities, which are to be performed in the manner that is determined by the Purchasing Supervisor from time to time:

- (a) Be responsible for the overall administration of <u>purchasingprocurement</u> policies, procedures and guidelines.
- (b) Providing-to all departments, on request, with advice on various procurement matters.
- (c) Reviewing the corporate use of Goods and/or Services to ensure the Corporation is receiving the best value.
- (d) Ensuring the <u>Corporation's purchasingCorporation's procurement</u> and disposition transactions are conducted ethically and professionally.
- (e) Maintaining a system for notifying Suppliers who have expressed an interest in doing business with the Corporation of the availability of applicable <u>purchasingprocurement</u> documents.
- (f) Conforming to good material management practice by simplifying and standardizing, wherever possible, procurement documents and processes for the Corporation.
- (g) Preparing Agreements in conjunction with the General Manager, Financial Services.
- (h) Maintaining records of <u>purchasingprocurement</u> transactions pursuant to the Corporation's document retention policy and in accordance with the requirements of any applicable trade agreements, as required.
- (i) Consulting external advisors on procurement matters, as appropriate.

(j) Any other matter which the Corporation decides from time to time is appropriate to be undertaken by Purchasing Services.

3.4<u>3.8</u> Purchasing Supervisor Responsibilities

The Purchasing Supervisor shall have the authority and responsibility:

- (a) Approving and prescribing procurement procedures not specifically provided for in this policy, in consultation with the General Manager, Financial Services and/or the CAO.
- (b) Coordinating Bid Solicitations on behalf of the Corporation, subject to the approval thresholds in Section 5.1.
- (c) Determining the appropriate form and method of procurement by which Goods and/or Services shall be procured on behalf of the Corporation, including <u>co-operativeCollaborative</u> <u>Procurementpurchasing</u> and limited tendering purchasing.
- (d) Reviewing procurement specifications and providing recommendations on improvements or changes to ensure consistency with the Policy.
- (e) Determining the appropriate means for issuing procurement information and receiving bid submissions, including through Electronic Tendering or any other means.
- (d)(f) Establishing templates for procurement process documents.
- (e)(g) Administering the Corporation's conduct of the procurement process, including planning, implementing, monitoring and supervising the appropriate:
 - (i) solicitation method;
 - (ii) development of evaluation criteria or related Supplier performance requirements;
 - (iii) advice and support on evaluation and Award; and
 - (iv) reporting to Council and the public, as required.
- (f)(h) The identification of those Goods and/or Services which are more effectively acquired through a Supplier Arrangement.

- (g)(i) Establishing a procedure for analyzing Bids and proposals to determine if the Corporation has received an Unbalanced Bid and the actions the Corporation may take in response to a materially Unbalanced Bid, including rejection.
- (j) Administering the Supplier Code of Conduct and Discipline Policy, including any Vendor Management Program and any discipline or other actions taken by the Corporation pursuant to those policies.
- (k) Preparing quarterly information reports to Council listing procurement awards meeting the following conditions:
 - (i) Competitive Procurements, within the Approved Budget, with a value of \$150,000.01 or greater pursuant to Table 1, in section 5.1;
 - (ii) Non-Competitive Procurements, within the Approved Budget with a value of \$75,000.01 or greater pursuant to Table 2, in section 5.1;
 - (iii) Any Procurement exceeding the Approved Budget by between \$75,000.01 and \$250,000, approved by the CAO pursuant to Table 3, section 5.1;
 - (iv) Non-Budgeted Procurements with a value between \$75,000.01 and \$150,000 pursuant to Table 4, section 5.1;
 - (v) Emergency and Urgent Procurements with a value of \$75,000.01 or greater pursuant to Table 4, section 5.1.
- (h)(l) Such other authorities and responsibilities as are set out in this policy or otherwise delegated to the Purchasing Supervisor.
- (i)(m) Any other matter which the Corporation decides from time to time is appropriate to be undertaken by the Purchasing Supervisor.

The Purchasing Supervisor may delegate any aspect of a procurement process to a department as the Purchasing Supervisor may determine to be necessary or desirable.

3.5<u>3.9 Department General</u> Manager / Division Manager / Supervisor Responsibilities

- (a) Advising the Purchasing Supervisor of departmental procurement plans and specific upcoming procurements including attempts to determine the amount of time which is sufficient to complete the procurement as may be stipulated in the procurement policies or procurement procedures;
- (b) Participating in the development of template specifications, quality requirements, scopes of work and other stipulated requirements including the development of other Contract documentation for routine procurements conducted by their department;
- (c) Ensuring that procurements made by staff are carried out in compliance with the requirements of this policy;
- (d) Directing and overseeing the management of all Contracts led by or coordinated by their department including, without limitation, the approval of subcontracting, assignment, amendments, optional renewals, terminations, enforcement of warranties and performance securities and the adoption of related contract management procedures; and
- (e) Any other matter which the Corporation decides from time to time is appropriate to be undertaken by a DepartmentGeneral Manager, Division.

3.10 Financial Services General Manager and Treasurer Responsibilities

- (a) The Financial Services General Manager and Treasurer is ultimately responsible for overseeing Purchasing Services and ensuring corporate compliance with this policy.
- (b) The Financial Services General Manager and Treasurer may assume some or all of the responsibilities of the Purchasing Supervisor.

3.11 Chief Administrative Officer (CAO) Responsibilities

- (a) Exercise general control and management of the affairs of the Corporation for the purpose of ensuring the efficient and effective operation of the Corporation and the staff placed under their supervision.
- (b) Any other duties outlined as being the responsibility of the CAO pursuant to this policy.

3.12 Council of the City of Cornwall Responsibilities

- (a) It is the role of Council to establish policy and approve expenditures through the Corporation's Budget approval process.
- (b) Council delegates authority to the Corporation's employees to incur expenditures through Procurements in accordance with this Policy.

3.13 All Employees Responsibilities

- (a) All City employees are responsible for complying with this policy. Individual employees involved in procurement activities shall clearly understand their obligations and responsibilities under this policy and shall consult with Purchasing Services in respect of any questions regarding the application or interpretation thereof.
- (b) Failure to adhere to the requirements outlined in this Policy may lead to disciplinary action up to and including termination of employment.

3.14 Conflict of Interest

- (a) Employees of the Corporation shall comply with the Corporation's policies on conflict of interest.
- (b) At no time during the Procurement process, beginning with the planning stage through to the Award and the Contract, shall any City employee accept, directly or indirectly, from any Bidder or Supplier, anything of any value, tangible or intangible, including but not limited to rebates, gifts, meals, money, or special privileges. No preference will be given to Bidders who provide solicited or unsolicited goods or samples to the Corporation or who demonstrate the operation of such goods or samples.
- (c) City employees and their immediate family shall not have a financial interest, either directly or indirectly, in any Contract or with any person acting for the Corporation in any Contract, unless such interest has been declared pursuant to the Code of Conduct for Employees. Such declaration shall be in writing, to their manager, with a copy to the Purchasing Supervisor, indicating the specific nature of the conflict of interest.
- (d) City employees must declare in writing to their manager, with a copy to the Purchasing Supervisor, any real or perceived conflicts of

16 | Page

interest arising from interacting, managing, supervising, or overseeing the work of any family member, former employee of the City or anyone with whom they have a close personal relationship or personal interest, who is working for a Supplier in any capacity.

- (e) All City employees participating in the development of specifications and/or the evaluation process for a Procurement process will be required to declare any real or perceived conflict of interest in accordance with the applicable Procurement procedures.
- (f) Department Contract Managers must be impartial in their treatment of all Suppliers and in managing Contracts, including approval of any payments.

4.0 PROCEDURES

4.1 Financial Authorities

- (a) Unless otherwise approved by Council, no expenditures or commitments shall be incurred or made, and no account shall be paid, by the Corporation for Goods and/or Services, except as authorized in accordance with this policy.
- (b) Notwithstanding any provision contained herein, all expenditures shall be within the current Council-approved annual budget or within Council-approved estimates. In the event that the annual budget has not yet been approved by Council, expenditures can be made provided the expenditures are not more than fifty percent (50%) greater than the previous year's approved budget authority amount:
 - (i) for the same or substantially similar purchase of Goods and/or Services;
 - (ii) the expenditure is for routine operating and recurring expenditures;
 - (iii) the expenditure is required under applicable laws; or
 - (iv) unless otherwise directed by Council.
- (c) A Bid Solicitation may only provide for an option to renew where the total value of the original term and the renewal term of the proposed Contract is:

- (i) within the authorization level of the person approving the purchase pursuant to Section 5.1;
- (ii) within the Council-approved annual budget amount or estimate; or
- (iii) otherwise approved by Council.
- (d) Where Goods and/or Services are routinely purchased on a multiyear basis, the exercise of authority to Award a Contract is subject to:
 - (i) the identification and availability of sufficient funds in appropriate accounts for the current year, or other Council appropriation of funds; and
 - the demand for the Goods and/or Services continuing to exist in subsequent years, and where, in the opinion of the Purchasing Supervisor, the required funding can reasonably be expected to be made available.

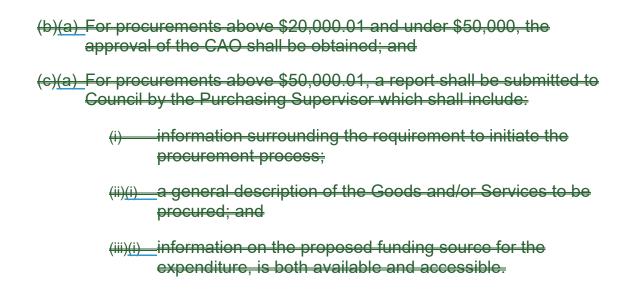
4.2 Conditional Bid before Annual Budget Adoption

The Purchasing Supervisor is authorized to obtain, prior to the adoption of the current year's budget by Council, Bids for construction Services and/or additional or replacement equipment, provided that the procurement documents used include a clause specifically stating that the acceptance of any such Bid and any Award is subject to budget approval by Council, that the items specified are subject to change in quantity and/or deletion and that the Bid Solicitation may be withdrawn at any time in the discretion of the Corporation without any liability to the Corporation.

Non-Budgeted Expenditures

Where a requirement exists to initiate a project for which Goods and/or Services are required and funds are not contained within the current year's approved budgets to meet the proposed expenditure, then, prior to the commencement of the procurement process:

(a) For procurements under \$20,000, the approval of the General Manager, Financial Services shall be obtained;



4.3 **Provisions / Practices**

All Bid Solicitations, Contracts and other procurement process documents shall include appropriate terms and conditions as determined by the Purchasing Supervisor in consultation with the General Manager, Financial Services.

4.4 **Process Integrity**

- (a) All Bid Solicitations issued by the Corporation shall clearly identify the requirements of the procurement, the criteria that will be used in the evaluation of Bids and, where appropriate, generally, the methods of weighting and evaluating the criteria. In addition, all Bid Solicitations issued will, where the Purchasing Supervisor determines it is appropriate:
 - (i) Outline mandatory, rated, and other criteria that will be used to evaluate Bids, including the weight of each criterion, but not necessarily sub-criteria.
 - (ii) State that Bids that do not meet the mandatory criteria may be disqualified.
 - (iii) Establish the formula for calculating the total price/cost.
 - (iv) Allocate weighting to the price/cost component of the evaluation criteria.

- (v) Contain specifications that are not designed or written so as to clearly express a preference for any one Supplier or, that contain reference to a specific brand and model as a benchmark unless it is necessary to do so, in the view of the Purchasing Supervisor. <u>However, notwithstanding this</u> provision and the requirement in subsection (g) hereof, the Corporation may in its discretion give preference to <u>Environmentally Preferred and or Ethically Preferred</u> Goods and or Services.
- (b) The Corporation shall ensure that all information marked and identified in Bids by a Supplier as proprietary is kept secure prior to the closing date and during the evaluation period. Thereafter, the Corporation shall handle all such Supplier's proprietary information in accordance with, and subject to, the Municipal Freedom of Information and Protection of Privacy Act (Ontario) (MFIPAA).
- (c) The Corporation shall ensure that all Bid Solicitations, Bids, Contracts and other procurement process documents are kept on file in accordance with the Corporation's document retention policy.
- (d) The scheduling of a procurement process must not be intentionally delayed as a means of making the procurement qualify under any exception to a policy.
- (e) No requirement for the payment of Goods and/or Services received by the Corporation shall be divided, <u>split or otherwise structured in</u> <u>order to reduce the Procurement value or contract value</u> in order to avoid <u>or circumvent</u> any of the requirements of this policy.
- (f) Irregularities in Bid submissions will be addressed by the procedures outlined in Appendix "B" Irregularities.
- (g) No local preference will be given to any Supplier <u>All procurement</u> processes are to be conducted so as not to unduly exclude local vendors, while at the same time maintaining the duty to be fair, open, and transparent to all Bidders in accordance with legislation, trade agreements, and best practices. The Corporation endeavours to achieve the best value in its commercial transactions. Accordingly, the Corporation will not be bound to purchase Goods or Services based upon Canadian content, nor shall the Corporation practice local preference in Awarding contracts, unless specifically permitted

20 | Page

to do so under the authority of the Province of Ontario or the Government of Canada.

- (h) Elected officials, appointed officers and employees of the Corporation shall not knowingly cause or permit anything to be done or communicated to anyone in a manner which is likely to cause any potential Supplier to have an unfair advantage or disadvantage in obtaining a contract for the supply of Goods and/or Services to the Corporation. This also includes a Contract with any other municipality, local board or public body involved in the purchase of Goods and/or Services either jointly or in cooperation with the Corporation.
- (i) Where it is determined that an Elected Official has contravened subsection (h), the Corporation in its discretion, may terminate any affected solicitation or contract entered into in such circumstances and any such termination shall be entirely without cost to the Corporation. No Supplier shall have any right to assert any claim for breach of contract, negligence, intentional interference with economic relations or inducing breach of contract, or damages of any kind including lost profits or lost opportunities in such circumstances.
- (i)(i) Elected officials of the Corporation shall separate themselves from the procurement process and have no involvement whatsoever in specific Bid Solicitations. Elected officials of the Corporation should not see any documents or receive any information related to a particular Bid Solicitation while the procurement process is ongoing. Elected officials of the Corporation who receive inquiries from Suppliers related to any specific Bid Solicitation shall immediately direct those inquiries to the General Manager, Financial Services.

4.5 Notification of Procurement Opportunities

 (a) Notifications of procurement opportunities with a value less than \$100,000.00 for goods or services, excluding construction, or less than \$250,000.00 for construction or such increased sums as required by applicable trade agreements (as they may be amended) may be made by means of open Electronic Tendering, or any other method as determined by the Purchasing Supervisor.

- (b) Notifications of procurement opportunities with a value of \$100,000.00 or greater for goods or services, excluding construction, or \$250,000.00 or more for construction or such increased sums as required by applicable trade agreements (as they may be amended) from time to time must be made by means of Electronic Tendering.
- (c) If a method other than Electronic Tendering is used for notification of procurement opportunities, consideration shall be given to ensuring wide dissemination and equal opportunity for Suppliers.

4.6 Timelines for Posting Procurements

With regard to timelines for posting procurements, procedures shall be implemented that ensure Suppliers are provided with an adequate response time that meets the minimum requirements outlined in applicable laws, including trade agreements referred to in paragraph 1.0(e) hereof. Where no trade agreement applies, the Purchasing Supervisor will determine the appropriate response time for a Bid Solicitation. -In absence of any other measure, a minimum response time of forty (40)-_days is required for Goods and/or Services valued in excess of three hundred thousand dollars (\$300,000) and for construction Services contracts valued in excess of eight million dollars (\$8,000,000) or such increased sums as required by applicable trade agreements (as they may be amended) from time to time. Response times may be further reduced as follows:

- (a) For open procurements, the minimum response time is reduced to thirty-_five (35)-_days if the procurement notice is posted <u>electronically on a bid site acceptable to the Purchasing</u> <u>Supervisorthrough Electronic Tendering means</u>, to thirty (30)-_days if the procurement documentation is made available by <u>electronicElectronic Tendering</u> means from date of publication notice, and further reduced to twenty five (25)-_days if submission by <u>electronicElectronic Tendering</u> means is accepted.
- (b) The posting period for open procurements may be further reduced to ten (10)-_days if a notice of planned procurement is published at least forty (40)-_days and not more than twelve (12) months in advance of the publication notice of intended procurement.
- (c) Bid posting periods for commercial Goods and/or Services may be reduced to thirteen (13)-_days if both the publication notice and procurement documentation are published electronically on a bid site acceptable to the Purchasing Supervisor, through Electronic

<u>Tendering means</u> and may be further reduced to ten (10)-_days if submissions are received <u>electronically</u><u>through Electronic Tendering</u> <u>means</u>.

- (d) For selective procurements using a Supplier list, response time may be reduced to ten (10)-_days by agreement between the municipality and the selected Suppliers.
- (e) Other than situations of Emergency, as herein defined, procurements shall be posted for not less than ten (10)-_days.

4.7 Confidentiality

This policy is subject to the MFIPPA.- Persons applying this policy should be aware of this legislation when disclosing information received relevant to the issue of Bid Solicitations, Bids, or the Award of Contracts resulting from Bid Solicitations. -The Corporation will disclose all information in accordance with MFIPPA.

4.8 Personal Purchases

No purchase shall be processed for personal items of employees of the Corporation or any member of Council except where permitted by this policy.

4.9 In-house Bids

Bids from a department or division of the Corporation may be obtained for the procurement of Goods and/or Services in circumstances where the CAO considers it appropriate. Otherwise in-house Bids will not be encouraged. -If any Bid Solicitation permits the receipt of in-house Bids, all Suppliers shall be made aware of this fact in the Bid Solicitation documentation. -In such situations the following clause, subject to any modifications approved by the Purchasing Supervisor, will be incorporated into the Bid Solicitation document:

"Suppliers should note that the Corporation has the capacity to supply the need described herein. Consequently, a division(s) of the Corporation has been invited to submit a bid which will be included in our evaluation process."

In-house Bids will be received and evaluated in the same manner as external Bids. However, the evaluation of such In-house Bids may include an assessment of savings to the Corporation if an in-house Bid is accepted. <u>Every Supplier</u>

acknowledges that In-house Bids have potential inherent advantages and waives any objection, compliant or cause of action of any kind to the use, evaluation, or acceptance of any In-house Bid.

4.10 Environmentally Responsible Preferred (Green) Procurement and Ethically Preferred Goods and Services

The purchase of environmentally responsible Goods and/or Services may be given preference during the evaluation stage of a submission when the Bid Solicitation either directly calls for "green" Goods and/or Services or where "green" Goods and/or Services may be priced as an option. These Goods and/or Services are defined as those having a lesser or reduced effect on human health and the environment when compared to other Goods and/or Services that serve the same purpose. Therefore, without limitation, procurement specifications may include calls for, or express preference for, environmentally responsible Goods and/or Services that, without limitation: use recycled materials; are durable, reusable or are designed to be recycled; consume fewer resources in their manufacture and/or their use; and Services that use environmentally responsible practices.

Notwithstanding anything else in this Policy, the purchase of environmentally preferred Goods and/or Services may be targeted by the Corporation and given preference during the evaluation stage of a procurement. In such circumstances, the procurement documents shall outline criteria and weighting which may be used in the evaluation of bids as well as Bidders and their subcontractors which may include in the Corporation's discretion, without limitation, the matters described in the definition of environmentally preferred goods or services as well as life cycle costs.

Notwithstanding anything else in this Policy, the Corporation may in its discretion target ethically preferred goods and or services in any Solicitation and give preference to Suppliers in any Solicitation whose production, distribution, transportation and or delivery or disposal of goods and services meets or exceeds national or provincial standards with respect to employment and human rights. Solicitation documents may set out both evaluation criteria and the weighting the Corporation may give to such criteria in respect of Ethically preferred goods and services.

5.0 **PROCUREMENT METHODS**

5.1 Financial Limitations and Authority Levels for Awards

- (a) The tables in this Section 5.1:
 - (i) Set out the applicable Bid Solicitation process available, based on the nature of the procurement; and
 - (ii) Establish the position within the Corporation which must approve an Award.
- (b) The amounts in this Section 5.1, value of Goods and/or Services are to be exclusive of HST and delivery charges.
- (c) All procurements of Goods and/or Services must otherwise comply with this policy, including the Council-approved budget or estimate requirements of Section 4.1.

5.1.1 Competitive and Non-Competitive Procurements within Budget (Tables 1 – 2)

(a) If the amount spent on the procurement is within the Approved Budget by Council, and no additional funds are required, the Purchasing Supervisor will include the procurement as part of a guarterly Council Report, if it has a value of \$150,000.01 or more.

Table 1 - COMPETITIVE PROCUREMENT within Budget		
Financial Limits (\$)	Method(s)	Authority Level
Under \$5,000	Low-Value Procurement Credit Card	Administrative Staff as designated by General Manager requisitioning department
\$5,000.01 to \$10,000	Request for Quotation	Supervisor, requisitioning department
\$10,000.01 to \$20,000	Request for Quotation Request for Proposals	Manager, requisitioning department

\$20,000.01 to \$50,000	Request for Quotation	General Manager, requisitioning
	Request for Proposals	department
	Request for Tender	
\$50,000.01 to \$75,000	Request for Quotation	General Manager, Financial
	Request for Proposals	Services
	Request for Tender	
\$75,000.01 to \$150,000	Request for Proposals	CAO
	Request for Tender	
\$150,000.01 or more	Request for Proposals	CAO and disclosed in quarterly
if within Approved	Request for Tender	Report to Council.
Budget		

Table 2 - NON-COMPETITIVE PROCUREMENT within Budget		
Financial Limits (\$)	Method(s)	Authority Level
Under \$100	Petty Cash	Administrative Staff as designated by Manager of requisitioning department
Under \$5,000	Credit card or Negotiation pursuant to Section 5.14	Manager of requisitioning department
\$5,000.01 to \$50,000	Negotiation pursuant to Section 5.14	General Manager of requisitioning department
\$50,000.01 to \$75,000	Negotiation pursuant to Section 5.14	General Manager, Financial Services
\$75,000.01 or more if within Approved Budget	Negotiation pursuant to Section 5.14	CAO and disclosed in quarterly report to Council.

5.1.2 Over-Budget Expenditure (Table 3)

(a) If the procurement exceeds the Approved Budget by Council between \$75,000.01 to \$250,000, the Purchasing Supervisor will include the procurements approved by CAO in the quarterly Council Report noting the source of funding for the over-expenditure.

- (b) For the procurements that exceed the Approved Budget by Council by \$250,000.01 or more, a separate report shall be submitted to Council prior to award by the Purchasing Supervisor which shall include:
 - (i) a general description of the Goods and/or Services to be procured;
 - (ii) information surrounding the circumstances for exceeding budget;
 - (iii) information on the proposed funding source for the overexpenditure.

Table 3 - OVER BUDGET <u>EXPENDITURES</u>		
Financial Limits (\$)	Authority Level	
Over the budgeted amount to a maximum of \$50,000	General Manager of requisitioning Department	
Over the budgeted amount between \$50,000.01 and \$75,000	General Manager, Financial Services	
Over the budgeted amount between \$75,000.01 to \$250,000	CAO and disclosed in quarterly report to Council.	
\$250,000.01 or more over budgeted amount	Council in a separate report	

5.1.3 Non-Budgeted Expenditures (Table 4)

Where a requirement exists to initiate a project for which Goods and/or Services are required and funds are not contained within the current year's approved budgets to meet the proposed expenditure, then, prior to the commencement of the procurement process approval shall be required as per authority levels in table 4.<u>:</u>

(a) If the procurement value is between \$75,000.01 to \$150,000, the Purchasing Supervisor will include the non-budgeted procurements approved by CAO in the quarterly Council Report noting the source of funding.

<u>———For procurements under \$20,000, the approval of the General</u>			
Manager, Financial Services shall be obtained;			
	For procurements above \$20,000.01 and under \$50,000, the		
<u>approval</u>	approval of the CAO shall be obtained; and		
(b) For the procurements of a value of \$150,000.01 or more, a separate report shall be submitted to Council prior to award by the Purchasing Supervisor which shall include: For procurements above \$50,000.01, a report shall be submitted to Council by the Purchasing Supervisor which shall include:			
(i) information surrounding the requirement to initiate the procurement process;			
(ii) a general description of the Goods and/or Services to be procured; and			
(iii) information on the proposed funding source for the expenditure, which states that funding is both available and accessible.			
		at funding is both available and	
Tal			
Tal Financial Limits (\$)	accessible.		
	accessible.	PENDITURES	

\$50,000.01 to \$75,000	Request for Quotation	General Manager, Financial
	Request for Proposals	Services
	Request for Tender	
	Negotiation pursuant to	
	Section 5.14	
\$75,000.01 to \$150,000	Request for Proposals	CAO and \$75,000.01 to \$150,000
	Request for Tender	disclosed in quarterly report to
	Negotiation pursuant to	Council.
	Section 5.14	
\$150,000.01 or more	Request for Proposals	Council in a separate report
	Request for Tender	
	Negotiation pursuant to	
	Section 5.14	
Emergency and Urgent	Pursuant to Section 5.14.1	CAO and disclosed in quarterly
Procurements	and 5.14.2	report to Council.
\$75,000.01 or more		

Financial Limits (\$)	Method(s)	Authority Level		
COMPETITIVE PROCUR	COMPETITIVE PROCUREMENT			
Under \$5,000	Request for Quotation	Administrative Staff as		
	Request for Supplier Qualification	designated by Department Manager, requisitioning		
	Request for Proposals	department		
	Request for Tender			
\$ 5,000.01 to \$10,000	Request for Quotation	Supervisor, requisitioning		
	Request for Supplier Qualification	department		
	Request for Proposals			
	Request for Tender			
\$10,000.01 to \$20,000	Request for Quotation	Division Manager,		
	Request for Supplier Qualification	requisitioning department		
	Request for Proposals			
	Request for Tender			
\$20,000.01 to \$50,000	Request for Quotation	Department Manager, requisitioning department		
	Request for Supplier Qualification			
	Request for Proposals			

Financial Limits (\$)	Method(s)	Authority Level	
	Request for Tender		
\$50,000.01 to	Request for Quotation	General Manager, Financial	
\$75,000.00	Request for Supplier Qualification	Services	
	Request for Proposals		
	Request for Tender		
\$75,000.01 to \$150,000	Request for Supplier Qualification	CAO	
	Request for Proposals		
	Request for Tender		
\$150,000.01 or more	Request for Supplier Qualification	Council	
	Request for Proposals		
	Request for Tender		
NON-COMPETITIVE PRO	OCUREMENT		
Under \$100	Petty Cash	Administrative Staff as designated by Department Manager of requisitioning department	
Under \$5,000	Credit card or Negotiation pursuant to Section 5.14	Division Manager of requisitioning department	
Under \$75,000	Negotiation pursuant to Section 5.14	General Manager, Financial Services	
\$75,000.01 to \$150,000	Negotiation pursuant to Section 5.14	CAO	
\$150,000.01 or more	Negotiation pursuant to Section 5.14	Council	
OTHER PROCESSES	OTHER PROCESSES		
Not applicable	Request for Information	Purchasing Supervisor in consultation with Division Manager of requisitioning department	
Not applicable	Request for Expression of Interest	Purchasing Supervisor in consultation with Division Manager of requisitioning department	

5.2 Purchasing Card / Credit Card

A credit card (purchasing card) is a mechanism to provide departments with a simplified, direct purchasing method for the purchase and payment of Goods

and/or Services. -The credit card (where possible) will be used instead of petty cash and prior processes such as "mini purchase orders" and "blanket purchase orders"...

5.2.1 General Requirements

- (a) Cardholders must be designated employees of the Corporation. -The DepartmentGeneral Manager shall approve in her or histheir discretion which employees are eligible to be cardholders. -The General Manager, Financial Services, will have final approval regarding the issuance of all corporate credit cards.
- (b) A municipal department responsible for any purchase shall ensure that Goods and/or Services acquired using a credit card is within the approved budget for within the current operating year.
- (c) All credit cards will have a predeterminedpredetermine "single transaction limit", and a "monthly credit limit" as determined and authorized by the <u>DepartmentGeneral</u> Manager of the applicable department and approved by the General Manager, Financial Services.
- (d) Financial Services shall monitor the use of credit cards and ascertain that the spending limits approved fall under the approved format.
- (e) Every cardholder shall be informed in writing of his or hertheir responsibilities and the restrictions regarding the use of the credit card and shall agree to them in writing.
- (f) By accepting to act as a cardholder, the cardholder authorizes the Corporation access to the account file, as well as to have both internal and external audits performed on the file. The Cardholder is deemed to accept that the Corporation can perform (or have a third party perform) audits at any time and reason within its discretion.
- (f)(g) Every cardholder shall review any associated credit card terms and conditions from the issuer and ensure that they abide by such terms and conditions.
- (h) No Elected Official or employee shall gain personal benefit through the collecting of reward points, such as, but not limited to, air miles, gasoline company points, grocery store points, etc. while making a purchase on behalf of the Corporation. Any rewards points that accrue from the use of a cardholder's purchasing card shall accrue or be converted to the use and benefit of the City of Cornwall.

5.2.2 Prohibitions

- (a) The credit card shall not be used:
 - (i) when a contract is in effect for the Goods and/or Services (unless pre-authorized by the Purchasing Supervisor);
 - (ii) for personal purchases of any kind;
 - (iii) for computer hardware/software/digital camerasinformation technology and office automation acquisitions or communications Services (unless pre-authorized by the ITT Supervisor);IT Manager;
 - (iv) for any purchase of Goods and/or Services that may be prohibited under any other policy approved by Council;
 - (v) for cash advances;
 - (vi) for telecommunication equipment such as telephones, cellular phones. Batteries for cell phones and cell phone accessories may be purchased with a credit card;
 - (vii) for splitting of total purchase cost, singly or between cardholders to avoid transaction limits;
 - (viii) for third party client purchases;
 - (ix) for clothing (small dollar value items are to be approved by Purchasing Services prior to purchasing);
 - (x) for office equipment, office furniture (small dollar value items are to be approved by Purchasing Services); and prior to purchasing);
 - (xi) for alcohol purchases, unless approved by the General Manager of the Department; and

(xi)(xii) for souvenirs.

- (b) The credit card is not transferrable to any other employee, and shall not be used by any person other than the authorized cardholder.
- (c) Cardholders will be held liable for any misuse or willful disregard of policies or operating procedures that result in a loss of money, fraud or collusion.

- (d) No cardholder may accept cash or a cheque from a Supplier who is making a refund pertaining to a transaction previously charged to a credit card account. The Supplier in all cases must issue a credit voucher.
- (e) The Purchasing Supervisor <u>Financial Services</u> will review the <u>credit card</u> <u>summaries</u>Purchasing Card Statements and <u>bills</u>documentation and advise the <u>supervisorSupervisor</u> of any employee who has not adhered to this policy.
- (f) Cardholders who do not adhere to the pre-set limits and requirements set out above in this policy, may have their credit card privileges limited and/or revoked or be subject to other discipline up to and including termination.
- (g) The Corporation may terminate access to a Purchasing Card or its associated account or permission to use a Purchasing Card at any time for any reason in its absolute discretion.

5.2.3 Administration, Reconciliations and Audits

- (a) Every month, cardholders must provide a transaction report including all receipts of all transactions detailing the itemized purchases to their Supervisor or Manager for approval.
- (b) Cardholders may not approve their own Statement.
- (c) Cardholders are required to attach to the Statement all sales receipts, packing slips and any other documents related to the transactions listed on the credit card statement in the order as they appear on the statement.
- (d) If a receipt cannot be obtained after a reasonable effort, the Cardholder shall complete the Lost Receipt Declaration Form. Continued failure to provide receipts may result in disciplinary action up to and including termination of employment.
- (e) The Cardholders' Supervisor or Manager shall review the monthly reconciliation of the Statements, and send them to the Financial Services by the prescribed deadline.
- (f) The Corporation may conduct internal or external audits of Cardholder purchases, the Logs and associated receipts/documentation at any time and for any reason at its discretion.

5.2.4 Cardholder Responsibilities

(a) Cardholders are responsible for the following:

- (i) Adhering to all conditions and restrictions imposed on the Purchasing Card by the Corporation and the issuing bank.
- (ii) Completing the Purchasing Card Cardholder Agreement Form acknowledging, and submitting that they have read, understood and accept the conditions, once they have received the card.
- (iii) Ensuring that the Purchasing Card and other documents bearing the Card number are kept in a secure location.
- (iv) Immediately notifying the issuing bank and the Deputy Treasurer of the loss or theft of the Card.
- (v) Informing the Deputy Treasurer of the cancellation, or change in the employee's area of responsibility.
- (vi) Returning the Card to the Deputy Treasurer for cancellation, as appropriate.
- (vii) Verifying the amount of Harmonized Sales tax (HST) paid, to allow for accurate rebates as applicable for the Corporation.
- (viii) Resolving disputed but not fraudulent charges. Notify the Deputy Treasurer regarding potential fraudulent purchases.
- (ix) Keeping supporting documentation (i.e., sales slips, cash register and credit card receipts, Supplier notices, etc.) related to all purchases made with the Purchasing Card for reconciliation, account verification and audit purposes. If no receipt is available, this must be noted in the Log.
- (x) Completing a transaction report on a monthly basis, for all purchases made with the Purchasing Card.
- (xi) For over-the-counter transactions, or services rendered, the cardholder will certify that the goods have been received when goods are shipped, the cardholder must ensure that the shipment matches the order or sales slip.
- (xii) For telephone, online and over-the-counter orders, the cardholder should have the Supplier provide a copy of the detailed receipt or instruct the Supplier to supply a copy of the receipt with the shipment.

5.3 Low-Value Procurements

Where the Procurement Value does not exceed \$5,000, the Corporation may procure by obtaining one or more informal quote(s) from Suppliers. Quotes may be obtained through several informal methods, including public advertisements, Supplier catalogs, or by contacting Suppliers directly. Departments-may conduct Low-Value Procurements independently but are required to keep all supporting documentation pertaining to the procurement.

5.35.4 Request for Quotations

- (a) When Quotations are sought from potential Suppliers the request should contain a list or description of all relevant Goods and/or Services intended to be purchased.
- (b) When a Request for Quotations is used, a minimum of three
 (3)-_written quotations shall be required before Purchasing Services makes an Award;_
- Where it is impractical to request a minimum of three (3)-_written quotations or where three written quotations are not received, an Award may be made with the approval of the Purchasing Supervisor.
- (d) Requests for Quotations may be issued through a public process such as Electronic Tendering or depending on the value of the request by placing a notice in the appropriate print publications, or by "Invitation Only" to select Suppliers with proven expertise and experience.
- (d)(e) The Division Manager or Supervisor of the requisitioning department shall be responsible to review the submissions and to verify that all requirements of the Request for Quotation are met. -Once a recommendation is made by the Division Manager or Supervisor, the Purchasing Supervisor may issue a Contract, including a Purchase Order, to the selected Supplier.
- (e)(f) Unless terms for a Request for Quotation states otherwise, the issuance of a Request for Quotation or receipt of a Request for Quotation shall not result in nor create any preliminary contractual or other obligations or duties on the Corporation.

5.4<u>5.5</u> Request for Tender

- (a) Requests for Tender can be used for the procurement of Goods and/or Services of any value.
- (b) Requests for Tenders may be used where the Goods and/or Services sought are able to be fully defined or specified at the time of the request.
- (c) Wherever possible, a<u>A</u> minimum of three (3)-_written Bids are to be requested wherever possible and practicable.
- (d) Where it is impractical to request a minimum of three (3)-_written Bids, or where three (3) written Bids are not received, the approval of the Purchasing Supervisor is required.
- (e) Requests for Tenders may be issued through a public process such as <u>Electronic Tendering or depending on the value of the request by</u> placing a notice in the appropriate <u>local and/or trade newspaper</u>, <u>electronicallyprint publications</u>, or by "Invitation Only" to select Suppliers with proven expertise and experience.
- (f) Submissions in response to Request for Tenders are not formally opened in public, nor is it necessary to publicly disclose the prices or terms of a submission at the time of submission or Bid opening.
- (g) Submissions will be electronically sealed by the bidding system until the closing date and time.
- (g)(h) Request for Tenders may or may not include pre-qualification or Expression Interest.
- (h)(i) After Bids are opened they shall be reviewed by the Purchasing Supervisor to determine whether:
 - (i) all requirements of the tender have been met;
 - (ii) all unit prices have been correctly extended; and
 - (iii) the extensions have been correctly totaled.
- (i)(j) Tender Awards shall generally, but not exclusively, be made to the lowest Bidder provided that the Bid meets requirements and specifications of the tender. However, in determining the lowest responsive Bidder, consideration may be given, in addition to price, to the Supplier's:

- (i) ability, capacity, skill and experience to meet the requirements of the procurement;
- (ii) financial capacity, commercial and technical abilities of the Supplier;
- (iii) the quality, availability and adaptability of the Goods and/or Services to the particular use required;
- (iv) past performance and past experience;
- (v) all criteria set out in the Bid Solicitation;
- (vi) such other criteria that the Purchasing Supervisor, in consultation with the General Manager, Financial Services, determines is appropriate in the circumstances.
- (j)(k) Unless terms of a Request for Tender states otherwise, the issuance of a Request for Tender or receipt of a submission in response to a Request for Tender shall not result in or create any preliminary contractual or other obligations or duties on the Corporation.
- (k)(I) Following approval of the Award under a Request for Tenders, the Purchasing Supervisor shall inform the successful Supplier that its Bid has been accepted and shall notify all other Suppliers of the Award, the name of the successful Supplier and such other information required to be disclosed by any applicable trade agreement.
- (I)(m) Following approval of the Award, the results of the tender and such other information required to be disclosed by any applicable trade agreement are to be published in the same manner as the Request for Tender or such other method as approved by the Purchasing Supervisor.

5.55.6 Request for Proposals

- (a) Requests for Proposals can be used for a procurement of Goods and/or Services of any value.
- (b) Request for Proposals shall generally be used when:
 - (i) the requirements for Goods and/or Services cannot be precisely defined;

- (ii) the expectation is that Suppliers may propose solutions to arrive at the result desired by the Corporation;
- (iii) the evaluation criteria to determine best value may include more than factors such as price; and/or
- (iv) the Goods and/or Services are of a unique or complex nature.
- (c) Requests for Proposals shall contain the Terms and Conditions developed by the department in consultation with Purchasing Services and approved by the Purchasing Supervisor.
- (d) Requests for Proposals shall clearly establish required project scope, outcome and/or requirements.
- (e) Requests for Proposals shall clearly outline the technical and pricing evaluation criteria and applicable ratings assigned that will form the basis of the contract award. The bids shall be evaluated based on those criteria and weighting, subject to amendments to the same released by an Addendum. The effectiveness of the proposal is measured against a set of evaluation criteria, which may include but is not limited to: approach, experience and qualifications, methodology, past performance, scheduling, demonstration of the equipment, price and/or strategy.
- (c)(f) A minimum of three (3)-_written proposals are to be requested wherever possible and practicable before an Award is made under a Request for Proposals.
- (d)(g) Where it is not practical to request a minimum of three (3)-_written proposals or where three (3) written proposals are not received, approval of the Purchasing Supervisor is required.
- (e)(h) Requests for Proposals may be issued through a public process such as <u>Electronic Tendering</u>, <u>depending on the value of the request</u> by placing a notice in the appropriate <u>local and/or trade</u> <u>newspaperprint publications</u>, electronically or by "Invitation Only" to select Suppliers with proven expertise and experience.
- (f)(i) Request for Proposals are not formally opened in public, nor is it necessary to publicly disclose the prices or terms of a submission in response to a Request for Proposals at the time of submission or Bid opening.

- (g)(j) Requests for Proposals may or may not include a pre-qualification process or an Expression of Interest. —Depending on its terms, the process may involve negotiations subsequent to the submission of proposals on any or all of the specifications, contract terms, and prices, including without limitation, best and final offers from one or multiple bidders as outlined in a Request for Proposals document.-Alternatively, the Corporation may Award a contract on the basis of initial offers received, without discussion.
- (h)(k) After opening, each Bid shall be reviewed by the Purchasing Supervisor to determine whether all mandatory requirements of the Bid Solicitation have been met, in which case the Bid will be distributed to the Selection Committee.
- (i)(I) A Selection Committee will be established <u>prior to the closing time of</u> <u>the Request for Proposal</u> and shall comprise of a minimum of two representatives with the relevant expertise from the initiating department and should include the Purchasing Supervisor. The <u>Selection Committee will review all proposals based on the evaluation criteria,</u> <u>reach consensus on the final rating results and ensure that the final rating</u> <u>results, with supporting documents, are kept in the procurement file with the</u> <u>Purchasing Supervisor.</u>
- (m) Unless A minimum of one representative from the Information Technology and Telecommunications Division of the Corporation must be on every Selection Committee for procurements involving software development that will interact with the Corporation's mainframe computer.
- (n) In order to maintain integrity and accountability in the procurement process, members of a Selection Committee shall only be comprised of individuals who are employees of the Corporation and/or employees of the other public body on behalf of whom the Corporation is procuring.
- (j)(o) The Selection Committee will review all proposals based on the evaluation criteria, reach consensus regarding the final rating of the proposal and ensure that the final rating, with supporting documents, are kept in the procurement file with the Purchasing Supervisor. Unless the terms for a Request for Proposal states otherwise, the issuance of a Request for Proposal or receipt of a submission in response to a Request for Proposal shall not result or create any preliminary contractual or other obligations or duties on the Corporation.

- (k)(p) Following approval of an Award, the Purchasing Supervisor shall, subject to the Corporation's reserved rights and the terms of the applicable trade agreements, inform the successful Supplier that its Bid has been accepted and notify all other prospective Suppliers of the Award, the name of the successful Supplier and such other information required to be disclosed by any applicable trade agreement.
- (I)(q) Following approval of the Award, the results of the procurement process and such other information required to be disclosed by any applicable trade agreement are to be published in the same manner as the Request for Proposal or such other method approved by the Purchasing Supervisor.

5.7 Other Processes

5.7.1 Request for Supplier Qualifications

- (a) A Request for Supplier Qualification may be used for selective Bid Solicitations to establish a list of pre-qualified Suppliers that will later be eligible to respond to:
 - (i) a specific solicitation; or
 - (ii) a multi-use list.
- (b) A call-up protocol shall be disclosed in the Request for Supplier Qualifications which sets out the subsequent selection process and the general terms and conditions that will govern any future work assignments and, where applicable, any proposed framework pricing. The call-up protocol contained in a Request for Supplier Qualifications shall also disclaim any contractual commitment to call-up any <u>specific amount of Goods and/or Services</u>, or other obligation of the Corporation to call on any Supplier on the specific or multi-use list to provide Goods and/or Services.
- (c) Approval of any subsequent Award to a Supplier under the Request for Supplier Qualifications call-up protocol shall be made in accordance with the authority to Award open competitive Bid Solicitations.
- (d) When using a multi-use list, the Corporation shall allow Suppliers to apply at least annually, or if a Request for

Supplier Qualification is published by <u>electronic Electronic</u> <u>Tendering</u> means, it is made available continuously, for inclusion in accordance with the notice of intended procurement for the Request for Supplier Qualifications. Notwithstanding the foregoing, if a multi-use list will be valid for three years or less, the Corporation may publish the Request for Supplier Qualification once only, at the beginning of the period of the validity of the list provided the Request for Supplier Qualification:

- (i) states the period of validity and that further Request for Supplier Qualification will not be published; and
- (ii) is published by <u>electronic Electronic Tendering</u> means and is made available continuously during its period of validity.

5.5.15.7.2 Information Gathering

- (a) Prior to issuing a competitive Bid Solicitation, the following solicitation documents may be issued for the purpose of gathering information:
 - (i) a Request for Information; (RFI); or
 - (ii) a Request for Expressions of Interest. (RFEOI).
- (b) The receipt of a submission in response to a Request for Information or a Request for Expressions of Interest does not create a legal contract or legal duties or obligations on the part of the Corporation and the submission of a response to a <u>Request for information or a Request for Expressions of</u> <u>Interest shall be deemed to be a waiver by a respondent of</u> any claim, remedy, cause of action or complaint.
- (c) The Corporation shall not use a response from a Request for Information or Request for Expressions of Interest to prequalify potential Suppliers and shall not use the response to influence the chances of the participating Suppliers from becoming the successful proponent in any subsequent opportunity.

5.65.8 Purchase by Negotiation

- (a) The Purchasing Supervisor may conduct negotiations with Suppliers if:
 - (i) the Bid Solicitation indicates the intent to conduct negotiations; or
 - (ii) it appears from the evaluation that no Bid is obviously the most advantageous in terms of the specific evaluation criteria set out in the Bid Solicitation.
- (b) The Purchasing Supervisor shall ensure that any elimination of Suppliers participating in negotiations is carried out in accordance with the evaluation criteria set out in the Bid Solicitation, and shall:
 - (i) if negotiations are conducted concurrently with multiple Suppliers, provide a common deadline for the participating Suppliers to submit any new or revised Bids; or
 - (ii) if negotiations are conducted consecutively with one Supplier at a time, provide a deadline for the participating Supplier to submit any new or revised Bid prior to proceeding to negotiate with the next ranked Supplier.

In the course of negotiations, the Corporation shall not give an unfair advantage to, or discriminate against, a Supplier.

5.75.9 Two-EnvelopeStage Process

- (a) The two-<u>envelopestage</u> Bid process may be used where it is deemed that the technical and qualitative information of a given Bid Solicitation is to be evaluated without being influenced by prior knowledge of the corresponding pricing information. -The <u>"</u>two-<u>envelope"stage</u>" Bid process may be used when a Request for Proposal is issued. -The Corporation shall advise all Suppliers when the two-<u>envelopestage</u> Bid process is to be used.
- (b) The two-stage process means the proposal is submitted with the pricing sealed separately. The pricing is un-sealed if the Proponent meets the minimum threshold score listed in the RFP document.
- (c) In a two-envelope Bid process, each Supplier must submit qualitative and technical information in a sealed envelope (envelope one) and pricing information in a second sealed envelope (envelope two). The contents of envelope one shall be opened and evaluated by the Selection Committee and rated according to a pre-determined point system. Only the second envelopes of those Bids meeting the

specifications of the Request for Proposal shall be opened and evaluated. If a proposal is not eligible to proceed to price evaluation, the Supplier shall be disqualified from further consideration and envelope two shall be returned to the Supplier unopened.

- (d)(c) In a two-stage Bid process, each Supplier must submit qualitative and technical information separately from pricing information. In instances where physical copies of bids are accepted by the Corporation, the qualitative and technical information must be placed in a sealed envelope, and the pricing information must be provided in a separate sealed envelope. In instances where electronic bids are submitted to the Corporation, bidders must submit the qualitative and technical information separately from their pricing information, in accordance with the electronic submission service's process for "sealing" documents.
- (e)(d) The technical submission shall be opened and evaluated by the Selection Committee and rated according to a pre-determined point system. -Only the second envelopes pricing information of those Bids meeting the specifications of the Request for Proposal shall be opened and evaluated. -If a proposal is not eligible to proceed to price evaluation, the Supplier shall be disqualified from further consideration and envelope two pricing submission shall not be returned to the Supplier unopened opened.

5.8<u>5.10</u> Tied Bids

If the lowest compliant Bids from two or more Bidders are identical in cost or unit price, the Purchasing Supervisor, in consultation with the General Manager, Financial Services and the requesting department, are authorized to enter into negotiations with the Suppliers who have submitted the identical prices in an attempt to resolve the tied Bids. The Corporation, in its discretion, may consider any of the following options in the negotiations:

- (a) awarding the work to multiple Suppliers, if practical;
- (b) basing the price on an alternative factor submitted in the Bids i.e., several items may have been bid, but only one was the price used to Award;
- (c) providing an opportunity for the tied Suppliers to submit new prices;
- (d) In the case of tied Bids between more than two Suppliers, the successful Bidder may be determined with reference to which Bidder is able to supply the goods or services contracted for at the earliest date, if the Bid Solicitation documents provide for this method of tiebreak;

- (d)(e) in the case where two Suppliers are tied, the successful Bidder may be determined by a coin toss; or
- (e)(f) in the case of tied Bids between more than two Suppliers, the successful Bidder may be determined by the drawing of a name.

5.95.11 One Bid & Bids Exceeding Budget

- (a) In any of the following circumstances, the Purchasing Supervisor, in consultation with the General Manager, Financial Services, may choose to either cancel the Bid Solicitation and/or reissue the Bid Solicitation at a later date:
 - (i) when only one compliant Bid has been received;
 - (ii) when the lowest compliant Bid exceeds the available project budget for the Goods and/or Services; or
 - (iii) when all Bids received are non-compliant with the specifications or quotation terms and conditions, or-

(iii)(iv) when it is not in the public interest to award a contract.

- (b) Where only one compliant Bid has been received as outlined in Section 5.11(a)(i), the Purchasing Supervisor, in consultation with the requesting department, may also accept the Bid as submitted or negotiate changes required to achieve an acceptable Bid.
- (c) Where the lowest compliant Bid exceeds the available project budget as outlined in Section 5.11(a)(ii), the Purchasing Supervisor, in consultation with the requesting department, may also proceed to negotiate changes to pricing, terms or conditions with the lowest compliant Supplier to achieve an acceptable Bid.
- (d) Where all Bids received are non-compliant as outlined in Section 5.11(a)(iii), it is prudent to cancel the solicitation process and recall Bids if time permits. However, where time does not permit, the Purchasing Supervisor, in consultation with the requesting department, may make changes to the specifications, terms or conditions that were set out in the Bid Solicitation. -In such cases all Suppliers who provided a response to the Bid Solicitation before the closing date shall have a further opportunity to present a new Bid based on the revised specification, terms or conditions.

5.105.12 Bid Withdrawal

Any prospective Supplier who has submitted a Bid may request that it be withdrawn. -Withdrawal requests shall be directed to the Purchasing Supervisor in writing. -Withdrawal shall be allowed if the request is made prior to closing. Generally, Bids withdrawn prior to closing shall be returned unopened to the Supplier.- Whether Bids may be withdrawn post closing on any Bid Solicitation will be governed by the terms of that Bid Solicitation.

5.115.13 Cancellation of a Bid Solicitation

A <u>DepartmentGeneral</u> Manager with the concurrence of the Purchasing Supervisor and the General Manager, Financial Services may cancel a Bid Solicitation at any time <u>up tofor any reason, including that it is not in the public interest to award</u> <u>a</u> contract, <u>Award</u> provided the contract has not yet been awarded.

If a Bid Solicitation is cancelled prior to the award of contract, the Corporation may decline to disclose the prices of the Bids received.

5.12<u>5.14</u> Non-Competitive Procurements

When the Purchasing Supervisor in consultation with the General Manager, Financial Services determines it is advisable, the Corporation may procure Goods and/or Services pursuant to a non-competitive procurement process of any nature acceptable to it. -Without limiting the generality of the matters listed in (a) to (m) below, the following are circumstances where a non-competitive procurement process may be used:

- (a) no Bids were submitted, or no Suppliers asked to participate in a procurement process;
- (b) no Bids were submitted that conformed with the essential requirements of the tender documentation;
- (c) no Suppliers satisfied the conditions for participation of the Bid Solicitation;
- (d) the submitted Bids in an existing procurement process were collusive;
- (e) if the Goods and/or Services can be supplied only by a particular Supplier and no reasonable alternative, or substitute Goods and/or Services exist for any of the following reasons:

- (i) the requirement is for a work of art;
- (ii) the protection of patents, copyrights, or other exclusive rights;
- (iii) due to an absence of competition for technical reasons;
- (iv) the supply of Goods and/or Services is controlled by a Supplier that is a statutory monopoly;
- (v) to ensure compatibility with existing Goods, or to maintain specialized Goods that must be maintained by the manufacturer of those Goods or its representative;
- (vi) work is to be performed on property by a contractor according to provisions of a warranty or guarantee held in respect of the property or the original work; or
- (vii) work is to be performed on a leased building or related property, or portions thereof, that may be performed only by the lessor;
- (f) for additional deliveries by the original Supplier of Goods and/or Services that were not included in the initial procurement, if a change of Supplier for such additional Goods and/or Services:
 - (i) cannot be made for economic or technical reasons such as requirements of interchangeability or interoperability with existing equipment, software, Services, or installations procured under the initial procurement; and
 - (ii) would cause significant inconvenience or substantial duplication of costs for the Corporation;

if strictly necessary, and for reasons of urgency brought about by events unforeseeable by the Corporation (including any Emergency), the Goods and/or Services could not be obtained in time using open tendering;

- (g) for Goods purchased on a commodity market;
- (h) if the Corporation procures a prototype or a first Good or Service that is developed in the course of, and for, a particular contract for research, experiment, study, or original development. Original development of a first Good or Service may include limited production or supply in order to incorporate the results of field testing and to demonstrate that the Good or Service is suitable for

production or supply in quantity to acceptable quality standards, but does not include quantity production or supply to establish commercial viability or to recover research and development costs;

- (i) for purchases made under exceptionally advantageous conditions that only arise in the very short term in the case of unusual disposals such as those arising from liquidation, receivership, or bankruptcy, but not for routine purchases from regular Suppliers;
- (j) if a contract is awarded to a winner of a design contest provided that:
 - (i) the contest has been organized in a manner that is consistent with the principles of this policy, in particular relating to the publication of a tender notice; and
 - (ii) the participants are judged by an independent jury with a view to a design contract being awarded to a winner;
- (k) if Goods and/or Services regarding matters of a confidential or privileged nature are to be purchased and the disclosure of those matters through an open tendering process could reasonably be expected to compromise government confidentiality, result in the waiver of privilege, cause economic disruption, or otherwise be contrary to the public interest; or
- (I) such other circumstances as may be authorized by Council.

As soon as possible following the making of the purchase of not less than \$50,000 and not more than \$150,000 (pursuant to this Section 5.14), and not later than the next regular meeting of Council after the expiry of the quarter in which the purchase was made, the Purchasing Supervisor will prepare a written report detailing the circumstances of a purchase made pursuant to this Section.

For purchases made pursuant to Table 2 in Section 5.14 that are greater than \$75,000, the Purchasing Supervisor will include the details of the circumstances of the purchase in the quarterly report to Council.

5.14.1 Emergency Procurements

For the purposes of this section, "Emergency" means an event or occurrence that the General Manager deems an immediate threat to:

(a) Public Health;

- (b) The maintenance of essential City service; or
- (c) The welfare and protection of persons, property, or the environment; and the event or occurrence necessitates the immediate need for Goods and/or Services to mitigate the emergency and time does not permit for a competitive procurement process.

In an Emergency, the Procurement of Goods and/or Services may be authorized without a competitive process. The requesting Department shall contact the Purchasing Supervisor, if possible, for direction on an appropriate Procurement process and possible sources of supply. A list of pre-qualified Suppliers or Vendors of Record will be used to select Suppliers, whenever possible.

The General Manager shall notify the CAO, General Manager, Financial Services and the Purchasing Supervisor of all emergency purchases within 24 hours following the purchase(s).

Upon return to normal business operations, Emergency Purchases in excess of \$75,000 will be reported to Council, as information, to inform Council of the nature and cause of the Emergency and actions taken to resolve the Emergency.

If a formal declared Emergency exists, the Purchasing Supervisor, in conjunction with the General Manager, Financial Services and the CAO will determine the appropriate limits and procedure to be followed for P-Cards, Quotations, Proposals and Tenders, taking appropriate steps to obtain the necessary goods and/or services.

5.14.2 Urgent Procurements

For the purposes of this section, an "Urgent Procurement" is a procurement that is strictly necessary to complete for reasons of urgency brought about by events which were unforeseeable for the Corporation and the goods and services which were the subject of the procurement could not be obtained in time using open tendering.

An Urgent Procurement may be authorized without a competitive process. The requesting Department shall contact the Purchasing Supervisor, for direction on an appropriate Procurement process and possible sources of supply. A list of pre-qualified Suppliers or Vendors of Record will be used to select Suppliers, whenever possible.

The General Manager shall notify the CAO, General Manager, Financial Services and the Purchasing Supervisor of all Urgent Procurements within 24 hours following the procurement.

Urgent Procurements in excess of \$75,000 will be reported to Council, as information, to inform Council of the nature and cause of the urgency, what unforeseeable circumstances caused the need for the Urgent Procurement, and why the goods and services could not be obtained in time using open tendering.

5.13<u>5.15</u> Exercise of Contract Renewal Options

Where a Contract contains an option for renewal, the Purchasing Supervisor and the applicable Division Manager or Supervisor will consult on whether such renewal option should be exercised provided that:

- (a) the Supplier's performance in supplying the Goods and/or Services is considered to have met the requirements of the Contract;
- (b) the Purchasing Supervisor agrees that the exercise of the option is in the best interest of the Corporation, subject to the levels of authority set out in Section 5.1 of this policy;
- (c) funds are available in appropriate accounts within the Council approved estimates;
- (d) the Corporation may consider any other factor it considers relevant.

The-Division Manager or Supervisor shall provide the Purchasing Supervisor with an explanation, in writing, as to why exercising the renewal option is in the best interest of the Corporation and include comment on applicable market situation and trends, if any. Any decision to exercise a renewal option shall be in the Corporation's sole discretion.

Where the Corporation exercises an option to renew and circumstances change such that the goods or services are no longer necessary or in demand, or the Corporations budget can no longer accommodate such expenses, then the Corporation shall be entitled to terminate any renewal after it is exercised without cost to the Corporation.

5.14 Co-operative Purchasing

The Purchasing Supervisor may participate with other governments, agencies or public authorities in co-operative ventures or contracts where the best interest of the Corporation would be served, providing that under such arrangements:

- (a) the purchasing procedures and policies of the government agency or public authority initiating the procurement process will be followed;
- (b) the Corporation and each government agency or public authority will issue its own Purchase Order or Contract for their respective Goods and/or Services.

5.16 Collaborative Procurement

In lieu of a Corporation-run competitive process, the Corporation may participate with a Buying Group in collaborative procurement initiatives where it is in the best interests of the Corporation to do so, with the approval of Procurement Services, and where:

- (a) Combining the volume of Goods and/or Services to be purchased by the Corporation and the Buying Group would result in the Best Value for the Corporation;
- (b) Where the Buying Group is initiating the Procurement, the Procurement process will be conducted in accordance with the procurement policies or by-laws of the Buying Group;
- (c) Where the Corporation is initiating the Procurement, the <u>Procurement process will be conducted in accordance with this</u> <u>Policy; and</u>
- (d) Legal Services shall be consulted to determine the appropriate agreements required to conduct such initiatives with the other Buying Group.

The Buying Group initiating the Procurement may determine the Award. If the Award is not in the best interest of the Corporation or is in violation of this Policy, the Purchasing Supervisor may decline acceptance of the Award.

5.155.17 Disposal of Surplus Goods

(a) Where any Goods, equipment or inventory stock are surplus, obsolete or not repairable, they shall be identified as surplus by the disposing department to the Purchasing Supervisor. -The

Purchasing Supervisor shall then circulate a list of surplus assets prior to the sale or disposal of such items.

- (b) If Goods, equipment or inventory stock which are identified as surplus by the disposing department are not required by any other departments, then the Goods may be declared surplus by the Purchasing Supervisor.
- (c) Goods, equipment or inventory stock declared surplus by the Purchasing Supervisor shall be disposed of by the Corporation in the following manner, set out by order of priority:
 - (i) trade-in as part of the procurement of other similar Goods being acquired by the Corporation;
 - be sold by external advertisement, formal request, auction or tender (where it is deemed appropriate, a reserve bid may be established);
 - (iii) donation to a not-for-profit charitable organization that is registered as such with the Canada Revenue Agency. Where there are several charitable organizations who have expressed interest in receiving a donation in the same items, the successful organization shall be selected by negotiation;
 - (iv) classifying as waste and recycling, scrapping, dismantling, destroying and/or disposing; and/or
 - (v) in any other way determined by the Purchasing Supervisor.
- (d) No disposition of such good(s) shall be made to employees, elected officials, or their family members unless such good(s) are sold through external advertisement, formal request, auction or public tender.
- (e) The net proceeds of the disposal of surplus assets shall be credited to the Corporation's appropriate reserve account or used to fund the replacement Goods, except if Council has otherwise directed.

5.18 Leasing

In certain circumstances, it may be economically advisable for the Corporation to enter into a Financing Lease to acquire the rights to use capital equipment rather than an outright purchase. In which case, the Corporation will follow the Municipal Act, 2001, and the Ontario Regulation 653/05 or as amended in

51 | Page

addition to the other applicable requirements of this policy and the trade agreements.

5.19 Standardization

Standardization identifies specific procedures, documents, requirements, equipment, or manufacturers that best fit the Corporation's needs and may limit Suppliers. The Corporation may apply the following standardization provisions for procurements which are not subject to the requirements of any applicable trade agreements.

- (a) All standardization recommendations must be approved in accordance with authority levels in Section 5.1 and have a reasonable time limitation of no longer than five (5) years before a re-evaluation.
- (b) Following approval of the standardization, procurements (including any non-competitive procurements) may proceed with specific products, equipment, or Suppliers within the time limitation no longer than five (5) years.
- (c) Authorization to Award Contracts related to a Procurement of standardized, goods or services shall be in accordance with the authority levels (within the thresholds and method of procurement employed) and will be reported in accordance with Section 5.1.

6.0 SUPPLIER CONDUCT

6.1 Honesty and Good Faith

- (a) Suppliers must respond to the Corporation's Bid Solicitations in an honest, fair and comprehensive manner that accurately reflects their capacity to satisfy the requirements stipulated in the Bid Solicitation.
- (b) Suppliers shall submit a Bid only if they know they can satisfactorily perform all obligations of the proposed Contract in good faith.
- (c) Suppliers shall alert the Purchasing Supervisor to any factual errors, omissions and ambiguities that they discover in a Bid Solicitation as early as possible in the process to avoid the Bid Solicitation being cancelled. -The failure of a Supplier to identify such error or omission or ambiguity prior to Bid closing shall result in the Supplier having deemed to accept such error, omission or ambiguity.
- (d) Suppliers and their subcontractors shall at all times comply with all federal, provincial, municipal and territorial laws, this Policy and the Supplier Code of Conduct and Discipline Policy. Failure to comply with applicable law, this Policy or the Corporation's Supplier Code of Conduct and Discipline Policy may lead to the disqualification of a Supplier under any Solicitation, or an exclusion from eligibility to bid on or be awarded any contract with the Corporation.

6.2 Confidentiality

Suppliers shall maintain confidentiality of all confidential information that the Corporation discloses to the Supplier as part of the Bid Solicitation process.

6.3 Conflict of Interest

Suppliers must declare and fully disclose any actual or potential Conflict of Interest related to the preparation of their Bid or where the Supplier foresees an actual or potential Conflict of Interest in the performance of the Contract, including, without limitation:

 engaging any family members, friends or private business associates of any public office holder which may have, or appear to have, any influence on the procurement process, or subsequent performance of the Contract;

- (b) prior involvement by the Supplier or affiliated persons in developing the technical specifications or other evaluation criteria for the Bid Solicitation;
- (c) prior access to confidential Corporation information by the Supplier, or affiliated persons that is related to the Bid Solicitation and that was not readily accessible to other prospective Suppliers or other information of the Corporation that was not readily accessible to other Suppliers or their affiliated persons;
- (d) the Supplier or its affiliated persons are indebted to or engaged in past, ongoing or proposed litigation with the Corporation in relation to a previous contract.

6.4 Unethical Bidding Practices

No Supplier may discuss or communicate, directly or indirectly, with any other Supplier or their agents, officers, directors or employees about the preparation of the Supplier's submission including, without limitation, any connection, comparison of figures or arrangements with, or knowledge of any other Supplier making a submission for the same work. Suppliers shall disclose to the Purchasing Supervisor any affiliations or other relationships with other Suppliers that might be seen to compromise the principle of fair competition, including any proposed subcontracting relationships.

6.5 <u>Illegal Conduct Illegality</u>

A Supplier shall disclose to the Corporation any previous convictions of itself or its affiliated persons for collusion, bid-rigging, price-fixing, bribery, fraud or other behaviours or practices prohibited under the Criminal Code, the Competition Act or other applicable law, for which they have not received a pardon.

A Supplier shall disclose to the Corporation any previous convictions, findings of guilt, misconduct or transgression by itself or its affiliated persons in relation to any conduct prohibited by the Criminal Code of Canada, (including without limitation for collusion, bid-rigging, price-fixing, bribery, fraud or other behaviour of any kind), prohibited under the Competition Act, or by any other federal, provincial, municipal or territorial law or regulation. The Corporation may consider any such information in the assessment of a bid under any Solicitation including as grounds not to award a Supplier a contract or as a basis for disqualification under the Corporation's Supplier Code of Conduct and Discipline Policy

6.6 Litigation

Suppliers shall disclose upon request any and all litigation, proceedings, matters, or investigations in which they, or any of their affiliated persons or subcontractors are involved or have been involved (for period of time specified by the Corporation) in the Superior Court of any province or territory, the Federal Court of Canada, or before any federal, provincial, municipal or territorial tribunal, board, commission or investigative body agency or police authority. The Corporation shall have the right to inspect and audit any document or thing associated with such matters. Suppliers will provide the Corporation with access to all documents related to such matter(s) or where necessary, a written consent to the Corporation to allow it to receive any and all information in relation to such matters from any third party. The involvement of a Supplier in any such matter may be considered by the Corporation as grounds for disqualification of a Supplier for eligibility to bid on or be awarded any contract with the Corporation under its Supplier Code of Conduct and Discipline Policy.

6.66.7 Interference

- (a) No Supplier may lobby, threaten, intimidate, harass, or otherwise interfere with any Corporation employee or public office holder in relation to their procurement duties or otherwise communicate with any employee or agent of the Corporation in a manner inconsistent with the terms of a Bid Solicitation. No Supplier may likewise lobby, threaten, intimidate, harass, or otherwise interfere with an effort by any other Supplier to a respond to a Bid Solicitation or to perform any contract awarded by the Corporation.
- (b) No Supplier shall offer gifts, favours or inducements of any kind to the Corporation, or its employees, agents or public office holders, or otherwise attempt to influence or interfere with their duties in relation to the procurement process or management of a Contract.

6.7<u>6.8</u> Misrepresentation

Suppliers are prohibited from misrepresenting their relevant experience and qualifications in relation to any Bid Solicitation and must acknowledge that the Corporation's process of evaluation may include a review of information provided by the Supplier's references as well as records of past performance, past experience or reputation on previous contracts with the Corporation or other

public or private bodies or such other information as is available from any other source.

6.86.9 Prohibited Communication during the Bid Solicitation

No Supplier, or affiliated person, may discuss or communicate either verbally, or in writing, with any employee, public office holder, or the media in relation to any Bid Solicitation between the time of the issuance of the Bid Solicitation to the Award and execution of final form of Contract. All Supplier communications shall be with the Purchasing Supervisor or the employee specifically designated for that purpose in the Bid Solicitation.

6.96.10 Failure to Honour Bid

Suppliers shall honour their Bids, except where they are permitted to withdraw their Bids in accordance with this Policy, the terms of a Bid Solicitation, or the process disclosed in the Bid Solicitation. Suppliers shall not refuse to enter into a Contract <u>if they have not withdrawn their bid in accordance with this Policy, the terms of a Bid Solicitation</u>, or the process disclosed in the Bid Solicitation or refuse to fully perform the Contract once their Bid has been accepted by the Corporation.

6.106.11 Supplier Performance

- (a) Suppliers shall fully perform their Contracts with the Corporation and follow any reasonable direction from the Corporation to cure any default.
- (b) Suppliers shall be fully responsible for the conduct of their employees, agents and subcontractors and shall ensure that any employees, agents and subcontractors fully perform all relevant terms and conditions of the Contracts with the Corporation as applicable.

No Supplier shall in the performance of a Contract with the Corporation fail to perform the terms and conditions of the Contract satisfactorily, including, without limitation, any of the grounds set out in the Corporation's Supplier Discipline Policy, as the same may be amended from time to time.

(c) No Supplier shall in the performance of a Contract with the Corporation fail to perform the terms and conditions of the Contract satisfactorily, including, without limitation, fail to comply in any way with this Policy or any other of the Corporation's applicable policies, including, but not limited to:

- (i) Supplier Code of Conduct and Discipline Policy;
- (ii) Harassment in the Workplace Policy
- (iii) Workplace Violence Policy
- (iv) Integrated Accessibility Policy
- (v) Information Technology Polices, and

as the same may be amended from time to time.

- (d) The Corporation shall have the right to evaluate a Supplier's performance pursuant to the Corporation's Vendor Management Program.
- (e) In the event that the Corporation awards a contract to the Supplier, the Corporation shall have at all times the right to demand, receive and inspect any document or thing associated with the work under any Contract or with respect to the Supplier's obligations under this or any other Policy of the Corporation. The Corporation shall have the right to enter any premises of a Supplier and a Supplier shall be deemed to consent to such entry by the Corporation to secure a copy (in electronic or other form) of any such document or thing.
- (c)(f) <u>The DepartmentGeneral</u> Manager shall enforce all rights and remedies of the Corporation under a Contract in compliance with that Contract.
- (d)(g) The <u>DepartmentGeneral</u> Manager shall ensure that evidence is documented and advise the Purchasing Supervisor in writing where the performance of a Supplier has been deficient. -A Supplier shall be provided an opportunity to respond to allegations of poor performance or non-compliance in any manner contemplated in the associated Contract or as otherwise permitted by the Corporation's Supplier <u>Code of Conduct and</u> Discipline Policy.

6.116.12 Disqualification of Suppliers for Non-Compliance

(a) Any contravention of Section 6.0 by a Supplier, including, without limitation, any failure to disclose actual or potential Conflicts of

Interest, may be grounds for the Purchasing Supervisor to disqualify a Supplier or its affiliates from being awarded a Contract.

- (b) Any failing grade given by the Corporation to a Supplier as part of the Vendor Management Program, may be grounds for the Purchasing Supervisor to disqualify a Supplier or its affiliates from being awarded another Contract.
- (b)(c) The Purchasing Supervisor, in consultation with the General Manager, Financial Services, may also disqualify any Supplier who may otherwise have a Conflict of Interest that cannot be resolved in relation to any procurement.
- (c)(d) A contravention of Section 6.0 may also be grounds for the Purchasing Supervisor to terminate any Contract to that Supplier and require the return of any advance payments made to the Corporation.
- (e) Any contravention of any provision in this or any other Policy of the <u>Corporation as amended from time to time may lead to the</u> <u>disqualification of any Supplier under any Solicitation or to its</u> <u>ineligibility to bid on or be awarded any Contract with the</u> <u>Corporation.</u>
- (d)(f) The rights of disqualification set out in this policy are in addition to any rights set out in the Corporation's Supplier Code of Conduct and Discipline Policy as the same may be amended from time to time.
- (e)(g) Nothing in Section 6.12 shall prohibit the Corporation from including additional terms relating to the disqualification of Suppliers in any Bid Solicitation.

6.126.13 Exclusion of Suppliers

- (a) The Purchasing Supervisor, in consultation with the General Manager, Financial Services, may prohibit a Supplier or its affiliates from participating in present or future Bid Solicitations under the following conditions:
 - (i) bankruptcy or insolvency of the Supplier;
 - (ii) false declarations of the Supplier;

- (iii) significant or persistent deficiencies in performance of any substantive requirement or obligation under a prior contract or contracts;
- (iv) final judgments <u>or convictions for or</u> in respect of <u>serious</u> crimes or other <u>serious</u> offences of the Supplier;
- (v) professional misconduct or acts or omissions that adversely reflect on the commercial integrity of the Supplier;
- (vi) failure to pay federal, provincial or municipal taxes by the Supplier; or
- (vii) such other grounds as the Purchasing Supervisor in consultation with the General Manager, Financial Services, determines is appropriate.
- (b) Any Supplier being excluded from present or future Bid Solicitations due to any of the above grounds will be reported to the CAO and respective <u>DepartmentGeneral</u> Manager.
- (c) The rights of exclusion set out in this policy are in addition to any rights set out in the Corporation's Supplier Discipline Policy as the same may be amended from time to time.
- (d) Nothing in Section <u>6.12</u> <u>6.13</u> shall prohibit the Corporation from including additional terms relating to the exclusion of Suppliers in any Bid Solicitation.

7.0 CONTRACT DOCUMENTATION, EXECUTION AND PERFORMANCE GUARANTEES

7.1 **Procurement Documentation**

In order to maintain consistency, the Purchasing Supervisor may provide guidelines to Corporation's departments on all procurement policies and procedures and on the structure, format and general content of procurement documentation.

- (a) The Purchasing Supervisor shall be responsible for all procurement documents, in accordance with this policy.
- (b) Departments shall be responsible to prepare and provide, in writing, to the Purchasing Supervisor specifications and approved budget

amount to support preparation of procurement documentation. -The Purchasing Supervisor shall review all specifications, terms and conditions and have the authority to change the documentation as deemed necessary.

7.2 Contractual Agreement

Where an Award of a Contract has been made, then in addition to any other general or specific authority delegated by Council regarding contract execution:

- (a) The form of Contract may be disclosed in the Bid Solicitation, including any process and scope for contract negotiations.
- (b) All Awards are subject to the execution of a Contract or issuance of a Purchase Order by the Corporation.
- (c) Awards shall be made by way of a written notification to the selected Supplier.
- (d) No municipal employee is permitted to sign or forward an Agreement to a Supplier other than in accordance with this policy.
- (e) All Agreements Purchasing Contracts to be entered into by the Corporation, whether to be executed physically or digitally, shall be forwarded to the City Clerk for signature endorsement. The For physical contracts, the City Clerk shall ensure that the proper signatures and, if appropriate, the corporate seal are appended on the contracts in accordance with the relevant by-law or delegated authority, and subject to the approvals contemplated in Section 5.1. 5.1. In the case of electronic contracts, in addition to the above requirements, as applicable, the City Clerk shall ensure that the signatures are digitally verified and the contract is otherwise in compliance with all relevant by-laws or delegated authority, and subject to the approvals contemplated in Section 5.1. The Mayor and City Clerk may enter into and execute any Contracts in relation to any Award.
- (f) Purchasing Services shall have the authority to execute written notification or Purchase Orders issued in accordance with these provisions.
- (g) The City Clerk shall be responsible for safeguarding the original Agreement in the case of a physical agreement, or in the case of a digital agreement, a copy with verified signatures, for archival

purposes.- Duplicate signed original or a signed copy will be forwarded to Purchasing Services and the Supplier for their records.

7.3 Guarantees and Performance

- (a) The Purchasing Supervisor may require that a Bid be accompanied by a bid bond or other similar security. <u>The Purchasing Supervisor</u> <u>may determine that the bid bond or other similar security must be</u> <u>provided in a digital form, submitted through Electronic Tendering</u> <u>means, and/or conform to any additional requirements to confirm</u> <u>such security's validity, such as that it be encrypted with embedded</u> <u>digital certificates which are verifiable by the Corporation.</u>
- (b) The Purchasing Supervisor shall select the appropriate means to guarantee execution and performance of a Contract. Means may include, without limitation:
 - (i) security deposits;
 - (ii) provisions for liquidated damages;
 - (iii) progress payments;
 - (iv) holdbacks;
 - (v) performance bonds;
 - (vi) payment bonds;
 - (vii) labour and materials bonds;
 - (viii) irrevocable letters of credit; or
 - (ix) any other types of bonds or security that is deemed appropriate.
- (c) The guarantee means selected will:
 - (i) be those which are necessary or desirable for the Corporation; and
 - (ii) comply with applicable laws.

7.4 Insurance

- (a) PriorAs part of any Solicitation and or prior to commencement of work and where deemed appropriate by the Purchasing Supervisor, evidence of Insurance Coverage satisfactory to the Purchasing Supervisor must be obtained by all Suppliers, ensuring indemnification of the Corporation from any and all claims, demands, losses, costs or damages of any kind, including without limitation resulting from the performance of or failure of the Supplier to perform or adequately perform a Supplier's Supplier's obligations under the contract.
- (b) Purchasing Services shall request from Suppliers providing Services to the Corporation a certificate of insurance. The certificate shall be in a form satisfactory to the Purchasing Supervisor <u>either during the</u> <u>Solicitation or</u> prior to the commencement of any work, for no less than the minimum amounts stated as determined by the Purchasing Supervisor and in force for the entire Contract period, including any warranty period.

7.5 Occupational Health and Safety Requirements

If the Purchasing Supervisor determines it is appropriate, a Supplier shall deliver a Certificate(s) of Clearance from the Workplace Safety and Insurance Board or such other board or authority prior to commencing any work pursuant to any Contracts stating that the Supplier and its subcontractors are in good standing with the Board as of the current date and every ninety (90) days thereafter ensuring ongoing good standing with the Workplace Safety and Insurance Board or such other board or authority.

8.0 RESOLUTION OF CONFLICT

8.1 Exercise of Delegated Powers

The Purchasing Supervisor is hereby authorized to resolve any conflict or ambiguity regarding the individual or individuals of the Corporation authorized to exercise any delegation.

Should any ambiguity arise as to the authorizations which are applicable under this Policy, or inconsistent with the authorizations given under this Policy, any such inconsistencies shall be referred to the Purchasing Supervisor for resolution and direction.

8.2 Pre-Award Bid Dispute

Suppliers should seek a resolution of any pre-Award dispute by communicating directly with the Purchasing Supervisor as soon as possible from the time when the basis for the dispute became known to them. The Purchasing Supervisor may, in its discretion delay an Award, or any interim stage of a procurement, pending the acknowledgement and resolution of any pre-Award dispute.

8.28.3 Supplier Debriefing

The purpose of a debriefing is to assist the Supplier to understand both the Procurement process that occurred and how it may improve its future bids. The Corporation will not discuss or disclose information about other Bids or Suppliers during a debriefing.

- (a) For competitive procurement processes valued at \$50,000 or more, the Purchasing Supervisor shall inform all unsuccessful Suppliers about their entitlement to a debriefing.
- (b) The Purchasing Supervisor will allow unsuccessful Suppliers up to sixty (60) calendar days following the date of the Award notification to request a debriefing.

8.32.1 Pro-Award Bid Dispute

Suppliers should seek a resolution of any pre-Award dispute by communicating directly with the Purchasing Supervisor as soon as possible from the time when the basis for the dispute became known to them. The Purchasing Supervisor may delay an Award, or any interim stage of a procurement, pending the acknowledgement and resolution of any pre-Award dispute.

8.4 Post Award Bid Dispute Resolution

- (a) Any dispute of an Award decision must be received in writing by the Purchasing Supervisor no later than ten (10)-_days after the date of the Award notification, or where a debriefing has been requested, ten (10)-_days after the debriefing has occurred. Any dispute that is not received in a timely way or in writing will not receive further consideration.
- (b) The complaint should contain the identity of the complainant and the procurement process at issue as well as a clear and detailed statement of the legal and/or factual grounds upon which the

complaint is based. The complaint should also include, as attachments, any information or documents relevant to the complaint that are in the Supplier's possession.

- (c) For the purpose of a complaint under this policy, the Purchasing Supervisor will review and address any complaint in a timely and appropriate manner.
- (d) Any written dispute that cannot be resolved by the Purchasing Supervisor shall be referred by the Purchasing Supervisor to the General Manager, Financial Services and/or CAO for an impartial review.
- (e) The General Manager, Financial Services in consultation with the CAO<u>and Legal Services</u>, may dismiss the dispute or accept the dispute and direct the Purchasing Supervisor to take appropriate remedial action.
- (f) The Purchasing Supervisor may adopt and publish such further procedures as are necessary to ensure an independent and timely review and resolution of post Award bid disputes.

8.5 Limitation on Liability

Except for a claim for costs of preparation of its Bid, each Supplier, by submitting a Bid, irrevocably waives any claim, action, or proceeding against the Corporation including without limitation any judicial review or injunction application against the Corporation or any of its employees, advisors or representatives for damages, expenses or costs including (without limitation), loss of profits, loss of opportunity or any consequential loss for any reason including: negligence, any actual or alleged unfairness on the part of the Corporation at any stage of the Bid Solicitation process; if the Corporation does not Award or execute a contract; or if the Corporation cancels a Bid Solicitation, or if the Corporation is subsequently determined to have accepted a non-compliant Bid or otherwise breached or fundamentally breached the terms of a Bid Solicitation, or policy or any trade agreement. This section is deemed to be incorporated by reference into every Bid Solicitation and every Contract Awarded by the Corporation.

The following are limitations on the Corporations liability with respect to procurements:

- For procurements to which the trade agreements do not apply. Each (a) Supplier, by submitting a Bid, fully and irrevocably waives any right to claim or assert any action or proceeding against the Corporation or any of its employees, advisors, representatives, servants or agents for judicial review, injunctive relief, damages, expenses or costs including (without limitation), loss of profits, loss of opportunity or any consequential loss or damages. This waiver shall include an action or proceeding caused for any reason, including by reason of any tort, negligence, breach of contract, bad faith, any actual or alleged unfairness on the part of the Corporation at any stage of the Bid Solicitation process, if the Corporation does not Award or execute a contract, if the Corporation cancels a Bid Solicitation, or if the Corporation is subsequently determined to have accepted a noncompliant Bid or otherwise breached the terms of any Bid Solicitation, any of its own policies including this one or the provisions of any trade agreement. This section is deemed to be and shall be incorporated by reference into every Bid Solicitation and every Contract Awarded by the Corporation.
- (b) For procurements to which the trade agreements apply, the provisions of subparagraph (a) apply, except that a Supplier can claim for costs of the preparation of its bid.

9.0 INTERPRETATION

- (a) Each section of this policy and every part of each section is an independent section or part of a section, and the holding of any section or part thereof to be void or ineffective for any cause shall not be deemed to affect the validity of any other sections or parts thereof.
- (b) Headings are for reference purposes only and shall not affect in any way the meaning or interpretation of the provisions of this policy.
- (c) References in this Policy to any statue, regulation, Corporation Policy, by-law, procedure, guide, or code of conduct, includes, in each case, any amendments made from time to time.
- (c)(d) This policy includes the Appendices annexed hereto.
- (e) References to currency or to "\$" shall be deemed to be a reference to the currency of Canada.

ATTACHMENTS

APPENDIX <u>"</u>A"- EXEMPTIONS

APPENDIX <u>"B"-</u> IRREGULARITIES

APPENDIX "A" - EXEMPTIONS

Subject to compliance with applicable laws and trade agreements, the procurement of the following Goods and/or Services are exempt from this policy:

- 1. The acquisition or rental of land, existing buildings or other immovable property or the rights thereon
- 2. Non legally binding agreements
- 3. Any form of assistance, such as grants, loans, equity infusions, guarantees and fiscal incentives
- 4. Public employment contracts
- 5. Measures necessary to protect intellectual property, provided that the measures are not applied in a manner that would constitute a means of arbitrary or unjustifiable discrimination between parties where the same conditions prevail or are a disguised restriction on trade
- 6. Procurement or acquisition of:
 - (a) fiscal agency or depository services;
 - (b) liquidation and management services for regulated financial institutions; or
 - (c) services related to the sale, redemption, and distribution of public debt, including loans and government bonds, notes, and other securities;
- 7. Procurement of:
 - (a) financial services respecting the management of government financial assets and liabilities (i.e. treasury operations), including ancillary advisory and information services, whether or not delivered by a financial institution;
 - (b) health services or social services;

- (c) services that may, under applicable law, only be provided by licensed lawyers or notaries; or
- (d) services of expert witnesses or factual witnesses used in court or legal proceedings; or
- 8. Procurement of Goods or Services:
 - (a) financed primarily from donations that require the procurement to be conducted in a manner inconsistent with the trade agreements;
 - (b) by a procuring entity on behalf of an entity not covered by the trade agreements;
 - (c) between enterprises that are controlled by or affiliated with the same enterprise, or between one government body or enterprise and another government body or enterprise;
 - (d) by non-governmental bodies that exercise governmental authority delegated to them;
 - (e) from philanthropic institutions, non-profit organizations, prison labour, or natural persons with disabilities;
 - (f) under a commercial agreement between a procuring entity which operates sporting or convention facilities and an entity not covered by the trade agreements that contains provisions inconsistent with the trade agreements;
 - (g) conducted for the specific purpose of providing international assistance, including development aid, provided that the Corporation does not discriminate on the basis of origin or location.
- 9. Training and education in the nature of:
 - (a) Conferences
 - (b) Courses
 - (c) Conventions
 - (d) Seminars

- (e) Memberships
- (f) Subscriptions, books, magazines, newspapers, periodicals

(g) Staff development and workshops

- 10. Employee/Council expenses in the nature of:
 - (a) Advances
 - (b) Expense Reimbursements
- 11. Employer's general expenses in the nature of:

(a) Employee Income

<u>(b) Honoraria</u>

(a)(c) Payroll deduction Remittances

(b)(d) Medical

(c)(e) Licenses

(f) Temporary staffing agencies and services

(d)(g) Grants to Agencies

(e)(h) Payments of Damages

(f)(i) Tax Remittances

(g)(a) Employee Income

(h)<u>(a)</u> Honoraria

(i)(j) Loan Payments

- 12. Professional and special services in the nature of:
 - (a) Witness Fees
 - (b) Arbitrators, Mediators, Conciliators or judicial and like bodies
 - (c) Legal Settlements

(d) Insurance <u>Claims</u>Premiums, Claim Settlements, and <u>Adjuster Services</u>

Utility usage fees

13. Utilities

- (a) Postage
- (b) Water and Wastewater
- (c) Electricity
- (d) Natural Gas
- (e) Cable or Television
- (f) Telephone (basic services), Cellular and Wireless Devices
- (g) Utility Relocation
- (h) Services and inspections of the Technical Safety Standards Association (TSSA)
- 14. Funding to service providers, including Human Services providers, childcare providers and housing providers.
- 15. Renewals of Licenses and annual maintenance, support for procured software or application.
- 16. Translation, interpretive services, Braille services, Text Telephone (TTY)
- 17. Advertising

Any exemption and/ or non-application that can be established to be in accordance with applicable trade agreements, as amended.

These exemptions do not preclude a procurement process where competition may exist. It is expected that the intent of the Policy is followed wherever possible to ensure the best interests of the Corporation are taken into consideration.

Approvals are to follow the authorization level pursuant to Section 5.1, this policy and practices. Proof of Insurance(s) and WSIB coverage as required wherever applicable.

APPENDIX "B" - IRREGULARITIES

IRREGULARITY

An irregularity is a deviation between the requirements (terms, conditions, specifications, special instructions) of a Bid request and the information provided in a Bid response. For the purposes of this policy, Bid irregularities are further classified as "major irregularities" or "minor irregularities".

A **"major irregularity"** is a deviation from the bid request that affects the price, quality, quantity or delivery, and is material to the Award. If the deviation is permitted, the Bidder could gain an unfair advantage over competitors. The Purchasing Supervisor in consultation with the General Manager, Financial Services must reject any Bid, which contains a major irregularity. However, the Corporation can decide, in its discretion, whether it will allow a process for correction of a major irregularity to be set out in any Bid Solicitation. The Corporation may, but has no duty to, issue a Bid Solicitation which provides for the correction of any major irregularity.

A **"minor irregularity"** is a deviation from the Bid request, which affects form, rather than substance. A minor irregularity is an effect on the price, quality, quantity or delivery is not material to the Award. If the deviation is permitted or corrected, the Bidder would not gain an unfair advantage over competitors. The Purchasing Supervisor in consultation with the General Manager, Financial Services may permit the deviation or allow the Bidder to correct the minor irregularity.

MATHEMATICAL ERRORS - RECTIFIED BY STAFF

The Purchasing Supervisor may correct errors in mathematical extensions and/or taxes, and the unit prices will govern. The responsibility for correcting mathematical errors may be delegated to the requisitioning department. -The Corporation is under no duty to correct such errors.

ACTION TAKEN

The Purchasing Supervisor shall have the authority and responsibility, subject to Council policies, for assessing compliance with submission requirements by determining whether irregularities are major or minor and rejecting submissions with major irregularities.

The Purchasing Supervisor may establish procedures for resolving common Bid irregularities for open competitive Bid Solicitations. In the event of any conflict between the evaluation criteria disclosed in a Bid Solicitation and the list of

common irregularities contained in any purchasing procedure, the evaluation criteria disclosed in the open competitive Bid Solicitation shall govern.

In exercising judgment with respect to any Bid irregularity, the Purchasing Supervisor shall consider the advice of the General Manager, Financial Services. The Corporation shall have no liability for any breach regarding the Corporation's assessment of major or minor irregularities.



The Corporation of the City of Cornwall Regular Meeting of Council

Report

Department:	Financial Services
Division:	Finance
Report Number:	2019-207-Financial Services
Prepared By:	Tracey Bailey, General Manager
Meeting Date:	November 12, 2019
Subject:	RFP Terms of Reference - Council Review

Purpose

The purpose of this report is to provide Council with the process for when the Terms of Reference of a Request for Proposal (RFP) would come to Council for review and approval.

Recommendation

That Administration provide a report to Council for input and approval for the Terms of Reference of a RFP, prior to the issuance of a RFP document, where the following criteria is met:

- 1. The contract is estimated at \$150,000.01 or more; and/or
- 2. A change in level of service is being considered.

Strategic Priority Implications

This report addresses Council's accountability and transparency to the ratepayers of the City of Cornwall.



Background / Discussion

At its meeting of Sep 09, 2019, Council approved the following motion:

Motion to direct Administration to prepare a report on what types of RFP's should come before Council for feedback such as level of service changes, or large financial impacts, prior to the issuance of the document.

The City is committed to protecting the integrity of the procurement process and taking appropriate measures to promote fairness, openness and transparency in this process. While the procurement process is open, elected officials are required to separate themselves from the procurement process and have no involvement.

The following details the circumstances where Council will provide feedback to Administration prior to the issuance of the RFP.

Criteria 1: The contract is estimated at \$150,000.01 or more Section 5.1 of the Procurement of Goods and/or Services Policy outlines that Council is required to award all procurements of \$150,000.01 or more. Criteria #1 is being recommended so that Council is familiar with the bid solicitation requirements prior to its issuance.

Criteria 2: A change in level of service is being considered Currently, level of service changes are reviewed and approved by Council at a regular meeting of Council or through the annual budget process. Criteria #2 is inline with the City's current process to introduce level of service changes to Council for consideration and approval.

Based on RFPs issued over the last several years, the following RFPs would meet the noted criteria:

- External Audit Services,
- Purchasing Card,
- Waste and Recycling Collection and Processing,
- Pharmaceutical Services Glen Stor Dun Lodge
- General Insurance Program and Risk Management



- Engineering and Design Consulting Services Wastewater Treatment Plant,
- Engineering and Design Consulting Services Water Purification Plant,
- Various one-time procurements for studies, engineering, design, consulting, etc.

Contract terms for the RFPs listed are from 1 year to 8 years. It is estimated that approximately five (5) reports would come to Council annually.

The Staff report to Council will include:

- Project overview;
- Summary of the scope of work;
- Proposed timetable (key dates) of the bid solicitation; and
- Terms of reference to be approved.

Following Council's approval of the terms of reference for the RFP, Administration will issue the RFP in order to initiate the bid solicitation process.



Document Title:	RFP Terms of Reference - Council Review - 2019-207- Financial Services.docx
Attachments:	
Final Approval Date:	Nov 5, 2019

This report and all of its attachments were approved and signed as outlined below:

Maureen Adams - Nov 5, 2019 - 7:36 AM



The Corporation of the City of Cornwall Regular Meeting of Council Report

Department:Infrastructure and Municipal WorksDivision:EnvironmentReport Number:2023-59-Infrastructure and Municipal WorksMeeting Date:August 13, 2024Subject:South Glengarry – Water & Wastewater Servicing Request for
Glen Walter

Purpose

To provide an update to Council on the Township of South Glengarry's request for the provision of water and/or wastewater services to the Glen Walter service area.

Recommendation

- 1. That Council direct Staff (Infrastructure and Municipal Works) to formalize a Memorandum of Understanding with the Township of South Glengarry, which requires an equal division of all costs related to the necessary engineering and cost recovery studies, among others, to thoroughly evaluate the request for water and/or wastewater services; and
- 2. That Council direct Staff to prepare a report to Council upon the completion of the requisite engineering and cost recovery studies.

Financial Implications

The anticipated costs to complete the necessary engineering and cost recovery studies is estimated to be \$50K to \$60K which will be equally shared among the involved parties. Additionally, all legal expenses incurred in the drafting of any potential servicing agreement would be jointly borne by the parties per the MOU.



Strategic Priority Implications

This report is consistent with the City's Strategic Plan, specifically under Pillar 2 – Community Connections, (1) Embrace and harness Cornwall's role as a "Hub City".

Background / Discussion

The Township of South Glengarry has formally submitted a request for the City to evaluate the possibility of extending water and/or wastewater services to the Glen Walter area.

The Township of South Glengarry adopted the Glen Walter Water and Wastewater Servicing Master Plan in 2022. The Servicing Master Plan developed a preferred strategy to provide water and wastewater services to the Glen Walter Community which would address ongoing challenges with the existing system(s) as well as accommodate future growth. Following the completion of Master Plan, the Township initiated a Municipal Class Environmental Assessment (MCEA) process in accordance with the Environmental Assessment Act for the expansion of the Glen Walter Water Treatment Plant and Water Pollution Control Plant.

As part of the MCEA process underway for the Glen Walter Water Treatment Plant and Water Pollution Control Plant, the Province required that the Township further evaluate the alternative of connecting the Glen Walter service area to the City of Cornwall's water and/or wastewater system(s). As such, the Township of South Glengarry inquired as to the City's willingness to consider providing water and/or wastewater services to the Glen Walter service area, as well as the City's ability to accommodate Glen Walter's future servicing demands in a sustainable manner. Furthermore, should the City express a willingness to consider providing water and wastewater services to the Glen Walter service area, the Township has requested detailed information regarding the associated capital and connection charges, rates for water and wastewater services, terms of the service agreement and its conditions, as well as any other pertinent requirements that may need consideration.

In order to review the request for servicing, a comprehensive engineering study will need to be completed to evaluate the existing and future capacity needs of the City's water system (water distribution network and Water Purification Plant) and wastewater system (sewer collection network and Wastewater Treatment Plant). The engineering study will evaluate the ability of the City's existing water



and wastewater systems to accommodate the City's projected growth (ie. development of the City's Urban Settlement Boundary) as well as consider the impacts of the potential addition of the Glen Walter service area. The study will identify the required capital upgrades and infrastructure expansion that is necessary for the City to support its projected growth, as well as assess the potential impacts of providing services to the Glen Walter area.

In addition to the engineering study, a cost recovery study will need to be completed to review the financial mechanisms available to the City to facilitate the recovery of the lifecycle capital costs associated with providing water and/or wastewater services to Glen Walter service area. Similar to the cost recovery structure that was previously proposed for servicing Boundary Road, the study will utilize a full cost recovery methodology to ensure full financial accountability for the provision of any services to the Township. The cost recovery structure will include an equitable costing model including components for: capital charges; connection charges; and consumption charges (water and wastewater rates). The cost recovery study would ensure that the City ratepayers are not subsidizing the growth of the Township through water and/or wastewater services. As noted, Watson & Associates completed a similar cost recovery study for the proposed servicing of properties on the east side of Boundary Road located within the Township. The previous study will be updated to account for providing service to the entire Glen Walter area, incorporate any proposed upgrades to City infrastructure which would be necessary to service the entire Glen Walter area, and will be updated to reflect the most recent City Asset Management Plan data and associated asset valuations.

Should Council wish to further consider servicing the Glen Walter area, Staff will bring a report back to Council seeking further direction following the completion of the engineering study as well as the cost recovery study.

Additionally, should Council wish to further consider providing services to the Glen Walter service area, Staff recommends that a Memorandum of Understanding (MOU) be entered into between the City and the Township. The MOU would delineate the scope of the studies which need to be completed, the information which would need to be shared (plant data, flow rates, etc.), and propose a 50% cost sharing of all costs associated with evaluating the request as well as preparing any potential servicing agreement. In order to review the request, a reasonable amount of costs as well as staff time will need to be incurred. An MOU is recommended to ensure that the City does not bear the costs of completing a review which would primarily benefit the Township. Previously, the City had absorbed all costs related to the evaluation of the



Boundary Road servicing request and the preparation of the servicing agreement, as the Township, after consulting with the property owners, opted not to advance with the project. An MOU will ensure equitable distribution of the costs associated with the review and will establish clear expectations regarding the exchange of information necessary to complete the studies and evaluate the request. Should the servicing agreement advance, it is likely that the Provincial and Federal governments would view a joint servicing arrangement between municipalities favourably in any subsequent funding applications or requests. This would apply not only to infrastructure projects directly supporting this specific servicing request but also more broadly to the City's infrastructure renewal and upgrade initiatives.



The Corporation of the City of Cornwall Regular Meeting of Council Report

Department:	Planning, Development and Recreation
Division:	Planning
Report Number:	2024-144-Planning, Development and Recreation
Meeting Date:	August 13, 2024
Subject:	Proposed Self-Supported Cell Tower – 120 Boundary Road – Bell Mobility c/o Canacre

Purpose

To provide a Council Resolution of support for the proposed Bell Mobility 75meter-tall self-supported telecommunication tower at 120 Boundary Road as part of ISED's (Innovation, Science and Economic Development Canada, formerly Industry Canada) requirement for a statement of municipal concurrence. The proposed structure will be sited within a 20-meter x 20 meter (400 sq.m.) fenced compound on the south-east corner of the subject property. The subject property is legally described as Part of Lot D, Concession 1, Cornwall, as well as being Part 1 on Reference Plan 52R-6859. The property is adjacent to various light industrial uses as well as the Grey's Creek Conservation Area Park.

Recommendation

That Council pass the subject Resolution of support for the proposed Bell Mobility 75-meter-tall self-supported telecommunication tower at 120 Boundary Road following which a municipal concurrence letter can be issued by staff.

The operative clause of the accompanying Resolution is as follows:

Now, therefore, be it resolved that the Council of the Corporation of the City of Cornwall supports and endorses the proposed Bell Mobility 75meter-tall self-supported telecommunication tower to be situated at 120 Boundary Road, as herein described.



Financial Implications

No cost to the municipality is incurred from such supporting action. Financial benefits for the private landowner may be realized as it is typical that telecommunications installations are often constructed on lands leased at an annual rental fee.

Climate Action Plan Alignment

Development of the proposed telecommunication tower has several direct and indirect positive impacts on the City's climate action goals. Table 1 below illustrates the proposal's alignment with multiple 'Actions' outlined under Section 3 of the City of Cornwall Climate Action Plan 2023 (CAP).

Table 1: Proposal's alignment with Section 3 of the City's Climate Action Plan			
CAP Action	Action Aim	Action Alignment	
Action 1.2 Energy upgrade portal and support service	To develop and implement a service to support property owners with energy audits, efficiency upgrades, and heat pump installation, and provide information on the City's website.	The proposed tower will ensure uninterrupted and enhanced internet service in the area which will allow residents to access web information (for example, future proposed portals and services available on the City's website).	
Action 1.6 Local capacity for zero- emission buildings	To host seminars and provide information to local contractors, builders and City staff about energy-efficient and low-emission building techniques and materials, including opportunities for using materials with low embodied carbon; and, to partner with other municipalities to share resources and obtain provincial resources.	The proposed tower will ensure uninterrupted and enhanced internet service in the area which will allow residents to attend webinars and virtual information sessions, access information and content on the web, connect and communicate with other stakeholders, and improve overall access to information.	



Remote work policy that considers the potential to reduce emissions.	The proposed tower will ensure uninterrupted and enhanced internet service in the area which will enable remote working for residents thereby reducing emissions related to traveling for work.
--	---

In addition to the above, the CAP broadly aims to reduce transportation-related emissions. Improved internet and communication services will enable access to real-time data, helping residents identify the shortest and fastest travel routes, review Cornwall Transit's schedule for better trip planning, and discover active transportation routes, such as bike lanes, from origin to destination.

Improved communication services further align with Section 13.2.1 of the City's Official Plan. This section guides the City to prepare for the impacts of climate change, ensuring Cornwall's resilience. By facilitating communication during emergencies, such as climate-change-related disasters, the City can better manage these situations.

The proposed tower's increased capacity will also facilitate shared siting opportunities thereby reducing the need for additional infrastructure development. This is in line with the CAP and Official Plan's objectives of encouraging compact development and reducing emissions across the built environment.

Background / Discussion

Radiocommunication and broadcasting services, more broadly referred to as telecommunication services, are increasingly integral to daily life. These services are provided through a network of antenna systems with some type of accompanying supporting structure(s). In Canada, telecommunication services are federally regulated by Innovation, Science and Economic Development Canada (ISED, formerly known as Industry Canada).

Bell Mobility, through their authorized agent Canacre, is proposing a 75-meter-tall self-supported telecommunication tower at 120 Boundary Road, Cornwall, Ontario, and is currently seeking municipal concurrence as part of their requirements for approval from ISED. The following sections summarize ISED's prescribed procedure and requirements, as well as the subject proposal.



ISED Client Procedure and Public Consultation Requirements

ISED, in its Client Procedures Circular CPC-2-0-03 *Radiocommunication and Broadcasting Antenna Systems*, prescribes the procedural requirements that apply to persons or entities planning to install/modify an antenna system. The document outlines the "broad elements", or steps of the process as follows:

- i. Investigating sharing or using existing infrastructure before proposing new antenna-supporting structures.
- ii. Contacting the land-use authority to determine local requirements regarding antenna systems.
- iii. Undertaking public notification and addressing relevant concerns, whether by following local land-use authority requirements or ISED's default process, as is required and appropriate.
- iv. Satisfying ISED's general and technical requirements.
- v. Completing the construction.

At present, the City of Cornwall (i.e., the local land-use authority) does not have a local protocol/process for antenna system siting. Therefore, proponents are to follow ISED's default protocol/process (Section 4.2 of CPC-2-0-03) which requires notification and consultation with the local public, land-use authority, and ISED, prior to commencement of any installation/modification of the antenna system. Consultation with the local public entails provision of a notification package by the proponent to property owners within a radius equivalent to three times the height of the proposed structure. Additionally, for structures 30 meters or more in height, the proponent is required to give notice in a local community newspaper. Questions, comments, or concerns raised during the public consultation period must be addressed by the proponent within the time and in the manner prescribed under ISED's default protocol. Once local consultation is complete, the proponent must obtain a concurrence letter or equivalent from the local land-use authority indicating that public consultation requirements have been met.

ISED further requires that the proponent construct/install the proposed antenna system within three years of obtaining municipal concurrence. Public consultation will be considered invalid after this three-year period, unless the land-use authority agrees, in writing, to an extension. In addition to public consultation, proponents' obligations include the following:



- a) ensure compliance with Health Canada's Safety Code 6 guideline, radio frequency; and
- b) ensure compliance with radio frequency immunity criteria; and
- c) notify nearby broadcasting stations, (d) meet environmental considerations; and
- d) meet Transport Canada's aeronautical safety requirements; and,
- e) have consideration for NAV Canada air navigation facilities, as applicable.

<u>Proposal</u>

Bell Mobility through their authorized agent, Canacre, is proposing a 75-meter-tall self-supported telecommunication tower on the southeast corner of the property municipally known as 120 Boundary Road (refer Attachment 1). The subject property is legally described as Part of Lot D, Concession 1, as well as being Part 1 on Reference Plan 52R-6859.

The proposed structure will be sited within a 20-meter x 20 meter (400 sq.m.) fenced tower compound to the rear of the existing building on the property. The tower compound is proposed to be set back from the front (west-side) property line by approximately 132 meters, and from the rear (east) property line by approximately 38 meters. In addition to the tower structure, a radio equipment shelter will also be located within the compound.

Access to the tower compound is to be provided via the existing main entrance and driveway of the property. This paved driveway connects to a gravel path located east of the main property's gate, extending towards the rear of the property and leading directly to the proposed tower compound.

Discussion

The subject property, 120 Boundary Road, is situated at the eastern edge of the City and is within Cornwall's Urban Settlement Boundary as indicated on Schedule 1 of the City's Official Plan. It is zoned as Employment Area Light (EAL) Zone in the City's Zoning By-law #2022-001, as amended, and is designated as Employment Area (EMP) in the Official Plan. The property is presently occupied by a 1-storey light-industrial building operating as a privately owned recycling center.



To the north, south and west of the subject property are Employment Area lands which are occupied by other industrial land uses. The eastern side of the property abuts Gray's Creek Conservation Area and the western boundary of the Township of South Glengarry. The nearest residentially zoned lands, known commonly as the Eastridge Subdivision, are approximately 300 meters west of the proposed tower location.

The proposed tower is intended to replace the existing 70-meter-tall telecommunication tower on the property municipally known as 1950 Montreal Road which is approximately 900 meters southwest of the proposed tower location. The replacement tower is necessary to ensure undisrupted cellular and home internet service within a significant radius in the eastern part of the City. The proposed tower will have the capacity to offer shared siting opportunities in the future to other telecommunications providers which can help limit the number of telecommunications towers/structures in the area.

ISED requires telecommunications carriers to first explore shared siting opportunities on existing infrastructure. In the information package submitted by the proponent (Attachment 2), it is stated that shared siting opportunities on existing antennas in the area were first examined, but none were deemed suitable or viable. The proponent identified ten other potential locations and has chosen the proposed location as it meets Bell's technical requirements such as radiofrequency objectives and space availability and is located away from residential land uses.

The currently proposed location is suitably located away from existing and proposed residential developments and the City's commercial core. It is adjacent to industrial land uses and is considerably set back from Boundary Road. The proposed tower is therefore anticipated to have minimal visual impact as illustrated in the submitted renderings (Attachment 3). Staff are of the opinion that considerable efforts have been made by the proponent to minimize any impacts the proposed tower may have on nearby sensitive land uses.

As the subject property abuts the western boundaries of the Township of South Glengarry, City staff had reached out to the Township to provide contact information for properties within the Township. No objections or concerns were raised by Township staff regarding the proposed tower and its location at that time.



In accordance with ISED's default public consultation protocol, the proponent notified property owners within a 225-meter radius from the proposed tower location. The public notification package included an overview of the proposal in both English and French, site renderings from the north side of Boundary Road, summary of pertinent safety standards, contact information and statutory timelines for public feedback, and a link to access the site plan (refer Attachment 4). Additional public notice was given in the June 12, 2024, edition of the Cornwall Seaway News per ISED's public notification requirements for towers greater than 30 meters in height (Attachment 5).

The proponent received one response to the public notification mailout from the owner of the property to the immediate north of the subject site (refer to Attachment 6). The respondent expressed objection to the proposed telecommunication tower location as they felt the tower would impact their future development plans. The respondent did not provide sufficient information regarding the future development plan but identified that the development would likely be commercial agriculture related activities. In response, the proponent clarified that telecommunications infrastructure is often sited near agricultural uses and that there are no known provincial ministerial approvals related to agricultural activities that may be affected by the proposed telecommunication tower operations. It is important to note that telecommunication towers are exclusively regulated by the Federal government, and provincial or municipal regulations do not apply. The respondent's property is separated from the tower site by approximately 90 meters and is also zoned as Employment Area Light (EAL) Zone which is intended for light industrial land uses. Planning is therefore of the opinion that the proponent's response is adequate and that ISED's public consultation requirements have been met.

Further to fulfilling ISED's public consultation requirements for the proposed tower, Bell Mobility has declared compliance with Health Canada's Safety Code 6 - Limits of Human Exposure to Radiofrequency Electromagnetic Fields, Canadian Environment Assessment Act (L.C 2019, chapter 28, article 1), Transport Canada/NAV Canada aeronautical safety requirements, and all current health and safety guidelines. The concurrence request letter submitted by the proponent (Attachment 7) indicates that the proponent has received permits from Transport Canada and NAV Canada, and that lighting protection will be required for the proposed tower. Lighting and marking for the proposed tower will be designed and installed in accordance with Transport Canada's *Standard 621 - Obstruction Marking and Lighting - Canadian Aviation Regulations (CARs)*.



The purpose of such marking and lighting is to ensure that the structure does not interfere with the safe operation of aircrafts in the area. It is therefore staff's understanding that the proposed structure will have no negative impacts on adjacent properties and will not conflict with existing services and infrastructure in the neighborhood.

Comments from other departments/agencies

The proposal was circulated to other City departments and the Raisin Region Conservation Authority (RRCA) as part of the municipality's due diligence. The following comments were received:

- Raisin Region Conservation Authority: The proposed location of work is not within an area where the RRCA would be required to provide comments under the Planning Act as there are no known natural hazards onsite. Additionally, the proposed location of work is not within an area that would require permits from the RRCA (no watercourses in close proximity, no floodplains, no wetlands, and no known hazardous soils). Finally, the location is not within an area identified in the local Source Protection Plan, whereby certain activities could impact municipal sources of drinking water, as such a Clean Water Act screening is not required.
- Building Division: No building permit is required for the proposed communications tower or accessory structure as per the Ontario Building Code. A municipal permit is required to be obtained for the proposed perimeter fence and more information is available by contacting <u>permits@cornwall.ca</u>.

Municipal Works: No comments or concerns.

Municipal Assessment: No comments or concerns.

Conclusion

Bell Mobility with their proposed 75-meter-tall self-supported telecommunication tower aims to provide dependable and advanced telecommunications service to businesses and residences near the proposed location. The proposed tower is intended to replace the existing tower further south of the subject site to ensure uninterrupted and enhanced telecommunication services in the area.

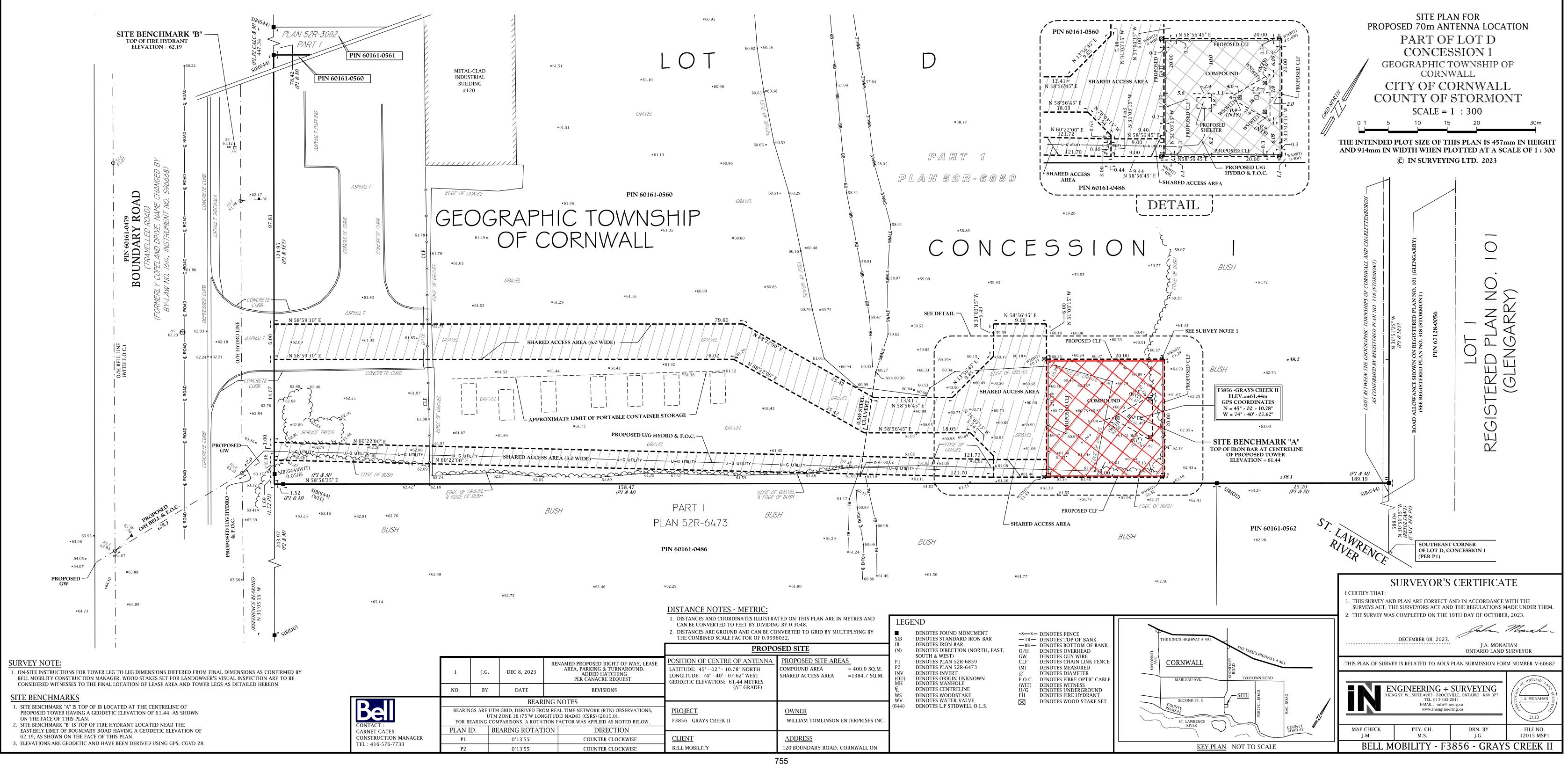


The structure will be federally regulated through ISED (formerly known as Industry Canada) including its design, installation, licensing, final review, and approval. The proponent has fulfilled all public consultation requirements as per ISED's default protocol which the City of Cornwall presently follows.

As part of meeting ISED's requirements, Bell Mobility through their authorized agent Canacre is currently seeking a statement of concurrence from the City which includes a Council Resolution of support. ISED requires the structure to be constructed within three years of obtaining municipal concurrence which is the typical validity of the public consultation. Based on the submitted plans and documentation, staff do not anticipate any negative impacts on the surrounding neighborhood and are therefore supportive of the proposal.

Attachments:

Attachment 1: Site Plan Attachment 2: Information Package Attachment 3: Visual Simulation from Boundary Road Attachment 4: Public Notification Mailout Package Attachment 5: Seaway News Cutout (June 12, 2024) Attachment 6: Public Consultation Summary Attachment 7: Concurrence Request Letter



Subject:	Information Package Proposed 75m Self-Support Telecommunications Installation		
Address:	120 Boundary Road, Cornwall ON		
Legal Description:	PART OF LOT D CONSESSION 1		
Coordinates:	Latitude: N 45°02'10.78", Longitude: W 74°40'07.62"		
Bell Site Reference:	F3856 – Gray's Creek		

1. Proposed Location

Bell Mobility Inc. ("Bell") is proposing a replacement self-support tower at the above referenced location, on land owned by a private property owner. The proposed tower is required to maintain **high-speed mobile (LTE)** network coverage and capacity AND Wireless To The Home internet services ("WTTH"). This installation is required to maintain service in eastern Cornwall as it will replace an existing tower that is to be decommissioned. The site is located on lands designated as Employment Area (EMP) in the City of Cornwall's Official Plan and "Employment Area Light (EAL) in the City of Cornwall's Zoning By-Law (please note radio installations are federally regulated and not subject to the Planning Act). The site is located south east of Boundary Road and Conservation Road. Access to the tower will be entirely via a private driveway off of Boundary Road.

In selecting the proposed location, a number of other sites were also considered:

- a. Evaluation of Existing Structures. As required by Innovation, Science and Economic Development Canada ("ISED", formerly known as Industry Canada), before a new free standing tower is proposed, a telecommunications carrier must make best efforts to evaluate any existing structures towers or rooftops that may be available to support new equipment or to use for co-location. After careful examination, it has been determined there are no viable existing structures in the area that would be suitable for the operations of Bell's network equipment.
- Alternative Sites Considered. Other properties were investigated by Bell but were determined not to be appropriate or feasible for hosting new telecommunications equipment for various reasons. These sites were assessed by a detailed analysis conducted by Bell's Radio Frequency Engineering Department, and subsequently in the field by conducting multiple site visits by the project team personnel. The proposed site location and alternative sites considered are depicted under Appendix 1: Proposed and Alternative Site Locations.

756

The reasons for rejecting the alternate candidate sites are as follows:



Proposed Site ("CAN4C"): The proposed location met radiofrequency objectives and land use requirements. The property has sufficient access available and suitable space for operations as well as maintaining distance from residential areas and water features.

Alternate Site 1 ("CAN1"): CAN1 met radiofrequency objectives, however, the landowner was not receptive of the land use proposed arrangement. Additionally, the site would present access challenges and be in closer proximity to residential areas.

Alternate Site 2 ("CAN2"): CAN2 met radiofrequency objectives, however, the landowner was not receptive of the proposed land use arrangement and the installation would likely interfere with the existing land use as well be in closer proximity to residential areas.

Alternate Site 3 ("CAN3"): CAN3 met radiofrequency objectives, however, the landowner was not receptive of the proposed land use arrangement and the site has potential constraints on installation access.

Alternate Site 4 ("CAN4A"): CAN4A met radiofrequency objectives, however, the landowner was not receptive of the location on the property.

Alternate Site 5 ("CAN4B"): CAN4B met radiofrequency objectives, however was not suitable due to access constraints.

Alternative Site 6 ("CAN5"): CAN5 met radiofrequency objectives, however, the landowner was not receptive of the proposed land use arrangement.

Alternate Site 7 ("CAN6"): CAN6 was not identified as suitable to meet radio-frequency objectives and the installation would likely interfere with existing land use operations has potential constraints on installation access.

Alternate Site 8 ("CAN7"): This site was ideal for meeting radiofrequency objectives due to the proximity of the existing installation and would be located on municipal land. However, this site was rejected as the the City is not interested in siting the proposed tower on the municipal wastewater treatment plant property due to concerns around liability, security and safety protocol issues.

Alternate Site 9 ("CAN8"): CAN8 was not identified as suitable to meet radio-frequency objectives and, additionally, this site would have potential environmental concerns, including the site's proximity to the creek and potential interference with conservation authority operations.

Alternate Site 10 ("CAN9"): CAN9 was not identified as suitable to meet radio-frequency objectives and was rejected in favour of the proposed site to maintain distance from residential areas and water features.

Co-location: Colocation with the existing 50m Rogers tower was investigated, however did not meet radiofrequency objectives as there is not suitable elevation available on the tower.



2. Proposed Design

In order to enhance wireless service, Bell is proposing to install a 75-metre self support tower and radio equipment shelter, located in the eastern portion of the property to support a new radiocommunications facility that will service the area.

Bell has completed a survey plan (see **Appendix 2: Survey Plan**) as well as visual simulations of the proposed self support tower (see **Appendix 3: Visual Simulations**). The tower will use a private right-of-way (driveway) for safe vehicular access into the site. The proposed design is subject to change based on final engineered design and final land survey.

Bell has made efforts to minimize the visibility of the tower to the area residents. This location was selected not only because it had the least visual impact compared to all the viable sites and is over 340 metres away from the closest residential dwelling, but also provides the community with the highest network coverage and capacity improvements.

Bell welcomes any comments from the City of Cornwall in regards to the proposed tower location and design.

3. Public Consultation Process

The City of Cornwall follows the ISED CPC-2-0-03 — Radiocommunication and Broadcasting Antenna Systems for the consultation process. Although ISED has exclusive jurisdiction in the licensing of radiocommunication sites, such as the proposed tower, ISED also requires proponents to consult with the local land use authority and public.

Since the proposed tower is within 350 metres of other properties (measured from the base of the tower), these property owners will be sent a notification package that includes the proposal and consultation details. Additionally, an ad will be published in a local newspaper determined by planning staff. The consultation period will run for 30 days where members of the public can submit comments and questions

During the consultation period, any questions, comments or concerns will be acknowledged within 14 days and address in writing all reasonable and relevant concerns within 60 days of receipt. Members of the public will have 21 days from the date of the correspondence to reply to the proponent's response

In in order to move forward with the public consultation process, Bell has submitted an application for a tower installation to the City of Cornwall. At the conclusion of the consultation process, Bell will prepare and submit a summary of comments received from the community and the replies provided by Bell.

4. Concurrence Requirements

Although Bell is exclusively regulated by the Federal Government, ISED requires Bell to consult with the land use authority as a commenting body in the sitting of antenna support structures. As a form of comment,



Bell will be seeking support or concurrence from the City in the form of a Resolution, Minutes of a committee meeting or council and/or a letter that addresses the following items:

- The City is satisfied with Bell's consultation process, as outlined in the current telecommunication policy;
- The proposed design and location is acceptable;
- That the City has been consulted and concurs with the tower location.

5. Health and Safety Compliance

The installation and operation of the proposed tower will be in compliance with the following safety standards:

a) Safety Code 6

Bell attests that the proposed tower will at all times comply with Health Canada's Safety Code 6 which limits the public's exposure to radiofrequency electromagnetic fields (EMF) and ensures public safety. This code is based on current, accepted scientific data. Additional information on health and safety may be found on-line at:

http://www.ic.gc.ca/eic/site/smt-gst.nsf/eng/h_sf01702.html

Safety Code 6 takes into account all RF emissions in the area to ensure levels in EMF energy operate within the safety limits. Safety Code 6 exposure limits are not device specific, but the limits do take into account the total exposure from all sources of RF energy.

For more detailed information on Safety Code 6, please see: <u>https://www.canada.ca/content/dam/hc-sc/migration/hc-sc/ewh-</u> <u>semt/alt_formats/pdf/consult/_2014/safety_code_6-code_securite_6/final-finale-eng.pdf</u>

b) Environmental

There are no environmental restrictions for this proposed site. Bell will undertake all the necessary environmental assessment(s) to mitigate potential impacts in the siting and construction of the proposed tower.

c) Engineering Practices

Bell attests that the proposed tower will be constructed in compliance with all applicable building standards and comply with good engineering practices including structural adequacy.

d) Transport Canada's Aeronautical Obstruction Marking Requirements

The proposed tower is in compliance with Transport Canada and NAV CANADA aeronautical safety requirements. Bell submitted an application to Transport Canada and NAV CANADA and is currently awaiting a response from both agencies.



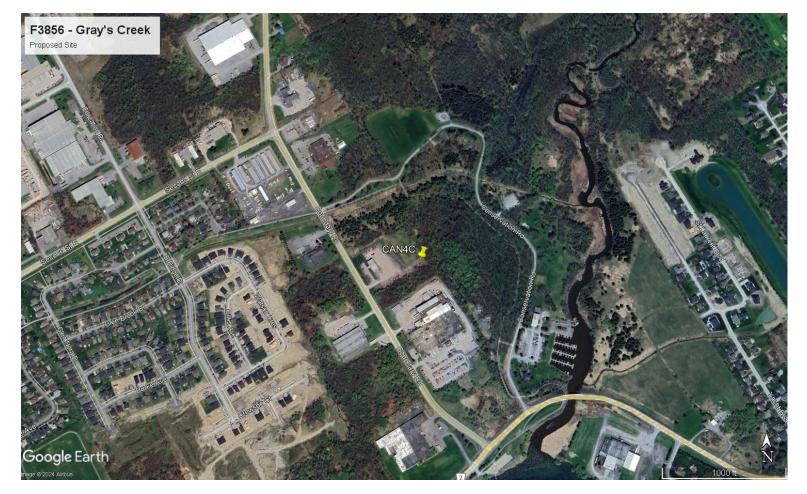
6. Conclusion

Bell is seeking to maintain high speed wireless service to the residential community and businesses by improving high-speed mobile (LTE) network coverage "This proposal entails maintaining high-speed mobile (LTE) network coverage and capacity AND Wireless To The Home internet services ("WTTH")."] in the Glenview area. To provide service, Bell is proposing the construction of a new tower. After investigating the area, reviewing local regulations and considering Bell's technical requirements, Bell finds the proposed infrastructure appropriate as it has taken into consideration the following:

- The proposed tower location will maintain much needed mobile wireless network coverage and capacity, as well as wireless high-speed home internet access to the community;
- The proposed tower is designed to maintain high quality service to Bell customers in Cornwall and surrounding areas;
- The proposed tower is located over 340 metres away from the closest residential dwelling;
- The proposed tower is located over 150 metres away from the nearest public road; and
- The proposed tower is well located due to the setback from the closest residential community.



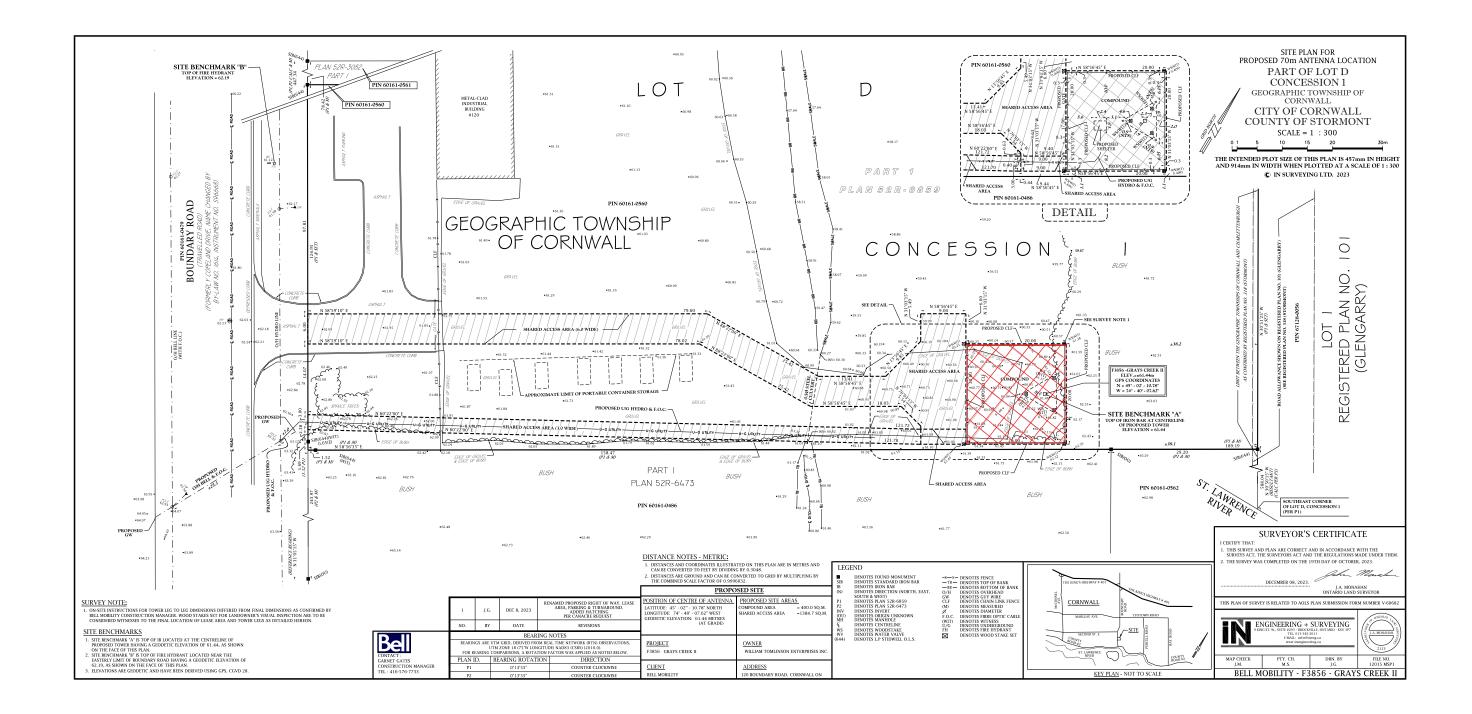
Appendix 1 – Proposed and Alternative Site Locations



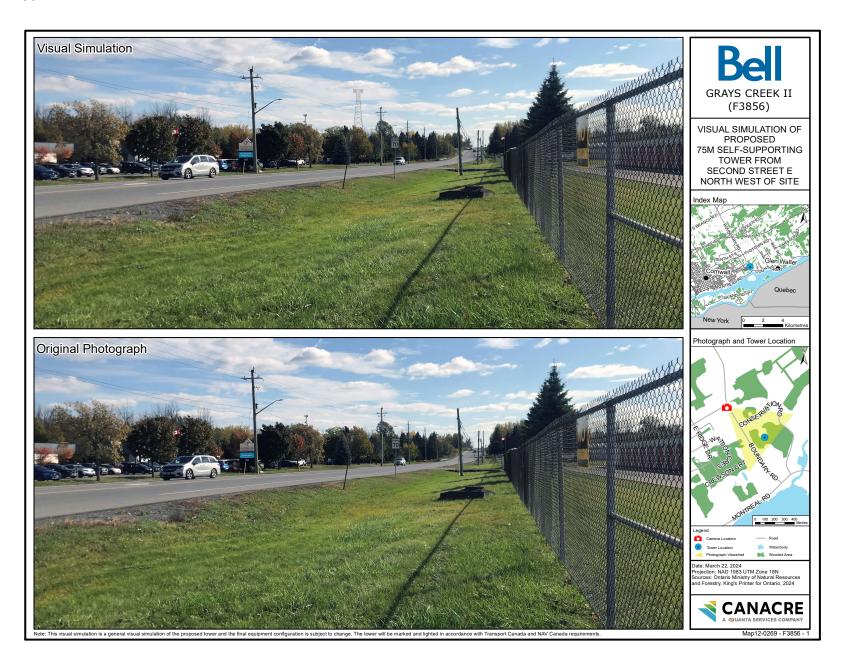
Proposed Site

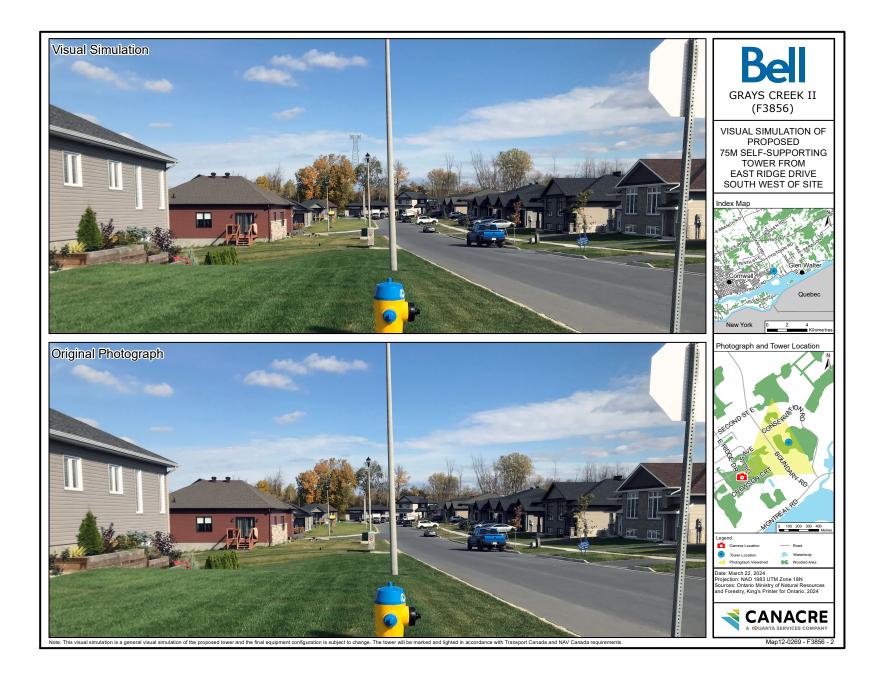
Proposed and Alternate Locations













Note: This visual simulation is a general visual simulation of the proposed tower and the final equipment configuration is subject to change. The tower will be marked and lighted in accordance with Transport Canada and NAV Canada requirements.

Map12-0269 - F3856 - 2



Note: This visual simulation is a general visual simulation of the proposed tower and the final equipment configuration is subject to change. The tower will be marked and lighted in accordance with Transport Canada and NAV Canada requirements

Map12-0269 - F3856 -

Share your thoughts on Bell's proposed antenna tower. Our experts will answer your questions and address any feedback.

If you have specific questions about the proposed plans to upgrade the wireless network in your community, you can email your Bell representative, Leyla Mains at <u>consultation@canacre.com</u> by July 14, 2024.

For additional information about antenna systems, you can visit the government of Canada at <u>www.ic.gc/towers</u> or you can contact:

Your Local Government Contact Brittany Mulhern, Associate Fotenn 613-542-5454 ext. 232 mulhern@fotenn.com

Your Innovation, Science and Economic Development Canada (formerly known as Industry Canada) Contact 2 Queen Street East Sault Ste. Marie ON P6A 1Y3 1-855-465-6307 ic.spectrumenod-spectredeno.ic@canada.ca

Canacre Ltd. Agents for Bell Mobility Unit 201 5520 Explorer Drive Mississauga, ON, L4W 5L1 Fax: (416) 352-0707

Important Information Enclosed

You are receiving this notice because you own property within 225 metres of a proposed telecommunications tower.





Notice of Public Consultation

You're receiving this notice because you own property within **225 metres** of a proposed telecommunications tower.

Inside you will find information on the proposed antenna tower as well as an invitation to share any questions and comments on this proposal. The proposed tower is required to maintain high-speed mobile (LTE) network coverage and capacity AND Wireless To The Home internet services ("WTTH").

You're Invited

In order to maintain service in your neighbourhood, Bell is proposing to install a 75 metre self-support antenna replacement tower at 120 Boundary Road. Latitude: N 45° 02' 10.78", Longitude: W 74° 40' 07.62". This installation is required to maintain service and will replace an existing tower that is to be decommissioned.

Bell is committed to working closely with our communities. This means providing any desired information in a transparent and straightforward fashion, hearing your views, and addressing any questions or comments you may have.

To this end, we invite you to email comments to your Bell representative Leyla Mains, at <u>consultation@canacre.com</u> by July 14, 2024.

We hope you will join us in helping to enhance the wireless network in your neighbourhood



Understanding the process

Step 1: Proposal

Bell proposes a site in accordance with ISED's and the Township's consultation Process. Bell submits a plan and initiates a dialogue with the City of Cornwall.

Step 2: Notification

Packages are mailed to the local public, neighbouring land use authorities, businesses, property owners and landowners within the area inviting them to the consultation process.

Step 3: Consultation

Landowners are invited to comment within 30 days. Landowners are invited to comment up to July 14, 2024.

Step 4: Acknowledgement

Bell must acknowledge receipt of comments within 14 days.

Step 5:

Response

All reasonable and relevant concerns will be addressed by Bell within 60 days.

Bell

What is an antenna tower?

An antenna tower supports the low power short-range radio systems that allow us to enjoy our mobile devices, such as our smart phones and tablets.

The purpose of the tower is to provide dependable advanced telecommunication service to the surrounding businesses and residences.



Why now?

Canadians are using wireless devices more and more in their daily lives. Currently, more than half of all phone connections in Canada are now wireless, including 70 percent of all 911 calls.

Canadian Radio-television and Telecommunications Commission (2013):

http://www.crtc.gc.ca/eng/publications/reports/rp130705.htm

In order to provide the high quality of service that Canadians have come to expect, Bell must enhance its networks to meet this increased demand.

By adding new antenna sites, Bell customers will continue to benefit from dependable, high speed and high quality wireless service.

Is it safe?

The consensus among Canadian health organizations and the scientific community is that wireless antennas are safe and in fact, this antenna tower will operate well below the levels established by Health Canada under Safety Code 6.

Bell is committed to the health and safety of Canadian communities. That is why we take great pride in our compliance with all current health and safety guidelines while continuing to provide Canada's first-rate wireless coverage.

"Health Canada, along with independent experts from across the country, continually monitor the scientific literature to ensure that Safety Code 6 is based on the best available evidence and has

significant margins of safety for the Canadian population."

Dr. Patricia Daly, MD, FRCPC, Chief Medical Health Officer & Vice President Public Health

What is Safety Code 6?

The purpose of this code is to establish safety limits for human exposure to radiofrequency (RF) energy in the frequency range from 3 kHz to 300 GHz. The safety limits in this code apply to all individuals working at, visiting, or living at or near federally regulated sites.

Bell attests that the proposed antenna tower will be installed and operated so as to always comply with Safety Code 6.

The Royal Society of Canada – A Review of Safety Code 6 (2013) https://rsc-src.ca/sites/default/files/SC6 Report Formatted 1.pd

Why here?

The proposed tower is required to maintain high-speed mobile (LTE) network coverage and capacity AND Wireless To The Home internet services ("WTTH"). This installation is required to maintain service in eastern Cornwall as it will replace an existing tower that is to be decommissioned.

Bell first looked at the possibility of sharing an existing antenna tower in order to minimize the number of new antennas in the area. Unfortunately, none of the existing structures were determined suitable for site-sharing.

Bell is proposing to install the replacement antenna tower 120 Boundary Road. Latitude: N 45° 02' 10.78", Longitude: W 74° 40' 07.62".

This site was carefully identified because it met various factors including land use restrictions, interaction with existing structures and the surrounding environment, and line of sight requirements.

Is it environmentally friendly?

As Canada's largest communications company, we care about the protection and preservation of our environment.

The proposed antenna will be built in accordance with the highest professional engineering standards and practices. We ensure the utmost care and respect for the environment as we comply with the Canadian Impact Assessment Act

A copy of the site plan can be accessed here:

https://canacre.sharefile.com/ds67670c09d8574eb9bc124cb5890aa40a

Step 6: Feedback

Landowners have 21 days to respond to

Step 7: Approval

A summary of consultation is shared with the land-use authority, and a request is submitted for concurrence.

What will it look like?

- Bell is proposing a replacement 75 metre self-support tower that will support antennas, and associated radio equipment.
- With the public's safety in mind, the area will not be accessible to the general public.
- Bell will incorporate suitable elements to the proposed antenna tower in accordance with Transport Canada's aeronautical obstruction marking requirements. Both Transport Canada and NAV Canada applications have been applied for. The NAV Canada application has been approved and it is expected that lighting will not be required for this tower ny Transport Canada.



Before



After

Faites part de vos réflexions concernant la tour proposée par Bellr. Nos experts répondront à vos questions et addresseront vos commentaires.

Si vous avez des questions précises sur les plans proposés pour mettre à niveau le réseau sans fil dans votre communauté, vous pouvez envoyer un courriel à votre représentante de Bell, Leyla Mains à l'adresse consultation@canacre.com avant le 14 juillet 2024.

Pour en savoir plus sur les systèmes d'antenne, vous pouvez visiter le gouvernement du Canada à l'adresse <u>www.ic.gc/towers</u> ou vous pouvez communiquer avec:

Votre personne-ressource du gouvernement local	V
Brittany Mulhern, adjoint	d
Fotenn	
613-542-5454 étendue. 232	
mulhern@fotenn.com	

Votre personne-ressource en matière d'innovation, de science et de développement économique Canada (anciennement appelée Industrie Canada) 2 Queen Street Est Sault Ste. Marie, ON P6A 1Y3 1-855-465-6307 <u>ic.spectrumenod-spectredeno.ic@canada.ca</u>



Avis de consultation publique

Vous recevez cet avis parce que vous possédez un immeuble à moins de 225 mètres d'une tour de télécommunications proposée.

À l'intérieur, vous trouverez de l'information sur la tour de télécommunications proposée ainsi qu'une invitation à partager vos questions et commentaires sur cette proposition. La tour proposée est requise pour maintenir la couverture et la capacité du réseau mobile haute vitesse ET les services Internet sans fil jusqu'aux domiciles.

Canacre Ltd. Agents de Bell Mobilité Unité 201 Lecteur Explorer 5520 Mississauga, ON, L4W 5L1 Télécopie: (416) 352-0707

Renseignements importants joints

Bell

Vous êtes invités

Afin de maintenir le service dans votre quartier, Bell propose d'installer une tour de télécommunications de remplacement autonome de 75 mètres au 120 rue Boundary. Latitude: N 45° 02' 10,78 po, Longitude: L 74° 40' 07,62 po. Cette installation est requise pour maintenir le service et remplacera une tour existante qui doit être mise hors service.

Bell s'engage à travailler en étroite collaboration avec nos collectivités. Cela signifie fournir l'information désirée de façon transparente et directe, entendre vos opinions et répondre à vos questions ou commentaires.

À cette fin, nous vous invitons à envoyer vos commentaires par courriel à votre représentante de Bell, Leyla Mains, à l'adresse <u>consultation@canacre.com</u> avant le 14 juillet 2024.

Nous espérons que vous vous joindrez à nous pour nous aider à améliorer le réseau sans fil dans votre quartier.



Site proposé

Comprendre le processus

Étape 1: **Proposition**

Bell propose un site conforme avec les ISED et le processus de consultation du canton. Bell soumet un plan et entame un dialogue avec la ville de Cornwall.

Étape 2: Avis

Les colis sont envoyés par la poste au public local, aux autorités d'utilisation des terres voisines, aux entreprises, aux propriétaires immobiliers et aux propriétaires fonciers de la région. les invitant au processus de consultation.

Étape 3: Consultation

Les propriétaires sont invités à commenter dans les 30 jours. Les propriétaires sont invités à commenter jusqu'au 14 juillet 2024.

Étape 4: Accusé de réception

Bell doit accuser réception des commentaires dans les 14 jours.

Étape 5: Réponse

Bell traitera toutes les préoccupations raisonnables et pertinentes dans les 60 jours.

Qu'est-ce qu'une tour de télécommunications?

Une tour de télécommunications prend en charge les systèmes radio à courte portée à faible puissance lesquels nous permettent de profiter de nos appareils mobiles, comme nos téléphones intelligents et nos tablettes.

L'objectif de la tour est d'offrir un service de



Pourquoi maintenant?

Les Canadiens utilisent de plus en plus d'appareils sans fil dans leur vie quotidienne. Actuellement, plus de la moitié de toutes les connexions téléphoniques au Canada sont maintenant sans fil, y compris 70 % des appels 9-1-1.

Commission canadienne de la radiodiffusion et des télécommunications (2013) :

http://www.crtc.gc.ca/eng/publications/reports/rp130705.htm

Afin de fournir la qualité de service élevée à laquelle les Canadiens s'attendent, Bell doit améliorer ses réseaux pour répondre à cette demande accrue.

En ajoutant de nouveaux sites de télécommunications, les clients de Bell continueront de profiter d'un service sans fil fiable, haute vitesse et de haute qualité

Est-ce sécuritaire?

Le consensus entre les organismes de santé canadiens et la communauté scientifique est que les antennes sans fil sont sécuritaires et, en fait, cette tour de télécommunications fonctionnera bien en dessous des niveaux établis par Santé Canada en vertu du Code de sécurité 6.

Bell s'engage à assurer la santé et la sécurité des collectivités canadiennes. C'est pourquoi nous sommes très fiers de notre conformité à toutes les directives actuelles en matière de santé et de sécurité tout en continuant d'offrir la couverture sans fil de premier ordre au Canada.

« Santé Canada et des experts indépendants de partout au pays surveillent continuellement la littérature scientifique pour s'assurer que le Code de sécurité 6 est fondé sur les meilleures preuves disponibles et présente d'importantes marges de sécurité pour la population canadienne. » Dr. Patricia Daly, MD, FRCPC, chef de la santé médicale et vice-présidente, santé publique.

Qu'est-ce que le Code de sécurité 6?

Le but de ce code est d'établir les limites de sécurité pour l'exposition humaine à l'énergie radiofréquence (RF) dans la plage de fréquences de 3 kHz à 300 GHz. Les limites de sécurité du présent code s'appliquent à toutes les personnes qui travaillent, visitent ou vivent dans des sites réglementés par le gouvernement fédéral ou à proximité.

Bell atteste que la tour de télécommunications proposée sera installée et exploitée de manière à toujours se conformer au Code de sécurité 6.

> La Société rovale du Canada – Revue du Code de sécurité 6 (2013) https://rsc-src.ca/sites/default/files/SC6_Report_Formatted_1.pdf

Pourquoi ici?

La tour proposée est requise pour maintenir la couverture et la capacité du réseau mobile haute vitesse (LTE) ET les services Internet sans fil jusqu'au domicile. Cette installation est requise pour maintenir le service à l'Est de Cornall, car elle remplacera une tour existante qui doit être mise hors service.

Bell a d'abord examiné la possibilité de partager une tour de télécommunications existante afin de réduire au minimum le nombre de nouvelles antennes dans la région. Malheureusement, aucune des structures existantes n'a été jugée appropriée pour le partage de site.

Bell propose d'installer la tour de télécommunications de remplacement au 120 rue Boundary. Latitude : N 45° 02' 10,78 po, Longitude : W 74° 40' 07,62 po.

Ce site a été soigneusement identifié parce qu'il répondait à divers facteurs, notamment les restrictions d'utilisation des terres, les interactions avec les structures existantes et l'environnement immédiat, et les exigences en matière de visibilité directe.

Est-ce respectueux de l'environnement?

En tant que plus grande entreprise de communications au Canada, nous nous soucions de la protection et de la préservation de notre environnement

La tour proposée sera construite conformément aux normes et pratiques d'ingénierie professionnelle les plus élevées. Nous assurons le plus grand soin et respect de l'environnement tout en nous conformant à la Loi canadienne sur l'évaluation de l'impact.

Une copie du plan du site est accessible ici :

https://canacre.sharefile.com/d-

s67670c09d8574eb9bc124cb5890aa40a

Étape 6: Rétroaction

Les propriétaires fonciers ont 21 jours pour répondre à Bell.

Étape 7: **Approbation**

Un sommaire de la consultation est communiqué à l'autorité d'utilisation des terres et une demande est soumise pour approbation.

À quoi cela ressemblera-t-il?

- Bell propose une tour autoportante de remplacement de 75 mètres laquelle prendra en charge les antennes et l'équipement radio connexe.
- Compte tenu de la sécurité du public, la zone ne sera pas • accessible au grand public.
- Bell intégrera des éléments appropriés à la tour de ٠ télécommunications proposée conformément aux exigences de marquage d'obstruction aéronautique de Transport Canada. Les applications de Transport Canada et de NAV Canada ont été appliquées. L'application NAV Canada a été approuvée et on s'attend à ce que l'éclairage ne soit pas requis pour cette tour de Transport Canada.



Avant



Après





JASON SETNYK

supporting equipment.

Waldroff said.

expressed gratitude, noting the grant's sig-

nificance as the theatre's first major equip-

ment investment since reopening in 2022.

'This investment supports our current pro-

ductions and will bring back the Aultsville

Film Festival, creating new revenue streams,"

impact, stating, "This is an exciting day for

Aultsville Theatre and the region. The new

equipment will attract visitors to Cornwall."

Aultsville Theatre applauds Ontario

2605 Brookdale Ave., Cornwall 613-933-7555 sales@cornwallnissan.ca WWW.CORNWALLNISSAN.CA

Former OHA star Kaleb Lawrence inks deal with LA Kings

JASON SETNYK

Orleans native Kaleb Lawrence has signed a three-year, entry-level contract with the Los Angeles Kings. The 21-year-old forward, who played two seasons at the Ontario Hockey Academy (OHA) in Cornwall, is thrilled. "Signing my first NHL contract was special for me and my family. I've put in a bunch of work and time, and to see it pay off like that and get one step closer to my goal is exciting," Lawrence said.

Lawrence had a standout season, recording 37 points in 58 regular season games split between the Ottawa '67s and the London it helped me a lot. I learned from some of Knights. He added nine points in eight playoff games, helping the Knights clinch the OHL championship before narrowly losing the Memorial Cup to the Saginaw Spirit. "After spending four years in the OHL, I think



Kaleb Lawrence has signed a contract with the LA Kings. Submitted photo

the best coaches across Canada this past year, which gave me even more experience." Lawrence reflected. Drafted by the Kings in 2022, Lawrence is eager to embark on his professional journey.





Raisin Region

CONSULTATION NOTICE: UPDATED WETLAND MAPPING AND DEVELOPMENT POLICIES

South Nation Conservation (SNC), Rideau Valley Conservation Authority (RVCA), and Raisin Region Conservation Authority (RRCA) will be hosting public information sessions for residents to learn more about updated wetland mapping and development policies under the Government of Ontario Reg. 41/24: Prohibited Activities, Exemptions and Permits.

Residents interested in learning more, viewing draft wetland maps and providing feedback are welcome to schedule meetings with their Conservation Authority or drop in anytime during the information sessions:

Thursday, June 20, 2024 3:00 pm – 8:00 pm	Civitan Club of Perth 6787 County Road 43, Perth, ON	RVCA Staff
Tuesday, June 25, 2024	R.J. Kennedy Community Centre	SNC &
3:00 pm – 8:00 pm	1115 Dunning Road, Cumberland, ON	RVCA Staff
Wednesday, June 26, 2024	RVCA Administrative Office	SNC &
3:00 pm - 8:00 pm	3889 Rideau Valley Drive, Manotick, ON	RVCA Staff
Thursday, June 27, 2024	SNC Administrative Office	SNC &
3:00 pm – 8:00 pm	38 Victoria St., Finch, ON	RRCA Staff

Policy information, draft wetland maps, and meeting request links are available online:

SNC: nation on ca/consultations RVCA: rvca ca/regulations-planning RRCA: rrca on ca/permits

www.cornwallseawaynews.com June 12, 2024 - Seaway News -Wednesday,



Board President Lee Cassidy, GM Brittney Waldroff. and MPP Nolan Quinn celebrated an OTF grant for Aultsville Theatre. Jason Setnyk Photo

Lee Cassidy, President of the Aultsville Theatre Board of Directors thanked the OTE MPP Nolan Quinn, GM Waldroff, the Board, and volunteers for their support. Cassidy MPP Nolan Quinn praised the grant's announced, "Our next big project is to get our sound system into this century. We've set a goal of \$760,000 and have already begun our quest."



PROPOSED BELL MOBILITY RADIOCOMMUNICATIONS FACILITY TELECOMMUNICATION TOWER

Bell Mobility Inc. ("Bell") is committed to providing Canadian communities high speed wireless voice and data services. To maintain service, Bell is proposing to construct a 75-metre self-support replacement antenna tower with ancillary radio equipment. This proposed tower is required maintain mobile network and wireless home internet ("WTTH") services to the community and will replace an existing tower to be decommissioned. As part of the public consultation process as required by Innovation, Science and Economic Development Canada (formerly known as Industry Canada) ("ISED"), Bell's regulator under the Radiocommunications Act, Bell is inviting the public to comment on the proposed tower location before July 14, 2024. This tower is fully compliant with ISED's guidelines, as found under the Client Procedures Circular (CPC-2-0-03).

TOWER LOCATION: 120 Boundary Road

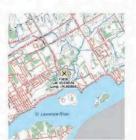
COORDINATES: Latitude: N 45° 02' 10.78", Longitude: W 74° 40' 07.62".

LEGAL: PART OF LOT D CONSESSION 1

ANY PERSON MAY comment by close of business day on July 14, 2024 with respect to this matter.

BELL CONTACT: Leyla Mains Canacre Ltd. Agent for Bell

Unit 201 5520 Explorer Drive Mississauga, ON, L4W 5L1 Fax: (416) 352-0707 Email: consultation@canacre.com





Seaway News - www.cornwallseawaynews.com - Wednesday, June 12, 2024 - 5



Brittany Mulhern MCIP RPP Associate, Fotenn, on behalf of the City of Cornwall The Woolen Mill 4 Cataraqui Street, Suite 315 Kingston, ON K7K 1Z7

July 22, 2024

Subject: Bell Mobility – F3856 – Gray's Creek – Consultation Summary

Consultation Summary:

Bell Mobility is proposing the F3856 Gray's Creek self-support telecommunications tower to maintain wireless LTE mobile in this community. As per the ISED default Public Consultation process, Bell sent out notifications to all property owners within 225 m of the self-support tower and Bell published a public notification in a local newspaper with a 30-day period to receive written comments.

A total of one (1) party submitted written comments regarding the proposed tower. This response was negative. Bell followed section 4.2 of the ISED protocol for Responding to the Public and ensured that the policy outlined below was followed:

"Proponents are to address all reasonable and relevant concerns, make all reasonable efforts to resolve them in a mutually acceptable manner and must keep a record of all associated communications."

The comments submitted by the property owner were acknowledged within the 14-day acknowledgement period and addressed as per ISED default protocol within the prescribed 21-day response period from the reply date. The property owner had concerns about the development potential of their property once the proposed telecommunications tower was installed. As the property owner did not want to share specific details of the proposal Bell restated that all towers are constructed as per Federal requirements and that there are no known provincial approvals related to the property owner's general development plans that would be impacted by the proposed telecommunications tower. Please refer to the consultation correspondence file titled 20240722_F3856_Gupta_Email_Conversation for the complete record of correspondence.

Summary of written comments:

Comment Type	Summary of Comments
Positive	• N/A
Neutral/Questions	• N/A
Negative	 Property owner had concerns about the tower's impact on their future development proposal.

From:	CAL-Consultation
To:	"Gupta"; CAL-Consultation
Cc:	Shanti Gupta; Ic.spectrumenod-spectredeno.lc@canada.ca; Brittany Mulhern
Subject:	RE: Bell Notice of Public Consultation Cherry Global Supplier Management Ltd Boundary Road Land PIN#PIN 60161-0561 (LT
Date:	Friday, July 19, 2024 10:05:00 AM
Attachments:	image001.png
	image002.png

Hi Harit,

Thank you for your response. These comments will be included in the record of consultation.

Kind Regards, Leyla Mains

Canacre of behalf of Bell Mobility

From: Gupta Sent: Thursday, July 18, 2024 3:30 PM

To: CAL-Consultation <consultation@canacre.com>

Subject: Re: Bell Notice of Public Consultation Cherry Global Supplier Management Ltd Boundary Road Land PIN#PIN 60161-0561 (LT

[EXTERNAL]

Hi Leyla,

With reference to your trailing e-mail, from Canacare, we would like to state that, we have an objection in installing the towers at the proposed site. We are in the process of developing the site, at this stage, we don't want to disclose any information on it.

Please mark our objection in the proposed project.

Thank you I

Kind regards, Harit Gupta Manager Cherry Global Supplier Management Limited

On Thu, Jul 18, 2024 at 2:30 PM CAL-Consultation < consultation@canacre.com > wrote:

Hi Shanti,

As the 21-day response period will close tomorrow, July 19 I am following up with you to ensure that you have no further questions or clarifications regarding the telecommunications tower proposal in relation to your property. Your comments will be included in the consultation record of correspondence.

Kind Regards,

Cc:

Leyla Mains Canacre of behalf of Bell Mobility

From: CAL-Consultation Sent: Thursday, July 4, 2024 2:03 PM To: 'Shanti Gupta'

lc.spectrumenod-spectredeno.lc@canada.ca; Brittany Mulhern mulhern@fotenn.com

Subject: RE: Bell Notice of Public Consultation Cherry Global Supplier Management Ltd Boundary Road Land PIN#PIN 60161-0561 (LT

Hi Shanti,

For clarification, please see the image below that shows the distance between your property and the proposed site.



Although this tower is proposed in an industrial area as shown in the attached, towers are common in and around properties used for agriculture, especially given the vital network services provided by necessary network infrastructure as entailed in this proposal. There are no known provincial ministerial approvals related to agricultural activities that may be affected by tower operations on a separate private property at this distance.

Please detail your specific concern with regard to this proposal. In particular, please describe your potential future agricultural activities, and how your potential future agricultural activities would be impacted by the proposed tower so that we can assess and address those concerns specifically.

Kind Regards,

Leyla Mains

Canacre of behalf of Bell Mobility

From: Shanti Gupta

Sent: Friday, June 28, 2024 4:44 PM

To: CAL-Consultation < consultation@canacre.com>

Cc: L.spectrumenod-spectredeno.lc@canada.ca; Brittany Mulhern <<u>mulhern@fotenn.com</u>> Subject: Re: Bell Notice of Public Consultation Cherry Global Supplier Management Ltd Boundary Road Land PIN#PIN 60161-0561 (LT

You don't often get email from the second state of the second stat

[EXTERNAL]

Hi CAL-Consultation,

I have future plans for commercial agriculture allied activities. your project will create many approval issues in my future plans .

However it will be very difficult to get approval from agriculture ministry for my future projects so I as a stakeholder I do not accept it .

Hope you find another place for your project .

Thank you Kind Regards Shanti

Cc:

From: CAL-Consultation <<u>consultation@canacre.com</u>> Sent: Friday, June 28, 2024 4:14:21 PM

To: Shanti Gupta

>; lc.spectrumenod-spectredeno.lc@canada.ca <lc.spectrumenod-

spectredeno.lc@canada.ca>; Brittany Mulhern <mulhern@fotenn.com>

Subject: RE: Bell Notice of Public Consultation Cherry Global Supplier Management Ltd Boundary Road Land PIN#PIN 60161-0561 (LT

Good Afternoon Shanti,

Thank you for taking the time to provide us with your comments regarding the proposed Bell telecommunications tower at 120 Boundary Road. We understand that there is a need for continued network coverage and capacity in the community, and this proposal has been brought forward to meet this need. As per the image of the location below, the tower is to be located at 120 Boundary Road and will not impact your property.



Please note that this response initiates the 21-day response period, which closes July 19, 2024. The 21-day response period is part of Innovation, Science, and Economic Development Canada's CPC 02-0-03 to provide time for commenters to reply to the proponent's message.

Kind Regards,

Leyla Mains

Canacre of behalf of Bell Mobility

From: Shanti Gupta < Sect: Thursday, June 27, 2024 4:25 PM To: CAL-Consultation < <u>consultation@canacre.com</u>> Cc:

Subject: Bell Notice of Public Consultation Cherry Global Supplier Management Ltd Boundary Road Land PIN#PIN 60161-0561 (LT

You don't often get email from **Extension Control**. Learn why this is important [EXTERNAL]

Hello Leyla,

I am responding in regard to letter received which is attached .

I have obligation to antenna tower as my proposed future plans will be affected so I can not accept it .

Please see my land location that's why I have obligation .

LEGAL DESCRIPTION

PIN Legal Description

PIN 60161-0561 (LT) PT LT D CON 1 E OF BOUNDARY RD, S OF 52R281 & N

If you have any questions, please reach out to me on

or email :

Thank you

Kind Regards,

Shanti Gupta MBA

Construction of the

🕈, Cornwall, Ontario, Canada

Cell:

Office Address



Brittany Mulhern MCIP RPP Associate, Fotenn on behalf of the City of Cornwall The Woolen Mill 4 Cataraqui Street, Suite 315 Kingston, ON K7K 1Z7

July 22, 2024

Dear Brittany,

As you are aware, Bell Mobility is proposing to build a 75 metre self-support telecommunications tower tower to the official position described as follows: PART OF LOT D CONSESSION 1; with municipal address: 120 Boundary Road. This project will meet the telecommunications needs for high-quality wireless voice and high-speed wireless internet services in the community.

Canacre Ltd., being an Authorized Agent of Bell Mobility Inc., has followed the ISED default Public Consultation process. As per the policy, all property owners living within a radius of three times the height of the proposed tower property were contacted. An ad was also published in the local newspaper Seaway News to inform the community about the project. Throughout this process, Bell Mobility was available to all residents who may have had a concern regarding the proposed structure.

No additional third-party permits are required for this tower proposal. Transport Canada and NAV Canada permits have been received, and it has been determined that lighting protection will be required for this proposal. As you may know, telecommunication towers are exempt from building permits and so this will not be pursued. Therefore, please accept this letter as a formal request for concurrence.

Please sign on the line indicated below or provide a letter indicating that you have no further comments or concerns.

Thank you,

Leyla Mains Planner, Canacre Ltd.

Signature of Designated Official for providing concurrence:

Brittany Mulhern MCIP RPP Associate mulhern@fotenn.com



The Corporation of the City of Cornwall Regular Meeting of Council Resolution

Department:	Planning, Development and Recreation
Division:	Planning
Resolution Number:	2024-20
Report Number:	2024-145-Planning, Development and Recreation
Meeting Date:	August 13, 2024
Subject:	Self-Supported Telecommunication Tower – 120 Boundary Road – Bell Mobility c/o Canacre

Whereas Bell Mobility seeks to provide dependable advanced telecommunication service to surrounding businesses and residences, including facilitating future shared siting opportunities; and,

Whereas Canacre, on behalf of Bell Mobility, has identified and secured a site for its 75-meter-tall self-supported telecommunication tower within the City of Cornwall's boundaries; and,

Whereas the tower will be situated within a 20-meter x 20 meter lease area located at the southeast corner of the property municipally known as 120 Boundary Road (legally described as Part of Lot D, Concession 1, as well as being Part 1 on Reference Plan 52R-6859); and,

Whereas the tower will be replacing an existing tower further south of the proposed location, and is necessary to ensure uninterrupted and enhanced telecommunications coverage in the area; and,

Whereas final approval of the proposed structure is the domain of the Federal Government through Innovation, Science and Economic Development Canada (ISED); and,



Whereas such an installation is subject to the federal requirements as prescribed in ISED's Client Procedures Circular CPC-2-0-03 Radiocommunication and Broadcasting Antenna Systems which includes the default protocol for public consultation that the City of Cornwall presently utilizes; and,

Whereas Canacre, on behalf of Bell Mobility, has fully conducted the required due diligence with respect to comprehensive public consultation, as confirmed in the applicable staff report attachments and documentation; and,

Whereas various City staff have reviewed the proposed tower location and description, and have no objections or concerns as it is not anticipated to negatively impact surrounding neighborhoods; and,

Whereas official support from the municipality in the form of Council Resolution and a municipal statement of concurrence is sought by Canacre on behalf of Bell Mobility to indicate fulfillment of ISED's public consultation requirements.

Now, therefore, be it resolved that the Council of the Corporation of the City of Cornwall supports and endorses the proposed Bell Mobility 75-meter-tall self-supported telecommunication tower to be situated at 120 Boundary Road, as herein described.

I, Manon L. Levesque, City Clerk for The Corporation of the City of Cornwall, do hereby certify that the above is a true copy of Resolution Number 2024-20 enacted by Council on Tuesday, August 13th, 2024.

Manon L. Levesque City Clerk



The Corporation of the City of Cornwall Regular Meeting of Council Report

Department:	Financial Services
Division:	Finance
Report Number:	2024-87-Financial Services
Prepared By:	Marie-France Walker, Finance Manager, Deputy Treasurer
Meeting Date:	August 13, 2024
Subject:	2023 Fourth Quarter Financial Overview – Preliminary Report

Purpose

This report provides Council with information on the 2023 fiscal year end results. Our financial statements are currently being audited by our external auditors, KPMG LLP.

Recommendation

That Council authorize the transfer of funds as follows:

- a) \$1,187,373 be transferred from the Working Reserve
- b) \$ 44,558 be transferred from the Water Works Reserve
- c) \$ 221,934 be transferred to the Wastewater Works Reserve

Financial Implications

This report is to provide the 2023 year end position of the City's tax supported and non-tax supported departments, subject to any adjustments resulting from the year-end external audit. Additionally, this report serves as Council's opportunity to approve funding the General Taxation deficit and the Water Services deficit, and to approve the allocation of the surplus for Wastewater Services.



As a result of operations in 2023, staff are recommending the following transfers to/from reserves:

City of Cornwall, excluding Water and Wastewater

The City of Cornwall has an approximate net operating deficit for 2023 in the amount of \$1,187,373. It is recommended that the deficit be funded by the Working Reserve.

The net operating deficit for 2023 in the amount of \$1,187,373 is 0.54% of the City's General Taxation budget. It is important to manage the City's operations financially to ensure long-term fiscal sustainability. Maintaining healthy Operating Reserves is crucial as it provides stability to address unexpected expenses, economic downturns, or emergencies without disrupting essential services. At the end of 2023, the City's Operating Reserves are below its target balance by \$1,625,027.

A summary of variances can be found on Schedule I.

Environmental Services Water

The 2023 Water operating and capital budget is \$9,271,932. The City of Cornwall has an approximate deficit in the amount of \$44,558 at year end. It is recommended that the deficit be funded by the Water Works Reserve. A summary of variances can be found on Schedule II.

Environmental Services Wastewater

The 2023 Wastewater operating and capital budget is \$11,746,048. The City of Cornwall has an approximate surplus in the amount of \$221,934 at year end. The recommendation is to transfer the surplus to the Wastewater Works Reserve. A summary of variances can be found on Schedule II.

Strategic Priority Implications

Fiscal responsibility is a key pillar to the City's strategic objectives. The details outlined within this report as well as the attachments have recommendations for contributions to reserves that can be used to mitigate unanticipated financial risks to the Corporation and reduce the impact to the tax base to fund this risk.



Background / Discussion

This report provides Council with information on the 2023 fiscal year end financial results.

The City's tax supported year end realized a deficit of \$1,187,373.

Some notable variances are:

 Salaries: The City continues to have full-time vacancies in a number of departments. The savings in full-time salaries were offset with increases in part-time and overtime costs. The deficit in salaries and benefits also include higher WSIB costs. WSIB costs were over budget by \$268,915 Overall salaries and benefits were over budget by \$1,670,227 when compared to the 2023 budget.

Salaries and benefits were greater than budget for the GSDL (\$598,428), Paramedic Services (\$473,619), Police Services (\$404,095), and Transit Services (\$489,065). It is important to note that variances for the GSDL, Paramedic Services, and Police Services were, for the most part, funded by additional Ministry and recovery revenue the City received.

Salaries and benefits were below budget for Human Services, Recreation Services, and City Facilities due to vacancies within the departments.

Overall, the net variance in salaries and benefits is estimated at \$400K over budget.

- Legal fees: The City budgeted \$516,660 for legal fees, arbitrations, and grievances. The City ended the year over budget by \$1,542,787. These expenses are related to labour relations and legal matters. To alleviate the increasing legal pressure and associated expenses on the City's budget, through the 2024 budget, Council approved bringing legal services inhouse.
- Tax refunds: The City is not seeing many assessment appeals or requests for reconsideration relating to property values. In November 2021, the Province announced the continued postponement of the 2022 and 2023 property assessments. Assessments used for the 2023 taxation year continued to be based on the same valuation date that was in effect for the 2020 taxation year. The City budgeted \$700,000 for tax refunds in 2023.Tax refunds for 2023 was \$277,382 (savings of \$422,618).



- Supplementary taxation: In 2023, the City billed \$842,741 in supplementary taxation revenue compared to a budget of \$1,087,000, a negative variance of \$244,259.
- Investment income: For its 2023 budget, interest earned on reserves was directly contributed to reserves and not recognized first as revenue. To ensure proper accounting, at its year end, different than budget, the City recognizes on its Statement of Operations and Accumulated Surplus all investment income earned on reserves through revenue (except for contributions to its obligatory reserves). Because of this change, recorded interest revenue exceeded budget by \$2,878,689 (budget \$1,900,000) while contributions to reserves exceeded budget by \$2,000,318 (budget \$480,000).

As a revenue source in its operating budget, the City budgets investment income on its bank balances and short-term investments. The Bank of Canada has increased its overnight rate several times in 2022 and in 2023. These increases have allowed the City to invest funds at much higher rates. Investment revenue exceeded budgeted by \$879,371.

- Winter Control: As planned, the City utilized \$150,000 from the Winter Control Reserve to support 2023 operations. This reserve now has a balance of \$350,000 at December 31, 2023. For 2023, winter activities were over budget by \$119,162.
- Parking: Municipalities generally strive for financially sustainable parking operations where parking revenues are enough to fund expenses. This model is preferred as it places the costs of the parking system on the users of the system and not on the tax base. In past years, the City has been able to fund any parking deficits from the Parking Reserve and with COVID funding during the pandemic. The City used \$141,392, the remaining funds in the Parking Reserve, and still had a deficit in Parking operations of \$111,017.

Financial Services continues to work closely with all City Departments in monitoring financial activity to ensure that any action required to address negative variances in relation to the budget is considered. The 2023 year end deficit poses a challenge to the City's long-term financial stability. While the deficit can be funded this year, as noted it is crucial to maintain reserves at adequate levels allowing the City to respond effectively to unexpected expenses or revenue shortfalls and any emergencies that may arise.



Contributions to Reserves and Reserve Funds at December 31, 2023

Further to the Reserve and Reserve Fund Policy and regulations and procedures set by Council/Ministry direction, the following contributions were made to reserves at December 31, 2023.

Land Ambulance Reserve

In 2023, the MOHLTC transferred an additional \$411,386 in funding when compared to budget. This additional funding offset added costs in salaries and enabled the City to record a contribution to the Land Ambulance Reserve in the amount of \$66,406 for future capital purchases. Recording these contributions brought SDG's contribution to budget and the City's contribution \$242,274 under budget.

The additional 2023 contribution to the Land Ambulance Reserve is important to support the Service's 10-year capital plan. Capital is funded by the Land Ambulance Reserve and the Reserve is funded by annual amortization. Currently, annual amortization is less than the capital requirements outlined in the 10-year capital plan.

Land Reserve

The City sold land contributing \$1,445,664 to the Land Reserve. These funds will be utilized for the Nick Kaneb Extension to McConnell Avenue through the Business Park.

Community Housing Capital Reserve

In 2023, the City recorded a contribution to its Community Housing Capital Reserve in the amount of \$374,200. Contributions to this capital reserve are to support the renewal of assets and additions to the housing portfolio.

Building Surplus Reserve (permits)

Building Permit revenue at year end is \$3,125,766. This exceeded the 2023 budget by \$1,902,366. Approximately 75% of the exceeded revenue is attributed to one major industrial project, which consisted of three permits. The balance of the exceeded revenue was also within the commercial and industrial sectors, as the current interest rate have had an impact on the residential sector as a whole.

The net Building Services' surplus of \$1,754,030 at year end was contributed to the Building Surplus Reserve (permits) as per Provincial Regulation. In Ontario, the annual surplus from municipal building permits is contributed to a reserve fund. This reserve fund is designed to ensure that even if building activity slows



down, there are sufficient funds to maintain building department services without affecting the municipality's finances or staffing. The money in this reserve fund can only be used for costs related to the administration and enforcement of the Building Code Act.

WSIB - Estimated Future Benefit Costs Reserve

As a schedule 2 employer, the City self-insures the provisions of benefits under the Workplace Safety and Insurance Act. The City established a Reserve to protect the City from major future costs associated with claims. Annual contributions are made by City departments and contributed to the fund each year. The amount of the 2023 contribution is \$241,426.

Schedule I and Schedule II – Explanation of Variances

Schedule I and Schedule II provide further details as it relates to year end variances in revenue, salaries and benefits, purchase of goods, services and rents, and financial. Variances in Shared Services and Police Services are noted separately by department.

The above financial matters have been reviewed with the City's departmental management teams and external auditors. Prior to completing the 2023 year end, approval for the transfer of funds to/from Reserves is required by Council.

Next Steps

The external audit of the financial statements is expected to be completed in Fall. Following the external audit, the audited financial statements will be presented to City Council for approval. At that time, the year end financial results will be confirmed or adjusted based on recommendations of the external audit.

City of Cornwall - Excluding Water and Wastewater 2023 Year End Report (Preliminary and Unaudited) Explanation of Variances

Schedule I

favourable / (unfavourable)

Interest on Taxes Other Salaries and Benefits Council, CAO, HR, Clerks, Financial Services Fire Services Municipal Works, Transit, Waste Mgmt. & Engineering Transit Services Economic Development, Bylaw and Planning Recreation Services City Facilities Purchase of Goods Operating Supplies/Parts and Accessories ITT and Equipment Purchases Utilities Road Materials Gasoline and Fuel Services and Rents Legal Fees Arbitrations, Grievances & Negotiations Contracted Services Other Services (hired equipment, mtce contracts, etc.) Financial	(244,259) (142,586) 203,438 377,636 187,193 2,878,689 222,990 251,858 (281,045) (210,327) (85,660) (489,065) (40,634) 316,645 252,837 (278,017) (186,103) (278,843) 178,768 134,372 (870,533) (550,132) (609,901) (769,166)	\$	(537,249) (429,823)		Revenue (excluding departments listed below) In 2023, the City did not receive the budget it planned for supplementary taxation or for POA. The City recorded additional revenue in Transit (regular passenger fees), Recreation (arena rental and fees), and in Recycled Material and Tipping Fees at the City's Landfill site. As noted in the report, Investment Income exceeded budget. The City budgeted \$550K for interest on taxes and billed \$773K on accounts in arrears. Salaries and Benefits (excluding departments listed below) In 2023, the City budgeted \$35.8M for Salaries and Benefits for these departments. Year end actuals were \$36.4M resulting in a deficit of \$537K. Challenges in recruitment lead to additional part-time and overtime costs. The City incurred additional costs related to union negotiations when compared to budget. Purchase of Goods (excluding departments listed below) Variances in Purchase of Goods included operational supplies/parts & accessories (Fire, \$95K, Garage \$107K, Transit \$34K, Facilities \$35K), new and replacement equipment (Fire \$107K, Facilities S53K), and additional costs of \$279K in utilities at municipal facilities. Materials, such as, sand, salt, asphalt, and concrete were under budget by \$115K. The City also recognized a saving in fuel for its fleet in the amount of \$134K (MW \$157K, Transit a cost of \$22K). Services and Rents (excluding departments listed below) Larger variances in Services and Rents include Legal and Arbitrations as described in the report. The City was over budget in contracted services by \$610K. Waste Management's contracted services came in \$612K over budget. This is related to the waste disposal and recycling program contracts with suppliers Additional costs in the amount of \$378K were incurred in
Transit Revenue Recreation Revenue Recycled Material Revenue/Tipping Fees Investment Income (see Financial section) Interest on Taxes Other Salaries and Benefits Council, CAO, HR, Clerks, Financial Services Fire Services Municipal Works, Transit, Waste Mgmt. & Engineering Transit Services Economic Development, Bylaw and Planning Recreation Services City Facilities Purchase of Goods Operating Supplies/Parts and Accessories © Transit Gaugipment Purchases Utilities Road Materials Gasoline and Fuel Services and Rents Legal Fees Arbitrations, Grievances & Negotiations Contracted Services Other Services (hired equipment, mtce contracts, etc.)	203,438 377,636 187,193 2,878,689 222,990 251,858 (281,045) (210,327) (85,660) (40,634) 316,645 252,837 (278,017) (186,103) (278,843) 178,768 134,372 (870,533) (550,132) (609,901) (769,166)	\$	(537,249) (429,823)		supplementary taxation or for POA. The City recorded additional revenue in Transit (regular passenger fees), Recreation (arena rental and fees), and in Recycled Material and Tipping Fees at the City's Landfill site. As noted in the report, Investment Income exceeded budget. The City budgeted \$550K for interest on taxes and billed \$773K on accounts in arrears. Salaries and Benefits (excluding departments listed below) In 2023, the City budgeted \$35.8M for Salaries and Benefits for these departments. Year end actuals were \$36.4M resulting in a deficit of \$537K. Challenges in recruitment lead to additional part-time and overtime costs. The City incurred additional costs related to union negotiations when compared to budget. Purchase of Goods (excluding departments listed below) Variances in Purchase of Goods included operational supplies/parts & accessories (Fire, \$95K, Garage \$107K, Transit \$34K, Facilities \$35K), new and replacement equipment (Fire \$107K, Facilities \$53K), and additional costs of \$279K in utilities at municipal facilities. Materials, such as, sand, salt, asphalt, and concrete were under budget by \$115K. The City also recognized a saving in fuel for its fleet in the amount of \$134K (MW \$157K, Transit a cost of \$22K). Services and Rents (excluding departments listed below) Larger variances in Services and Rents include Legal and Arbitrations as described in the report. The City was over budget in contracted services by \$610K. Waste Management's contracted services came in \$612K over budget. This is related to the waste disposal and recycling program contracts with suppliers Additional costs in the amount of \$378K were incurred in tree removal and planting, \$130K for grass
Recreation Revenue Recycled Material Revenue/Tipping Fees Investment Income (see Financial section) Interest on Taxes Other Salaries and Benefits Council, CAO, HR, Clerks, Financial Services Fire Services Municipal Works, Transit, Waste Mgmt. & Engineering Transit Services Economic Development, Bylaw and Planning Recreation Services City Facilities Purchase of Goods Operating Supplies/Parts and Accessories © Operating Supplies/Parts and Accessories ITT and Equipment Purchases Utilities Road Materials Gasoline and Fuel Services and Rents Legal Fees Arbitrations, Grievances & Negotiations Contracted Services Other Services (hired equipment, mtce contracts, etc.) Financial Tax Refunds \$	377,636 187,193 2,878,689 222,990 251,858 (281,045) (210,327) (85,660) (489,065) (40,634) 316,645 252,837 (278,017) (186,103) (278,843) 178,768 134,372 (870,533) (550,132) (609,901) (769,166)	\$	(537,249) (429,823)		revenue in Transit (regular passenger fees), Recreation (arena rental and fees), and in Recycled Material and Tipping Fees at the City's Landfill site. As noted in the report, Investment Income exceeded budget. The City budgeted \$550K for interest on taxes and billed \$773K on accounts in arrears. <u>Salaries and Benefits (excluding departments listed below)</u> In 2023, the City budgeted \$35.8M for Salaries and Benefits for these departments. Year end actuals were \$36.4M resulting in a deficit of \$537K. Challenges in recruitment lead to additional part-time and overtime costs. The City incurred additional costs related to union negotiations when compared to budget. <u>Purchase of Goods (excluding departments listed below)</u> Variances in Purchase of Goods included operational supplies/parts & accessories (Fire, \$95K, Garage \$107K, Transit \$34K, Facilities \$35K), new and replacement equipment (Fire \$107K, Facilities \$53K), and additional costs of \$279K in utilities at municipal facilities. Materials, such as, sand, salt, asphalt, and concrete were under budget by \$115K. The City also recognized a saving in fuel for its fleet in the amount of \$134K (MW \$157K, Transit a cost of \$22K). <u>Services and Rents (excluding departments listed below)</u> Larger variances in Services and Rents include Legal and Arbitrations as described in the report. The City was over budget in contracted services by \$610K. Waste Management's contracted services came in \$612K over budget. This is related to the waste disposal and recycling program contracts with suppliers Additional costs in the amount of \$378K were incurred in tree removal and planting, \$130K for grass
Recycled Material Revenue/Tipping Fees Investment Income (see Financial section) Interest on Taxes Other	187,193 2,878,689 222,990 251,858 (281,045) (210,327) (85,660) (489,065) (40,634) 316,645 252,837 (278,017) (186,103) (278,843) 178,768 134,372 (870,533) (550,132) (609,901) (769,166)	\$	(537,249) (429,823)		and fees), and in Recycled Material and Tipping Fees at the City's Landfill site. As noted in the report, Investment Income exceeded budget. The City budgeted \$550K for interest on taxes and billed \$773K on accounts in arrears. <u>Salaries and Benefits (excluding departments listed below)</u> In 2023, the City budgeted \$35.8M for Salaries and Benefits for these departments. Year end actuals were \$36.4M resulting in a deficit of \$537K. Challenges in recruitment lead to additional part-time and overtime costs. The City incurred additional costs related to union negotiations when compared to budget. <u>Purchase of Goods (excluding departments listed below)</u> Variances in Purchase of Goods included operational supplies/parts & accessories (Fire, \$95K, Garage \$107K, Transit \$34K, Facilities \$35K), new and replacement equipment (Fire \$107K, Facilities \$53K), and additional costs of \$279K in utilities at municipal facilities. Materials, such as, sand, salt, asphalt, and concrete were under budget by \$115K. The City also recognized a saving in fuel for its fleet in the amount of \$134K (MW \$157K, Transit a cost of \$22K). <u>Services and Rents (excluding departments listed below)</u> Larger variances in Services and Rents include Legal and Arbitrations as described in the report. The City was over budget in contracted services by \$610K. Waste Management's contracted services came in \$612K over budget. This is related to the waste disposal and recycling program contracts with suppliers Additional costs in the amount of \$378K were incurred in tree removal and planting, \$130K for grass
Investment Income (see Financial section) Interest on Taxes Other Salaries and Benefits Council, CAO, HR, Clerks, Financial Services Fire Services Municipal Works, Transit, Waste Mgmt. & Engineering Transit Services Economic Development, Bylaw and Planning Recreation Services City Facilities Purchase of Goods Operating Supplies/Parts and Accessories ITT and Equipment Purchases Utilities Road Materials Gasoline and Fuel Services and Rents Legal Fees Arbitrations, Grievances & Negotiations Contracted Services Other Services (hired equipment, mtce contracts, etc.) Financial Tax Refunds	2,878,689 222,990 251,858 (281,045) (210,327) (85,660) (489,065) (40,634) 316,645 252,837 (278,017) (186,103) (278,843) 178,768 134,372 (870,533) (550,132) (609,901) (769,166)	\$	(537,249) (429,823)		Landfill site. As noted in the report, Investment Income exceeded budget. The City budgeted \$550K for interest on taxes and billed \$773K on accounts in arrears. Salaries and Benefits (excluding departments listed below) In 2023, the City budgeted \$35.8M for Salaries and Benefits for these departments. Year end actuals were \$36.4M resulting in a deficit of \$537K. Challenges in recruitment lead to additional part-time and overtime costs. The City incurred additional costs related to union negotiations when compared to budget. Purchase of Goods (excluding departments listed below) Variances in Purchase of Goods included operational supplies/parts & accessories (Fire, \$95K, Garage \$107K, Transit \$34K, Facilities \$35K), new and replacement equipment (Fire \$107K, Facilities \$53K), and additional costs of \$279K in utilities at municipal facilities. Materials, such as, sand, salt, asphalt, and concrete were under budget by \$115K. The City also recognized a saving in fuel for its fleet in the amount of \$134K (MW \$157K, Transit a cost of \$22K). Services and Rents (excluding departments listed below) Larger variances in Services and Rents include Legal and Arbitrations as described in the report. The City was over budget in contracted services by \$610K. Waste Management's contracted services came in \$612K over budget. This is related to the waste disposal and recycling program contracts with suppliers Additional costs in the amount of \$378K were incurred in tree removal and planting, \$130K for grass
Interest on Taxes Other Salaries and Benefits Council, CAO, HR, Clerks, Financial Services Fire Services Municipal Works, Transit, Waste Mgmt. & Engineering Transit Services Economic Development, Bylaw and Planning Recreation Services City Facilities Purchase of Goods Operating Supplies/Parts and Accessories ITT and Equipment Purchases Utilities Road Materials Gasoline and Fuel Services and Rents Legal Fees Arbitrations, Grievances & Negotiations Contracted Services Other Services (hired equipment, mtce contracts, etc.) Financial Tax Refunds	222,990 251,858 (281,045) (210,327) (85,660) (489,065) (40,634) 316,645 252,837 (278,017) (186,103) (278,843) 178,768 134,372 (870,533) (550,132) (609,901) (769,166)	\$	(537,249) (429,823)		Salaries and Benefits (excluding departments listed below) In 2023, the City budgeted \$35.8M for Salaries and Benefits for these departments. Year end actuals were \$36.4M resulting in a deficit of \$537K. Challenges in recruitment lead to additional part-time and overtime costs. The City incurred additional costs related to union negotiations when compared to budget. Purchase of Goods (excluding departments listed below) Variances in Purchase of Goods included operational supplies/parts & accessories (Fire, \$95K, Garage \$107K, Transit \$34K, Facilities \$35K), new and replacement equipment (Fire \$107K, Facilities \$53K), and additional costs of \$279K in utilities at municipal facilities. Materials, such as, sand, salt, asphalt, and concrete were under budget by \$115K. The City also recognized a saving in fuel for its fleet in the amount of \$134K (MW \$157K, Transit a cost of \$22K). Services and Rents (excluding departments listed below) Larger variances in Services and Rents include Legal and Arbitrations as described in the report. The City was over budget in contracted services by \$610K. Waste Management's contracted services came in \$612K over budget. This is related to the waste disposal and recycling program contracts with suppliers Additional costs in the amount of \$378K were incurred in tree removal and planting, \$130K for grass
Interest on Taxes Other Salaries and Benefits Council, CAO, HR, Clerks, Financial Services Fire Services Municipal Works, Transit, Waste Mgmt. & Engineering Transit Services Economic Development, Bylaw and Planning Recreation Services City Facilities Purchase of Goods Operating Supplies/Parts and Accessories ITT and Equipment Purchases Utilities Road Materials Gasoline and Fuel Services and Rents Legal Fees Arbitrations, Grievances & Negotiations Contracted Services Other Services (hired equipment, mtce contracts, etc.) Financial Tax Refunds Salaries	222,990 251,858 (281,045) (210,327) (85,660) (489,065) (40,634) 316,645 252,837 (278,017) (186,103) (278,843) 178,768 134,372 (870,533) (550,132) (609,901) (769,166)	\$	(537,249) (429,823)		Salaries and Benefits (excluding departments listed below) In 2023, the City budgeted \$35.8M for Salaries and Benefits for these departments. Year end actuals were \$36.4M resulting in a deficit of \$537K. Challenges in recruitment lead to additional part-time and overtime costs. The City incurred additional costs related to union negotiations when compared to budget. Purchase of Goods (excluding departments listed below) Variances in Purchase of Goods included operational supplies/parts & accessories (Fire, \$95K, Garage \$107K, Transit \$34K, Facilities \$35K), new and replacement equipment (Fire \$107K, Facilities \$53K), and additional costs of \$279K in utilities at municipal facilities. Materials, such as, sand, salt, asphalt, and concrete were under budget by \$115K. The City also recognized a saving in fuel for its fleet in the amount of \$134K (MW \$157K, Transit a cost of \$22K). Services and Rents (excluding departments listed below) Larger variances in Services and Rents include Legal and Arbitrations as described in the report. The City was over budget in contracted services by \$610K. Waste Management's contracted services came in \$612K over budget. This is related to the waste disposal and recycling program contracts with suppliers Additional costs in the amount of \$378K were incurred in tree removal and planting, \$130K for grass
Other	251,858 (281,045) (210,327) (85,660) (489,065) (40,634) 316,645 252,837 (278,017) (186,103) (278,843) 178,768 134,372 (870,533) (550,132) (609,901) (769,166)	\$	(537,249) (429,823)		 \$773K on accounts in arrears. <u>Salaries and Benefits (excluding departments listed below)</u> In 2023, the City budgeted \$35.8M for Salaries and Benefits for these departments. Year end actuals were \$36.4M resulting in a deficit of \$537K. Challenges in recruitment lead to additional part-time and overtime costs. The City incurred additional costs related to union negotiations when compared to budget. <u>Purchase of Goods (excluding departments listed below)</u> Variances in Purchase of Goods included operational supplies/parts & accessories (Fire, \$95K, Garage \$107K, Transit \$34K, Facilities \$35K), new and replacement equipment (Fire \$107K, Facilities \$53K), and additional costs of \$279K in utilities at municipal facilities. Materials, such as, sand, salt, asphalt, and concrete were under budget by \$115K. The City also recognized a saving in fuel for its fleet in the amount of \$134K (MW \$157K, Transit a cost of \$22K). <u>Services and Rents (excluding departments listed below)</u> Larger variances in Services and Rents include Legal and Arbitrations as described in the report. The City was over budget in contracted services by \$610K. Waste Management's contracted services came in \$612K over budget. This is related to the waste disposal and recycling program contracts with suppliers Additional costs in the amount of \$378K were incurred in tree removal and planting, \$130K for grass
Council, CAO, HR, Clerks, Financial Services \$ Fire Services Municipal Works, Transit, Waste Mgmt. & Engineering Transit Services Economic Development, Bylaw and Planning Recreation Services City Facilities Purchase of Goods Operating Supplies/Parts and Accessories \$ ITT and Equipment Purchases Utilities Road Materials Gasoline and Fuel Services and Rents Legal Fees Arbitrations, Grievances & Negotiations Contracted Services Other Services (hired equipment, mtce contracts, etc.) Financial Tax Refunds \$	(210,327) (85,660) (489,065) (40,634) 316,645 252,837 (278,017) (186,103) (278,843) 178,768 134,372 (870,533) (550,132) (609,901) (769,166)	\$	(429,823)		In 2023, the City budgeted \$35.8M for Salaries and Benefits for these departments. Year end actuals were \$36.4M resulting in a deficit of \$537K. Challenges in recruitment lead to additional part-time and overtime costs. The City incurred additional costs related to union negotiations when compared to budget. Purchase of Goods (excluding departments listed below) Variances in Purchase of Goods included operational supplies/parts & accessories (Fire, \$95K, Garage \$107K, Transit \$34K, Facilities \$35K), new and replacement equipment (Fire \$107K, Facilities \$53K), and additional costs of \$279K in utilities at municipal facilities. Materials, such as, sand, salt, asphalt, and concrete were under budget by \$115K. The City also recognized a saving in fuel for its fleet in the amount of \$134K (MW \$157K, Transit a cost of \$22K). Services and Rents (excluding departments listed below) Larger variances in Services and Rents include Legal and Arbitrations as described in the report. The City was over budget in contracted services by \$610K. Waste Management's contracted services came in \$612K over budget. This is related to the waste disposal and recycling program contracts with suppliers Additional costs in the amount of \$378K were incurred in tree removal and planting, \$130K for grass
Fire Services Municipal Works, Transit, Waste Mgmt. & Engineering Transit Services Economic Development, Bylaw and Planning Recreation Services City Facilities Purchase of Goods Operating Supplies/Parts and Accessories ITT and Equipment Purchases Utilities Road Materials Gasoline and Fuel Services and Rents Legal Fees Arbitrations, Grievances & Negotiations Contracted Services Other Services (hired equipment, mtce contracts, etc.) Financial Tax Refunds \$	(210,327) (85,660) (489,065) (40,634) 316,645 252,837 (278,017) (186,103) (278,843) 178,768 134,372 (870,533) (550,132) (609,901) (769,166)	\$	(429,823)		In 2023, the City budgeted \$35.8M for Salaries and Benefits for these departments. Year end actuals were \$36.4M resulting in a deficit of \$537K. Challenges in recruitment lead to additional part-time and overtime costs. The City incurred additional costs related to union negotiations when compared to budget. Purchase of Goods (excluding departments listed below) Variances in Purchase of Goods included operational supplies/parts & accessories (Fire, \$95K, Garage \$107K, Transit \$34K, Facilities \$35K), new and replacement equipment (Fire \$107K, Facilities \$53K), and additional costs of \$279K in utilities at municipal facilities. Materials, such as, sand, salt, asphalt, and concrete were under budget by \$115K. The City also recognized a saving in fuel for its fleet in the amount of \$134K (MW \$157K, Transit a cost of \$22K). Services and Rents (excluding departments listed below) Larger variances in Services and Rents include Legal and Arbitrations as described in the report. The City was over budget in contracted services came in \$612K over budget. This is related to the waste disposal and recycling program contracts with suppliers Additional costs in the amount of \$378K were incurred in tree removal and planting, \$130K for grass
Municipal Works, Transit, Waste Mgmt. & Engineering Transit Services Economic Development, Bylaw and Planning Recreation Services City Facilities Purchase of Goods Operating Supplies/Parts and Accessories \$ ITT and Equipment Purchases Utilities Road Materials Gasoline and Fuel Services and Rents Legal Fees Arbitrations, Grievances & Negotiations Contracted Services Other Services (hired equipment, mtce contracts, etc.) Financial Tax Refunds	(85,660) (489,065) (40,634) 316,645 252,837 (278,017) (186,103) (278,843) 178,768 134,372 (870,533) (550,132) (609,901) (769,166)	\$	(429,823)		In 2023, the City budgeted \$35.8M for Salaries and Benefits for these departments. Year end actuals were \$36.4M resulting in a deficit of \$537K. Challenges in recruitment lead to additional part-time and overtime costs. The City incurred additional costs related to union negotiations when compared to budget. Purchase of Goods (excluding departments listed below) Variances in Purchase of Goods included operational supplies/parts & accessories (Fire, \$95K, Garage \$107K, Transit \$34K, Facilities \$35K), new and replacement equipment (Fire \$107K, Facilities \$53K), and additional costs of \$279K in utilities at municipal facilities. Materials, such as, sand, salt, asphalt, and concrete were under budget by \$115K. The City also recognized a saving in fuel for its fleet in the amount of \$134K (MW \$157K, Transit a cost of \$22K). Services and Rents (excluding departments listed below) Larger variances in Services and Rents include Legal and Arbitrations as described in the report. The City was over budget in contracted services came in \$612K over budget. This is related to the waste disposal and recycling program contracts with suppliers Additional costs in the amount of \$378K were incurred in tree removal and planting, \$130K for grass
Transit Services Economic Development, Bylaw and Planning Recreation Services City Facilities Purchase of Goods Operating Supplies/Parts and Accessories \$ ITT and Equipment Purchases Utilities Road Materials Gasoline and Fuel Services and Rents Legal Fees \$ Arbitrations, Grievances & Negotiations Contracted Services Other Services (hired equipment, mtce contracts, etc.) Financial Tax Refunds \$	(489,065) (40,634) 316,645 252,837 (278,017) (186,103) (278,843) 178,768 134,372 (870,533) (550,132) (609,901) (769,166)	\$	(429,823)		departments. Year end actuals were \$36.4M resulting in a deficit of \$537K. Challenges in recruitment lead to additional part-time and overtime costs. The City incurred additional costs related to union negotiations when compared to budget. <u>Purchase of Goods (excluding departments listed below)</u> Variances in Purchase of Goods included operational supplies/parts & accessories (Fire, \$95K, Garage \$107K, Transit \$34K, Facilities \$35K), new and replacement equipment (Fire \$107K, Facilities \$53K), and additional costs of \$279K in utilities at municipal facilities. Materials, such as, sand, salt, asphalt, and concrete were under budget by \$115K. The City also recognized a saving in fuel for its fleet in the amount of \$134K (MW \$157K, Transit a cost of \$22K). <u>Services and Rents (excluding departments listed below)</u> Larger variances in Services and Rents include Legal and Arbitrations as described in the report. The City was over budget in contracted services by \$610K. Waste Management's contracted services came in \$612K over budget. This is related to the waste disposal and recycling program contracts with suppliers Additional costs in the amount of \$378K were incurred in tree removal and planting, \$130K for grass
Economic Development, Bylaw and Planning Recreation Services City Facilities Purchase of Goods Operating Supplies/Parts and Accessories \$ ITT and Equipment Purchases Utilities Road Materials Gasoline and Fuel Services and Rents Legal Fees \$ Arbitrations, Grievances & Negotiations Contracted Services Other Services (hired equipment, mtce contracts, etc.) Financial Tax Refunds \$	(40,634) 316,645 252,837 (278,017) (186,103) (278,843) 178,768 134,372 (870,533) (550,132) (609,901) (769,166)	\$	(429,823)		 \$537K. Challenges in recruitment lead to additional part-time and overtime costs. The City incurred additional costs related to union negotiations when compared to budget. Purchase of Goods (excluding departments listed below) Variances in Purchase of Goods included operational supplies/parts & accessories (Fire, \$95K, Garage \$107K, Transit \$34K, Facilities \$35K), new and replacement equipment (Fire \$107K, Facilities \$53K), and additional costs of \$279K in utilities at municipal facilities. Materials, such as, sand, salt, asphalt, and concrete were under budget by \$115K. The City also recognized a saving in fuel for its fleet in the amount of \$134K (MW \$157K, Transit a cost of \$22K). Services and Rents (excluding departments listed below) Larger variances in Services and Rents include Legal and Arbitrations as described in the report. The City was over budget in contracted services by \$610K. Waste Management's contracted services came in \$612K over budget. This is related to the waste disposal and recycling program contracts with suppliers Additional costs in the amount of \$378K were incurred in tree removal and planting, \$130K for grass
Recreation Services	316,645 252,837 (278,017) (186,103) (278,843) 178,768 134,372 (870,533) (550,132) (609,901) (769,166)	\$	(429,823)		overtime costs. The City incurred additional costs related to union negotiations when compared to budget. Purchase of Goods (excluding departments listed below) Variances in Purchase of Goods included operational supplies/parts & accessories (Fire, \$95K, Garage \$107K, Transit \$34K, Facilities \$35K), new and replacement equipment (Fire \$107K, Facilities \$53K), and additional costs of \$279K in utilities at municipal facilities. Materials, such as, sand, salt, asphalt, and concrete were under budget by \$115K. The City also recognized a saving in fuel for its fleet in the amount of \$134K (MW \$157K, Transit a cost of \$22K). Services and Rents (excluding departments listed below) Larger variances in Services and Rents include Legal and Arbitrations as described in the report. The City was over budget in contracted services by \$610K. Waste Management's contracted services came in \$612K over budget. This is related to the waste disposal and recycling program contracts with suppliers Additional costs in the amount of \$378K were incurred in tree removal and planting, \$130K for grass
City Facilities Purchase of Goods Operating Supplies/Parts and Accessories ITT and Equipment Purchases Utilities Road Materials Gasoline and Fuel Services and Rents Legal Fees Arbitrations, Grievances & Negotiations Contracted Services Other Services (hired equipment, mtce contracts, etc.) Financial Tax Refunds \$	252,837 (278,017) (186,103) (278,843) 178,768 134,372 (870,533) (550,132) (609,901) (769,166)	\$	(429,823)		negotiations when compared to budget. Purchase of Goods (excluding departments listed below) Variances in Purchase of Goods included operational supplies/parts & accessories (Fire, \$95K, Garage \$107K, Transit \$34K, Facilities \$35K), new and replacement equipment (Fire \$107K, Facilities \$53K), and additional costs of \$279K in utilities at municipal facilities. Materials, such as, sand, salt, asphalt, and concrete were under budget by \$115K. The City also recognized a saving in fuel for its fleet in the amount of \$134K (MW \$157K, Transit a cost of \$22K). Services and Rents (excluding departments listed below) Larger variances in Services and Rents include Legal and Arbitrations as described in the report. The City was over budget in contracted services by \$610K. Waste Management's contracted services came in \$612K over budget. This is related to the waste disposal and recycling program contracts with suppliers Additional costs in the amount of \$378K were incurred in tree removal and planting, \$130K for grass
Purchase of Goods Operating Supplies/Parts and Accessories \$ ITT and Equipment Purchases Utilities Road Materials Gasoline and Fuel Services and Rents	(278,017) (186,103) (278,843) 178,768 134,372 (870,533) (550,132) (609,901) (769,166)	\$	(429,823)		Purchase of Goods (excluding departments listed below) Variances in Purchase of Goods included operational supplies/parts & accessories (Fire, \$95K, Garage \$107K, Transit \$34K, Facilities \$35K), new and replacement equipment (Fire \$107K, Facilities \$53K), and additional costs of \$279K in utilities at municipal facilities. Materials, such as, sand, salt, asphalt, and concrete were under budget by \$115K. The City also recognized a saving in fuel for its fleet in the amount of \$134K (MW \$157K, Transit a cost of \$22K). Services and Rents (excluding departments listed below) Larger variances in Services and Rents include Legal and Arbitrations as described in the report. The City was over budget in contracted services by \$610K. Waste Management's contracted services came in \$612K over budget. This is related to the waste disposal and recycling program contracts with suppliers Additional costs in the amount of \$378K were incurred in tree removal and planting, \$130K for grass
Operating Supplies/Parts and Accessories \$ ITT and Equipment Purchases Utilities Road Materials Gasoline and Fuel Services and Rents Legal Fees \$ Arbitrations, Grievances & Negotiations Contracted Services Other Services (hired equipment, mtce contracts, etc.) Financial Tax Refunds \$	(186,103) (278,843) 178,768 134,372 (870,533) (550,132) (609,901) (769,166)		、 · · /		Variances in Purchase of Goods included operational supplies/parts & accessories (Fire, \$95K, Garage \$107K, Transit \$34K, Facilities \$35K), new and replacement equipment (Fire \$107K, Facilities \$53K), and additional costs of \$279K in utilities at municipal facilities. Materials, such as, sand, salt, asphalt, and concrete were under budget by \$115K. The City also recognized a saving in fuel for its fleet in the amount of \$134K (MW \$157K, Transit a cost of \$22K). Services and Rents (excluding departments listed below) Larger variances in Services and Rents include Legal and Arbitrations as described in the report. The City was over budget in contracted services by \$610K. Waste Management's contracted services came in \$612K over budget. This is related to the waste disposal and recycling program contracts with suppliers Additional costs in the amount of \$378K were incurred in tree removal and planting, \$130K for grass
Operating Supplies/Parts and Accessories \$ ITT and Equipment Purchases Utilities Road Materials Gasoline and Fuel Services and Rents Legal Fees \$ Arbitrations, Grievances & Negotiations Contracted Services Other Services (hired equipment, mtce contracts, etc.) Financial Tax Refunds \$	(186,103) (278,843) 178,768 134,372 (870,533) (550,132) (609,901) (769,166)		、 · · /		Variances in Purchase of Goods included operational supplies/parts & accessories (Fire, \$95K, Garage \$107K, Transit \$34K, Facilities \$35K), new and replacement equipment (Fire \$107K, Facilities \$53K), and additional costs of \$279K in utilities at municipal facilities. Materials, such as, sand, salt, asphalt, and concrete were under budget by \$115K. The City also recognized a saving in fuel for its fleet in the amount of \$134K (MW \$157K, Transit a cost of \$22K). Services and Rents (excluding departments listed below) Larger variances in Services and Rents include Legal and Arbitrations as described in the report. The City was over budget in contracted services by \$610K. Waste Management's contracted services came in \$612K over budget. This is related to the waste disposal and recycling program contracts with suppliers Additional costs in the amount of \$378K were incurred in tree removal and planting, \$130K for grass
ITT and Equipment Purchases Utilities Road Materials Gasoline and Fuel Services and Rents Legal Fees \$ Arbitrations, Grievances & Negotiations Contracted Services Other Services (hired equipment, mtce contracts, etc.) Financial Tax Refunds \$	(186,103) (278,843) 178,768 134,372 (870,533) (550,132) (609,901) (769,166)		、 · · /		accessories (Fire, \$95K, Garage \$107K, Transit \$34K, Facilities \$35K), new and replacement equipment (Fire \$107K, Facilities \$53K), and additional costs of \$279K in utilities at municipal facilities. Materials, such as, sand, salt, asphalt, and concrete were under budget by \$115K. The City also recognized a saving in fuel for its fleet in the amount of \$134K (MW \$157K, Transit a cost of \$22K). Services and Rents (excluding departments listed below) Larger variances in Services and Rents include Legal and Arbitrations as described in the report. The City was over budget in contracted services by \$610K. Waste Management's contracted services came in \$612K over budget. This is related to the waste disposal and recycling program contracts with suppliers Additional costs in the amount of \$378K were incurred in tree removal and planting, \$130K for grass
Utilities Road Materials Gasoline and Fuel Services and Rents Legal Fees \$ Arbitrations, Grievances & Negotiations Contracted Services Other Services (hired equipment, mtce contracts, etc.) Financial Tax Refunds \$	(278,843) 178,768 134,372 (870,533) (550,132) (609,901) (769,166)		、 · · /		new and replacement equipment (Fire \$107K, Facilities \$53K), and additional costs of \$279K in utilities at municipal facilities. Materials, such as, sand, salt, asphalt, and concrete were under budget by \$115K. The City also recognized a saving in fuel for its fleet in the amount of \$134K (MW \$157K, Transit a cost of \$22K). Services and Rents (excluding departments listed below) Larger variances in Services and Rents include Legal and Arbitrations as described in the report. The City was over budget in contracted services by \$610K. Waste Management's contracted services came in \$612K over budget. This is related to the waste disposal and recycling program contracts with suppliers Additional costs in the amount of \$378K were incurred in tree removal and planting, \$130K for grass
Road Materials Gasoline and Fuel Services and Rents Legal Fees \$ Arbitrations, Grievances & Negotiations Contracted Services Other Services (hired equipment, mtce contracts, etc.) Financial Tax Refunds \$	178,768 134,372 (870,533) (550,132) (609,901) (769,166)		、 · · /		additional costs of \$279K in utilities at municipal facilities. Materials, such as, sand, salt, asphalt, and concrete were under budget by \$115K. The City also recognized a saving in fuel for its fleet in the amount of \$134K (MW \$157K, Transit a cost of \$22K). Services and Rents (excluding departments listed below) Larger variances in Services and Rents include Legal and Arbitrations as described in the report. The City was over budget in contracted services by \$610K. Waste Management's contracted services came in \$612K over budget. This is related to the waste disposal and recycling program contracts with suppliers Additional costs in the amount of \$378K were incurred in tree removal and planting, \$130K for grass
Gasoline and Fuel Services and Rents Legal Fees Arbitrations, Grievances & Negotiations Contracted Services Other Services (hired equipment, mtce contracts, etc.) Financial Tax Refunds \$	134,372 (870,533) (550,132) (609,901) (769,166)		、 · · /		such as, sand, salt, asphalt, and concrete were under budget by \$115K. The City also recognized a saving in fuel for its fleet in the amount of \$134K (MW \$157K, Transit a cost of \$22K). Services and Rents (excluding departments listed below) Larger variances in Services and Rents include Legal and Arbitrations as described in the report. The City was over budget in contracted services by \$610K. Waste Management's contracted services came in \$612K over budget. This is related to the waste disposal and recycling program contracts with suppliers Additional costs in the amount of \$378K were incurred in tree removal and planting, \$130K for grass
Services and Rents Legal Fees \$ Arbitrations, Grievances & Negotiations Contracted Services Other Services (hired equipment, mtce contracts, etc.) Financial Tax Refunds \$	(870,533) (550,132) (609,901) (769,166)		、 · · /		 \$115K. The City also recognized a saving in fuel for its fleet in the amount of \$134K (MW \$157K, Transit a cost of \$22K). Services and Rents (excluding departments listed below) Larger variances in Services and Rents include Legal and Arbitrations as described in the report. The City was over budget in contracted services by \$610K. Waste Management's contracted services came in \$612K over budget. This is related to the waste disposal and recycling program contracts with suppliers Additional costs in the amount of \$378K were incurred in tree removal and planting, \$130K for grass
Legal Fees \$ Arbitrations, Grievances & Negotiations Contracted Services Other Services (hired equipment, mtce contracts, etc.) Financial Tax Refunds \$	(550,132) (609,901) (769,166)	\$(2	,799,732)	-	amount of \$134K (MW \$157K, Transit a cost of \$22K). Services and Rents (excluding departments listed below) Larger variances in Services and Rents include Legal and Arbitrations as described in the report. The City was over budget in contracted services by \$610K. Waste Management's contracted services came in \$612K over budget. This is related to the waste disposal and recycling program contracts with suppliers Additional costs in the amount of \$378K were incurred in tree removal and planting, \$130K for grass
Legal Fees \$ Arbitrations, Grievances & Negotiations Contracted Services Other Services (hired equipment, mtce contracts, etc.) Financial Tax Refunds \$	(550,132) (609,901) (769,166)	\$ (2	,799,732)	_	Services and Rents (excluding departments listed below) Larger variances in Services and Rents include Legal and Arbitrations as described in the report. The City was over budget in contracted services by \$610K. Waste Management's contracted services came in \$612K over budget. This is related to the waste disposal and recycling program contracts with suppliers Additional costs in the amount of \$378K were incurred in tree removal and planting, \$130K for grass
Legal Fees \$ Arbitrations, Grievances & Negotiations Contracted Services Other Services (hired equipment, mtce contracts, etc.) Financial Tax Refunds \$	(550,132) (609,901) (769,166)	\$(2	,799,732)		Larger variances in Services and Rents include Legal and Arbitrations as described in the report. The City was over budget in contracted services by \$610K. Waste Management's contracted services came in \$612K over budget. This is related to the waste disposal and recycling program contracts with suppliers Additional costs in the amount of \$378K were incurred in tree removal and planting, \$130K for grass
Legal Fees \$ Arbitrations, Grievances & Negotiations Contracted Services Other Services (hired equipment, mtce contracts, etc.) Financial Tax Refunds \$	(550,132) (609,901) (769,166)	\$ (2	,799,732)		as described in the report. The City was over budget in contracted services by \$610K. Waste Management's contracted services came in \$612K over budget. This is related to the waste disposal and recycling program contracts with suppliers Additional costs in the amount of \$378K were incurred in tree removal and planting, \$130K for grass
Arbitrations, Grievances & Negotiations Contracted Services Other Services (hired equipment, mtce contracts, etc.) Financial Tax Refunds	(550,132) (609,901) (769,166)	\$(2	,799,732)		services by \$610K. Waste Management's contracted services came in \$612K over budget. This is related to the waste disposal and recycling program contracts with suppliers Additional costs in the amount of \$378K were incurred in tree removal and planting, \$130K for grass
Contracted Services Other Services (hired equipment, mtce contracts, etc.) Financial Tax Refunds	(609,901) (769,166)	\$ (2	,799,732)		\$612K over budget. This is related to the waste disposal and recycling program contracts with suppliers Additional costs in the amount of \$378K were incurred in tree removal and planting, \$130K for grass
Other Services (hired equipment, mtce contracts, etc.)	(769,166)	\$ (2	,799,732)		program contracts with suppliers Additional costs in the amount of \$378K were incurred in tree removal and planting, \$130K for grass
Financial Tax Refunds \$		\$ (2	,799,732)		\$378K were incurred in tree removal and planting, \$130K for grass
Tax Refunds \$	422,618				
Tax Refunds \$	422,618				cutting and \$240K in maintenance and renairs at municipal facilities
Tax Refunds \$	422,618				country, and $\phi \simeq \phi \circ \tau$ in manifemence and repairs at municipal facilities.
Tax Refunds \$	422,618				Financial (excluding departments listed below)
	722,010				Taxes refunds were less than budget by \$422,618 (budget \$700K). As
	,	<u> ተ</u> / ተ	E77 700)		
	(2,000,318)	φ(I	,577,700)		noted in the report, \$2M in interest earned on reserve balances was transferred to the respective reserve accounts.
Glen Stor Dun Lodge					transierred to the respective reserve accounts.
	1,847,950				Glen Stor Dun Lodge
Resident Revenue					Increased Ministry revenue is due to direct care funding and
Salaries and Benefits	(317,166)				
	(598,430)				continuation of the PSW wage enhancement. This funding offsets
Food Provisions	(81,540)				increased costs in Salaries and Benefits and Contracted Services.
	(1,229,152)				GSDL is using agencies to cover staffing shortages. Resident
Other	48,836	\$	(329,502)		accommodation fees are under budget.
Human Services					Human Services
Ontario Works Revenue \$	279,644				Additional expenditures (\$300K) for Ontario Works employment-related
Income Maintenance Assistance/Admin/OW Expenses	(282,652)				benefits were funded by the Ministry. Children's Services received
•	1,996,913				additional funding from the Ministry (\$2.5M) that funded the CWELCC
	(1,704,306)				and special purpose programming. The impact was a savings in
Community Housing Revenue	(82,656)				Children Services at \$292K. Due to the delay in opening 9th St.,
Community Housing Costs	(82,030) 249,513	¢	456,456		resident revenue was below budget by \$256K . This revenue was offset
	249,013	φ	+00,400		by savings in salaries, building materials, and utility costs.
Paramedic Services					
Ministry of Health/Other Ontario \$	358,499				Paramedic Services
Salaries and Benefits	(473,619)				The Service received an additional \$358K in funding compared to
Training and Education	100,194				budget. Salaries were over budget by \$474K. This is related to WSIB
Contracted Services	93,370				costs and overtime due to shift end calls. The savings in amortization is
Amortization	207,159				related to the delay in receiving capital assets due to the supply chain.
Other	(43,328)	\$	242,275	\rightarrow	
—	/				
Police Services Other Ontario \$	290,859				Cornwall Police Services (CPS)
Recoveries	280,272				Operating activities for CPS came in \$52,943 under budget for 2023.
WSIB recoveries	402,095				Revenues were higher than anticipated due to the award of several
Salaries and Benefits	(404,094)				provincial grants. The Department was overspent in salaries due to
Vehicle and Equipment Mtce/Fuel	(124,222)				staffing challenges and incurred additional part-time and overtime
Equipment and Supplies	(235,869)				costs. Benefits are over budget and were offset by WSIB recoveries.
Contracted Services/Professional Services	(158,798)	¢	F0 0 10		Police Services incurred additional expenses related to the provincial
Other	2,700	\$	⁵² 788		funding it received.
2023 deficit (excluding Water and Wastewater)		\$(1	,187,373)		

City of Cornwall - Environmental Services Water and Wastewater 2023 Year End Report (Preliminary and Unaudited) Explanation of Variances (Actuals v. Budget)

favourable/(unfavourable)

2023 Water Works Deficit Va	ariance	S	
Revenue			
Water Billings	\$	113,997	
Other Revenue	\$	57,024	\$ 171,021
Expenses			
Salaries and Benefits	\$	(99,560)	
Chemicals	\$	(49,968)	
Services (contracted or internal)	\$	52,298	
Corporate Costs/Other	\$	(118,349)	\$ (215,579)
2023 Water Works Operating Surplus/(Deficit)			\$ (44,558)
2023 Water Works Operating and Capital Deficit			\$ (44,558)
Contribution to/(from) the Water Works Reserve	\$	(44,558)	
2022 Westswater Werks Surplu			
	a Varia	0000	
2023 Wastewater Works Surplus	s Varia	nces	
Revenue	s Varia	nces	
	<u>s Varia</u> \$	nces 397,252	
Revenue			\$ 496,264
Revenue Wastewater Billings	\$	397,252	\$ 496,264
Revenue Wastewater Billings Other Revenue	\$ \$	397,252	\$ 496,264
Revenue Wastewater Billings Other Revenue Expenses Salaries and Benefits Building Materials (Asphalt, Gravel, Sod, Concrete)	\$ \$ \$	397,252 99,012 (46,501) 36,645	\$ 496,264
Revenue Wastewater Billings Other Revenue Expenses Salaries and Benefits Building Materials (Asphalt, Gravel, Sod, Concrete) Chemicals	\$ \$ \$ \$	397,252 99,012 (46,501) 36,645 (128,949)	\$ 496,264
Revenue Wastewater Billings Other Revenue Expenses Salaries and Benefits Building Materials (Asphalt, Gravel, Sod, Concrete) Chemicals Utilities	\$\$	397,252 99,012 (46,501) 36,645 (128,949) 65,153	\$ 496,264
Revenue Wastewater Billings Other Revenue Expenses Salaries and Benefits Building Materials (Asphalt, Gravel, Sod, Concrete) Chemicals Utilities Developer Payment - contributed to Reserves	\$ \$	397,252 99,012 (46,501) 36,645 (128,949) 65,153 (133,560)	
Revenue Wastewater Billings Other Revenue Expenses Salaries and Benefits Building Materials (Asphalt, Gravel, Sod, Concrete) Chemicals Utilities	\$\$	397,252 99,012 (46,501) 36,645 (128,949) 65,153	\$ 496,264 (274,330)
Revenue Wastewater Billings Other Revenue Expenses Salaries and Benefits Building Materials (Asphalt, Gravel, Sod, Concrete) Chemicals Utilities Developer Payment - contributed to Reserves	\$ \$	397,252 99,012 (46,501) 36,645 (128,949) 65,153 (133,560)	
Revenue Wastewater Billings Other Revenue Other Revenue Expenses Salaries and Benefits Building Materials (Asphalt, Gravel, Sod, Concrete) Chemicals Utilities Developer Payment - contributed to Reserves Corporate Costs/Other 2023 Wastewater Works Operating Surplus/(Deficit)	\$ \$	397,252 99,012 (46,501) 36,645 (128,949) 65,153 (133,560)	\$ (274,330) 221,934
Revenue Wastewater Billings Other Revenue Expenses Salaries and Benefits Building Materials (Asphalt, Gravel, Sod, Concrete) Chemicals Utilities Developer Payment - contributed to Reserves Corporate Costs/Other	\$ \$	397,252 99,012 (46,501) 36,645 (128,949) 65,153 (133,560)	\$ (274,330)

2023 SUMMARY OF RESERVES December 31, 2023

Operating Reserves	Opening Balance	Net Transactions	Ending Balance	Targeted Balance
Working Reserves	5,878,932	-1,345,893	4,533,039	Dalance
Tax Stabilization Reserve	300,000	0	300,000	
Winter Control Reserve	500,000	-150,000	350,000	
Health and Safety Reserve	76,022	0	76,022	
Municipal Elections Reserve	0	55,000	55,000	
Renaissance Reserve	118,826	0	118,826	
Medical Recruitment Reserve	734,048	127,540	861,588	
	7,607,828	-1,313,353	6,294,475	7,919,502
	,,	0	-, - , -	,,
Capital Reserves		0		
Equipment and Vehicles Reserve	880,445	41,227	921,672	
Recreation Facilities Reserve	1,605,558	-927,953	677,605	
Municipal Buildings Reserve	2,742,509	544,738	3,287,247	
Fire Equipment Reserve	40,461	19,597	60,058	
Land Ambulance Reserve	757,613	-189,892	567,721	
Waste Management Reserve	2,159,330	-54,408	2,104,922	
Land Reserve	1,239,256	1,187,869	2,427,125	
Community Housing Capital Reserve	7,660,137	-1,417,502	6,242,635	
Community Housing Regeneration Reserve	1,350,928	-149,982	1,200,946	
Community Housing Providers Capital Reserve	911,745	0	911,745	
Road Infrastructure Reserve	<u>1,094,885</u>	<u>-34,493</u>	<u>1,060,392</u>	
	20,442,867	-980,799	19,462,068	
Restricted Reserves (Municipal Funding)				
Water Works Reserve	4,876,411	-1,946,595	2,929,816	3,518,589
Water Works Reserve	4,660,927	-304,771	4,356,156	3,811,969
Brownfields Reserve	1,480,666	41,612	1,522,278	2,000,000
Landfill Closure and Post Closure Reserve Fund	306,394	428,401	734,795	27,604,360
Waterfront Development Fund	240,000	420,401	240,000	Not Defined
WSIB - Estimated Future Benefit Costs Reserve	2,771,709	388,846	3,160,555	8,195,900
Downtown Investment Reserve Fund	3,538,416	-38,416	3,500,000	3,500,000
Heart of City Reserve	139,336	323,198	462,534	200,000
Parking Reserve Fund	122,091	-122,091	0	Not Defined
Progress Fund	25,926,898	146,814	26,073,712	25,000,000
0	44,062,848	-1,083,002	42,979,846	, ,
Destricted Deserves (Founded Fotoms III.)				
Restricted Reserves (Funded Externally)				
(a targeted reserve balance is not applicable) Provincial Gas Tax Reserve (Transit)	110,446	1	110,447	
Canada Community-Building Fund Reserve	6,763,261	-2,165,313	4,597,948	
Development Charges Reserve	3,075,080	-974,481	2,100,599	
Building Surplus Reserve (permits)	2,097,465	1,896,969	3,994,434	1,290,265
Community Housing Providers Reserve	2,791,326	211,519	3,002,845	1,200,200
Employment Assistance Retained Surplus Reserve	641,357	-30,287	611,070	
Child Care ELCD Reserve	95,393	00,207	95,393	
Consolidated Homelessness CHPI Reserve	39,927	-39,927	0	
Parkland Reserve Fund	142,127	124,489	266,616	
Winter Games/Legacy Trust Fund	55,104	-520	54,584	
Arts and Culture Trust Fund	<u>1,005,135</u>	<u>164,469</u>	<u>1,169,604</u>	
	16,816,621	-813,081	16,003,540	
	,,- ·-	-,	, -,	
TOTAL RESERVES AND RESERVE FUNDS	88,930,164	-4,190,235	84,739,929	

2023 SUMMARY OF RESERVES December 31, 2023

	Opening Balance	Withdrawals	Additions	Closing Balance
OPERATING RESERVES				
Working Reserves	5,878,932			
Repay Eastern Ontario Regional Network - EORN (2020-2026)			28,367	
Repay GSDL Fire Panel Replacement (2014-2023)			18,310	
Repay Accounting Software Upgrade (2020-2027)			50,000	
Council ITT Requirements for 2026			6,000	
Repay CN Rail Property Acquisition			172,906	
Planning Department - Future Studies			20,000	
Economic Strategic Plan			25,000	
2022 Carryforward - GSDL Service delivery review		-100,000		
2022 Carryforward - GSDL Recruitment/Retention		-40,000		
2022 Carryforward - GSDL Office Improvements		-10,000		
2022 Carryforward - Employee Recognition		-48,000		
2022 Carryforward - Admin Office Furniture		-7,300		
2022 Carryforward - ITT Infrastructure		-20,600		
2022 Carryforward - SharePoint Contracted Services		-2,178		
2022 Carryforward - ITT Contracted Services		-12,000		
2022 Carryforward - Cenotaph Fencing		-66,124		
2022 Carryforward - Municipal Grants		-31,739		
2023 Carryforward - Fire ITT Hardware & Software			30,200	
2023 Carryforward - Fire Communication Equipment			17,500	
2023 Carryforward - Engineering Drone Training			10,000	
2023 Carryforward - Water Equipment			12,900	
Comprehensive Plan Review		-62,954		
ITT Safe Restart Funding		-41,406		
Heritage Consulting		-7,402		
HR Training		-20,000		
Your Arts Council		-25,000		
2023 Canada Day		-25,000		
One Week Wood Chipping		-30,000		
Fund 2023 Year End Deficit		-1,187,373		4,533,039
Tax Stabilization Reserve	300,000			300,000
Winter Control Reserve	500,000			
Winter Control operations		-150,000		350,000
Health and Safety Reserve	76,022			76,022
Municipal Elections Reserve	0			
2026 Election Contribution	0		55,000	55,000
Renaissance Reserve	118,826			118,826
Medical Recruitment Reserve	734,048			
Committed Funds (Medical Scholarships/Recruitment): \$755,000	- ,			
Budgeted Contribution			200,000	
Recognized 2023 Medical Scholarships		-60,000		
Medical Recruitment Expenses		-12,460		861,588
TOTAL Operating Reserves	7,607,828	-1,959,536	646,183	6,294,475

2023 SUMMARY OF RESERVES December 31, 2023

		Opening Balance	Withdrawals	Additions	Closing Balance
CAPITAL RESERVES					
Equipment and Vehicles Reserve Life Cycle Costing as per the City's Long-Term Financial Plan MW Contribution to Reserve Fire Contribution to Reserve Police Contribution to Reserve Transit Contribution to Reserve ITT Contribution to Reserves Proceeds from Sale of Equipment		880,445		600,000 450,000 100,000 220,000 220,000 120,000 66,713	
Pump# 3 Equipment Purchase (Fire) Police Services MW Fleet Renewal Program MW Mini Asphalt Paver Transit Metal Siding & Garage Doors Bus Shelters & Accessibility Stops Bus Hoist Replacement Handi-Transit Software Micro-Transit Backflow Prevention Corporate Wireless & Connectivity Review			-136,228 -237,111 -947,157 -100,000 -77,680 -13,600 -42,670 -38,670 -29,870 -12,500		001 670
			-100,000		921,672
Recreation Facilities Reserve Contribution from Recreation Facilities 2022 Curling Club Taxes Complex - Front Steps and Patio Replacement Design 2022 Carryforward - Complex Ladder and Railing Tennis Court Resurfacing and LED Lighting Upgrade Optimist Park LED Lights for Baseball and Soccer Fields Mattice Park Basketball Court Benson Centre - Refrigeration System Maintenance Complex - Concourse Study Complex - North Elevator Upgrade Complex - Office Lights Aquatic Centre - Sprinkler Piping Replacement		1,605,558	-2,478 -125,000 -17,800 -200,000 -288,076 -200,000 -146,552 -25,000 -300,000 -25,000 -125,000	466,350	
2022 Aquatic Centre Heat Study Proceeds from Sale of Equipment				60,000 603	677,605
Municipal Buildings Reserve Contribution from Buildings GSDL Contribution EMS HQ - Transfer to Reserves Justice Building - Transfer to Reserves Justice Building - Generator Surplus Justice Building - HVAC loan (LTD 2022-2031) Library - HVAC loan (LTD 2018-2026) Library - Elevator Library - Stairs City Hall - HVAC Justice Building - Elevator Justice Building - Backflow Prevention GSDL - Building Requirements GSDL - Kitchen & Laundry Equipment		2,742,509	-118,280 -102,956 -52,010 -3,771 -24,000 -12,500 -160,000 -47,000	662,850 300,000 99,470 216,519 26,416	3,287,247
		40.461	-47,000		3,287,247
Fire Equipment Reserve (Fire Marque) 2023 Extrication tool 2022 Fire Comprehensive Risk Assessment Fire Marque Payments		40,461	-50,000	13,537 56,060	60,058
Land Ambulance Reserve Transfer Amortization Proceeds from Sale of Equipment 2021 Ambulance Replacement 2022 Carryforward - Training Supplies Ambulance Replacement CPR Devices	792	757,613	-16,807 -10,000 -469,502 -60,000	694,842 296 41,386	

	Opening Balance	Withdrawals	Additions	Closing Balance
Paramedic Response Unit Replacement	Daialice	-300,000		Balance
Defibrillator Retention Bracket Replacement		-28,773		
Public Access Defib. Replacement		-37,740		
Helmet Replacement		-20,000		
CADLink (RTD Project)		-50,000		
2023 Surplus in Funding		,	66,406	567,72
Vaste Management Reserve	2,159,330			
Budgeted Contribution - Waste Disposal			220,000	
Budgeted Contribution - Waste Diversion			100,000	
Budgeted Contribution - Organics			200,000	
Climate Action Plan			11,063	
Landfill Site Maintenance			14,529	
Leachate & Gas Capture Systems		-300,000		
Alternate Disposal Environmental Compliance Approval		-100,000		
Organics Source Separation Program		-200,000		2,104,92
and Reserve	1,239,256			
Sale of Land			1,445,664	
Land Legal Fees		-103,264	-	
Nick Kaneb Expansion - Industrial to Tollgate		-154,531		2,427,12
community Housing Capital Reserve	7,660,137			
Budgeted Contribution (LHC)			1,209,910	
Interest Earned			334,648	
2021 15 Edward Apartment Renovation			23,723	
2023 Revenue Sharing			18,758	
2023 AHP Surplus			374,200	
2023 Carryforward Revitalization Plan			150,000	
2023 Carryforward RGI Application forms			14,200	
Proceeds from sale			7,037	
Affordable housing Development (Ninth St.)		-601,392		
Cornwall NP Housing Capital repairs		-38,296		
Building Interiors		-763,553		
Building Exteriors (2023-39 SDG Human Services Department)		-149,961		
Infrastructure		-956,997		
Grounds		-87,490		
Backflow Prevention		-75,000		
AHP Ingleside Repairs		-1,871		
24 Augustus Apartment Renovations		-23,675		
2023 Cumberland Housing		-750,000		
2023 LHC operating Deficit		-101,743		6,242,63
community Housing Regeneration Reserve	1,350,928			
Budgeted Contribution			550,000	
Interest Earned			77,247	
Fund Operating		-2,229		
Morrisburg Building		-575,000		
Building Condition Assessment and Asset Management Plan		-200,000		1,200,94
Community Housing Providers Capital Reserve	911,745			911,74
load Infrastructure Reserve	1,094,885			
Capital Levy			929,000	
Deposit R.O.W.			1,170	
Fund Marleau Project		-14,646		
Active Transportation - Bicycle		-80,000		
Pole Replacement Program		-149,017		
Culvert Replacement - Fly Creek at Boundary Rd.		-100,000		
Multi-Service UAV Asphalt resurfacing - Various Streets		-75,000 -546,000		1,060,39
TOTAL Capital Reserves	20,442,867	-11,143,396	10,162,597	19,462,068

	Opening Balance	Withdrawals	Additions	Closing Balance
RESTRICTED RESERVES (Municipal Funding)				
Water Works Reserve Budgeted Contribution Interest earned 2023 Carryforward Rebates & Home Water Audits Building Condition Assessment and Asset Management Plan Watermain Rehabilitation Aberdeen (2023-64-Financial Services)	4,876,4	-70,000 -1,650,000 -118,175	3,543,479 139,892 50,000	
Watermain Rehabilitation - Pitt St. System Growth New Watermain (Dunkirk Street & Edythe Avenue Pr Backwash System Redundancy UV Disinfection System Replacement Engineering of Raw Water Transmission Main & Chamber Repairs Gloucester St Water St. to First St. E. 2023 Year End Deficit	ojects)	-800,000 -347,233 -100,000 -2,000,000 -50,000 -500,000 -44,558		2,929,816
Wastewater Works Reserve Budgeted Contribution	4,660,9	27	3,012,353	
Interest earned			194,432	
Developer Payment - Pitt St Sewer Building Condition Assessment and Asset Management Plan		-70,000	133,560	
Sewer Network Improvements		-1,100,000		
Combined Sewer Separation Primary Header Expansion and Joint Rehabilitation		-694,500 -300,000		
Digester Rehabilitation		-1,100,000		
Aberdeen (2023-64-Financial Services) Gloucester St Water St. to First St. E.		-102,550 -500,000		
2023 Year End Surplus			221,934	4,356,156
Brownfields Reserve	1,480,6			
Fund Program expenses Interest Earned		-34,851	76,463	1,522,278
Landfill Closure and Post Closure Reserve Fund	306,3	٥٨	-	
Budgeted Contribution	000,0	54	400,000	
Interest Earned			28,401	734,795
Waterfront Development Fund	240,0	00		240,000
WSIB-Estimated Future Benefit Costs Reserve	2,771,7	09		
WSIB Schedule 2 Contribution Interest Earned			241,426 147,420	3,160,555
			147,420	3,100,333
Downtown Investment Reserve Fund Interest earned CAHC 1st Mortgage	3,538,4	16	5,394	
Interest earned CAHC 2nd Mortgage			12,069	
Investment Interest Earned Transfer to HOTC Reserve		-38,416 -199,271	181,808	3,500,000
Heart of City Reserve	139,3			-,,
Capital outlay	139,3	30	32,250	
Tax Incentive Grant - Non-Refundable Interest from Downtown investment - CAHC 1st Mortgage			185,300 5,394	
Interest from Downtown investment - CAHC 2nd Mortgage			12,069	
Interest from Downtown investment - Investment income Loan Forgiveness		-34,253	181,813	
Fund HOTC Programs		-59,375		462,534
Parking Reserve Fund	122,0	91		
In lieu of Parking	, - , -		15,000	
Interest Earned To Partially Fund the 2023 Year End Deficit		-141,392	4,301	0
				·
Progress Fund (Policy - 80% of Interest Earned) Interest Earned	25,926,8	30	734,064	
Benson Centre Debt Payments		-587,250	-	26,073,712
TOTAL Restricted Reserves (Municipal Funding)	794 44,062,84	48 -10,641,824	9,558,822	42,979,846

	Opening Balance	Withdrawals	Additions	Closing Balance
RESTRICTED RESERVES (Funded Externally)				
Provincial Gas Tax Reserve (Transit) Funds Received Fund Operations 2014 Handi Transit Buses (Loan 2016-2023) 2015-16 Conventional Buses (Loan 2016-2031) 2017 Conventional Buses (Loan 2018-2026) 2018 Conventional Buses (Loan 2020-2024) 2019 Conventional Buses (Loan 2022-2026)	110,446	-136,553 -49,680 -78,588 -108,228 -120,392 -138,440	631,882	110,447
Canada Community-Building Fund Reserve (Infrastructure) 2023 CCBF Allocation Interest Earned 2019-2021 Leachate Gas 2019-2021 Bicycle Path Repairs 2020-2023 Waterfront Plan 2021 Asphalt Resurfacing 2021 Lamoureux Washroom 2021 Asset Management Planning Software 2022 Traffic Signal Upgrades 2022 Active Transportation (Bicycle Infrastructure) 2022 Optimist Park LED 2022 Asphalt Resurfacing 2023 Building Condition Assessment and Asset Management Plan 2023 Traffic Signal Upgrades 2023 Culvert Replacement - Fly Creek at Boundary Rd 2023 Active Transportation (Bicycle Infrastructure) 2023 Marina 200 Dock Replacement and Upgrades 2023 Asphalt Resurfacing 2020 Brookdale Reconstruction Street Lights Ioan (LTD 2022-2023, Ioan matures in 2025) Complex LED Lights Ioan (LTD 2022-2023)	6,763,261	-16,709 -23,890 -15,264 -1,332,495 -3,359 -91,098 -789 -238,487 -37,631 -464,657 -194,002 -315,896 -386,219 -51,279 -286,454 -106,808 -46,294 -1,513,712 -130,698 -113,296 -101,748	3,083,640 221,832	4,597,948
Development Charges Reserve City Wide Residential City Wide Non-Residential Interest Earned 2020-2021 Marleau Ave Project Fire HQ & Training Center 2023 Active Transportation (Sidewalk Infrastructure) MW Admin Building Design 2021 Combined Sewer Separation 2022 Combined Sewer Separation 2023 Combined Sewer Separation 2023 Combined Sewer Separation Transit Garage 2023 New Watermain Growth Library Additional Collection Background Study 2023 Asphalt Resurfacing	3,075,080	-387,331 -1,092,471 -35,015 -214,108 -22,851 -25,540 -9,820 -1,057 -23,502 -47,606 -22,634 -401,129	707,681 499,556 101,346	2,100,599
Building Surplus Reserve (permits) Interest Earned 2023 Year End Contribution	2,097,465		142,939 1,754,030	3,994,434
Community Housing Providers Reserve Interest Earned 2023 Non- Profit Savings	2,791,326		146,068 65,451	3,002,845
Employment Assistance Retained Surplus Reserve OW Bad Debt & Funeral Expenses	641,357	-30,287		611,070
Child Care ELCD Reserve	95,393			95,393

	Opening Balance	Withdrawals	Additions	Closing Balance
Consolidated Homelessness CHPI Reserve 2023 Cumberland Housing	39,927		-39,927	0
Parkland Reserve Fund Playground Structure Replacement	142,127	-30,000		
Parkland Dedications Interest Earned			146,639 7,850	266,616
Winter Games/Legacy Trust Fund Legacy Awards	55,104	-3,555	0.005	54 504
Interest Earned Arts and Culture Trust Fund	1,005,135		3,035	54,584
Donations collected Interest Earned			111,139 53,330	1,169,604
TOTAL Restricted Reserves (Funded Externally)	16,816,621	-8,449,572	7,636,491	16,003,540

City of Cornwall Progress Fund Investment Register

Investment Type	Dealer	<u>Maturity</u>	Maturity Value	+Premium /-Discount	Investment <u>Paid</u>	Estimated Interest Earned <u>Annually</u>	<u>% Yield</u>	Book Value of Investments <u>Dec 31 2023</u>
<i>Schedule I Banks</i> CIBC Investment Scotia GIC BMO GIC	CIBC Scotia Bank BMO	11-Feb-27 05-Aug-24 16-Sep-24	\$1,230,000 \$3,190,200 \$3,193,500	\$0	\$1,230,000 \$3,000,000 \$3,000,000	\$0 \$190,200 \$193,500	0.00% 6.34% 6.45%	\$1,230,000 \$3,077,643 \$3,056,725
ONE Funds Bond Fund	ONE	on demand					2.04%	\$19,262,126

Accrued Interest

Amount Owing to the General Account from the Progress Fund

(\$552,782)

PROGRESS FUND INVESTMENTS \$26,073,712

Progress Fund

Opening Balance Add:		25,000,000
Interest earned 1998	467 041	
Interest earned 1996	467,241	
Interest earned 2000	1,403,582	
	1,372,515	
Interest earned 2001	1,645,226	
Interest earned 2002	1,422,723	
Interest earned 2003	1,594,927	
Interest earned 2004	1,097,206	
Interest earned 2005	945,362	
Interest earned 2006	935,804	
Interest earned 2007	1,124,533	
Interest earned 2008	1,346,915	
Interest earned 2009	1,065,338	
Interest earned 2010	814,611	
Interest earned 2011	818,915	
Interest earned 2012	727,852	
Interest earned 2013	657,044	
Interest earned 2014	609,527	
Interest earned 2015	568,725	
Interest earned 2016	560,649	
Interest earned 2017	546,323	
Interest earned 2018	554,594	
Interest earned 2019	601,842	
Interest earned 2020	465,931	
Interest earned 2021	396,520	
Interest earned 2022	523,987	
Interest earned 2023	734,064	23,001,956
Less: Current Fund Transfers		
2003 SLRIES	-500,000	
2008 Boys and Girls Club	-150,000	
2008/09 Cornwall Hospice	-500,000	
2009 Agape Centre	-200,000	
2010-2012 Hospital Commitment	-4,410,255	
2013 University Study	-40,000	
Benson Centre Debt Payment	-5,269,259	
2023 Benson Centre Debt Payment	-587,250	-11,656,764
Less: Capital Fund Purchases		
2000 Unfinanced Capital Outlay	-600,000	
2003 Recreation Projects	-135,902	
2003-2005 Aquatic Centre	-5,834,141	
2004 Complex Roof Repairs	-460,100	
2004 Complex HVAC	-1,373,698	
2005/2006 Complex HVAC	-824,290	
2006 Roof Replacement - Complex	-464,349	
2008 Complex Cladding	-579,000	-10,271,480
Balance of Progress Fund at Dec 31, 2023		26,073,712
Balance of Progress Fund at Dec 31, 2023		26,073,712
Principal		-25,000,000
Interest Earned but not spent	-	1,073,712
798	:	1,010,112

798



The Corporation of the City of Cornwall Regular Meeting of Council Resolution

Department:	CAO
Division:	Office of the City Clerk
Resolution:	2024-19
Report Number:	2024-21-Council Members
Meeting Date:	August 13, 2024
Subject:	Procedure By-law – Reconsideration of Start Times

Proposed by: Councillor Elaine MacDonald Seconded by: Councillor Maurice Dupelle

Whereas, in December of 2023, as proposed by Mr. Rick O'Connor, President of MuniverseRO Consulting Inc., Council adopted the revised Procedure By-law 2023-112. By that By-law, Council adopted Article 9.1 of the Rules, that places the In Camera Meeting toward the end of the Public Meeting, rather than prior to it, as had been the custom for many years. At the time, there was no movement to resist the change in the order of occurrence of the two meetings, and certainly not the 2/3 vote that it would have taken to deviate from the prescribed order as described in Article 9.1., and

Whereas since that time, the law of unintended consequences suggests that Council reconsider the change in order of the meetings. It has become apparent that the change causes a severe stress to those Councillors who are employed full time and in some instances at great distances from Council Chambers, and

Whereas meetings subsequent to that of December 11, 2023, have demonstrated that punctual attendance at the public meeting is actually impossible for some Members of Council, and



Whereas some Ontario municipalities have adopted the public/in-camera sequence, but not all have, and

Whereas in larger cities, election to a seat on Council is an election to a full-time position, with a family-supporting wage as recompense. This situation allows a person to step away from their primary employment without jeopardizing their welfare and meet during business hours. But that is not the case in Cornwall, where the responsibility is equally weighty but capable of being discharged on a part-time basis, with part-time remuneration in return. Consequently, it is unreasonable to so arrange a timetable so members cannot serve on Council without incurring employment-related stress or transportation stress; and

Whereas the revised order is understood to be a "best practice" in Mr. O'Connor's words and in his opinion, the order of the meetings, like all the other provisions in the Procedure By-law, is the responsibility of Council.

Whereas this motion presupposes that the Public Meeting is more important than the In Camera Meeting, Council should so establish the timetable that if a member must be late, she/he would miss part of the In Camera Meeting rather than part the Public Meeting. It is in the Public Meeting that the business of the municipality is conducted, and tax dollars are spent. In Camera Meetings have a much narrower scope and effect.

Now therefore be it resolved that Council reconsider Section 9.1 of By-law 2023-112 and re-establish 7:00 p.m. as the time of the Public Meetings and set the In Camera meeting to precede the public meeting, at 5:00 p.m., 5:30 p.m., 6:00 p.m. or even 6:30 p.m. as the Agenda necessitates.

I, Manon L. Levesque, City Clerk for The Corporation of the City of Cornwall, do hereby certify that the above is a true copy of Resolution Number 2024-19 enacted by Council on Tuesday, August 13th, 2024.

Manon L. Levesque City Clerk



The Corporation of the City of Cornwall Regular Meeting of Council By-law 2024-066

Department:	Infrastructure and Municipal Works
Division:	Environment
By-law Number:	2024-066
Report Number	2024-55-Infrastructure and Municipal Works
Meeting Date:	August 13, 2024
Subject:	Regulation of Water Supply By-law

A by-law to provide for the Regulation of Water Supply (Water Supply Bylaw) in the City of Cornwall and repeal by-law 2016-019

Whereas Section 9 (1) of the *Municipal Act, 2001,* S.O. 2001, c. 25, provides that Section 11 shall be interpreted broadly so as to confer broad authority on municipalities to enable them to govern their affairs as they consider appropriate and to entrance their ability to respond to municipal issues;

And Whereas under Section 11 of the *Municipal Act, 2001,* a municipality may pass by-laws respecting matters within the sphere of jurisdiction of Public Utilities, and Public Utilities includes a system that is used to provide water services for the public;

And Whereas Section 81 (1) and Section 81 (2) of the *Municipal Act, 2001* authorizes a public utility to shut off the supply of water if fees and charges payable for water and wastewater services are overdue;

And Whereas Section 434.1 of the *Municipal Act*, 2001, as amended, authorizes The Corporation of the City of Cornwall to require a Person, subject to such conditions as the municipality considers appropriate, to pay an Administrative Penalty if the municipality is satisfied that the Person has failed to comply with a by-law of the municipality;



And Whereas Section 434.2(1) and (2) of the *Municipal Act*, 2001, as amended, authorizes The Corporation of the City of Cornwall to add any imposed Administrative Penalty to the tax roll for any property in the local municipality for which all the owners are responsible for paying the Administrative Penalty, and collect it in the same manner as municipal taxes;

And Whereas Sections 444 and 445 of the *Municipal Act, 2001*, provide for a municipality to make an order to discontinue a contravening activity or correct a contravention through order, setting out particulars of the contravention and the date which compliance must be achieved;

And Whereas Subsection 11(1) of the *Safe Drinking Water Act, 2002,* S.O. 2002, c.32, requires every owner of a Municipal Drinking Water System to ensure that all water provided by the system meets the requirements of drinking water quality standards and that the system is operated in accordance with the *Safe Drinking Water Act, 2002* as amended;

And Whereas Section 19 of the *Safe Drinking Water Act, 2002,* requires every person who oversees or has the decision making authority over a Municipal Drinking Water System to exercise the level of care, diligence and skill that a reasonably prudent person would be expected to exercise in a similar situation and act honestly, competently and with integrity, with a view to ensuring the protection and safety of the users of the Municipal Drinking Water System;

And Whereas Part 7, Subsection 7.6.2 of O.Reg 332/12, the Ontario Building Code, requires Potable Water systems to be protected from contamination.

Now therefore be it resolved that the Council of The Corporation of the City of Cornwall enacts as follows:

1.0 Short Title

1.1. This By-law may be referred to as the "Water Supply By-law".

2.0 Definitions of Terms

- 2.1. "Administrative Fee" means any fee specified in this By-law.
- 2.2. **"Administrative Penalty"** means an administrative penalty established pursuant of By-law 2022-112 "Administrative Monetary Penalty System (AMPS)" for a contravention of a Designated Bylaw.



- 2.3. **"AMI Network"** means the Advanced Metering Infrastructure Network which collects and stores Water Meter consumption information.
- 2.4. **"AMPS"** means Administrative Monetary Penalty System.
- 2.5. **"Authorized Functions List"** means the list of functions and persons authorized to carry out such functions as set out in Appendix A.
- 2.6. **"Authorized Tester"** means persons described in the Authorized Functions List permitted to carry out any of the corresponding authorized functions that has registered with the Corporation, provided all requested documentation to the Corporation, paid any applicable fee, and received a corporation registration number.
- 2.7. **"Auxiliary Water Supply"** means any Water Supply on or available to the Property, other than the Potable Water supplier by the Corporation.
- 2.8. **"Backflow"** means the flowing back or reversal of the normal direction of water.
- 2.9. **"Backflow Prevention Device"** or **"Backflow Preventer"** means a device installed to prevent the reverse flow of any substances into the Municipal Drinking Water System which may contaminate the Water Supply.
- 2.10. **"Building"** shall mean a Structure supplied with Water by the Corporation.
- 2.11. **"Building Code"** means O. Reg 332/12, the *Ontario Building Code*, made under the *Building Code Act*, 1992, S.O. 1992, c.23 as amended from time to time.
- 2.12. **"By-law"** means this By-law #2024-06 to provide for the Regulation of Water Supply (Water Supply By-law) in the City of Cornwall and repeal by-law 2016-019.
- 2.13. **"By-pass"** means plumbing that is installed around a Water Meter for the purpose of allowing water to flow to the Property without passing through the Water Meter.



- 2.14. **"CFO"** shall mean Chief Fire Official.
- 2.15. "City" means the geographical area of the City of Cornwall.
- 2.16. **"Corporation"** means the Corporation of the City of Cornwall.
- 2.17. **"Corporation Stop"** means the underground valve that connects the Watermain to the Water Supply pipe.
- 2.18. **"Council"** means the Municipal Council of the Corporation.
- 2.19. **"Cross-Connection"** shall mean any actual or potential connection between a Potable Water supply and any source of pollution or contamination that may allow Backflow of contaminants, pollutants, infectious agents, other material, or substance that will change the water quality in the Municipal Drinking Water System and include swivel or changeover devices, removable sections, jumper connections and By-pass arrangements.
- 2.20. **"Cross-Connection Control Survey"** is an inspection of a Building to identify any existing Backflow Prevention Devices and any internal plumbing Cross-Connections that may require Backflow Prevention Devices in order to comply with this By-law. This survey may only be conducted by an Authorized Tester as identified in Appendix A.
- 2.21. **"CSA Standard"** means the document entitled B64.10-11/B64.10.1-11, Selection and Installation of Backflow Preventers/Maintenance and Field Testing of Backflow Preventers published by the Canadian Standards Association, as amended from time to time.
- 2.22. **"Curb Stop"** shall mean the valve on the Private Water Service or Private Water Main owned and used by the Corporation to shut off or turn on the Water Supply from the Municipal Drinking Water System to any Premises.
- 2.23. **"Designated By-law"** means a by-law, or a part or provision of a by-law, that is designated under this or any other by-law, and is listed in any Schedule of this By-law to which AMPS applies.
- 2.24. **"Enforcement Officer"** means a Municipal By-law Enforcement Officer, Provincial Offences Officer, members of the Cornwall Police



Services, the Chief Municipal Law Enforcement Officer, and any other person authorized by the Corporation to enforce By-laws.

- 2.25. **"Fire Code"** means O.Reg 213/07, the Ontario Fire Code made under the *Fire Protection and Prevention Act*, 1997, S.O 1997, c.4, as amended from time to time.
- 2.26. **"Fire Hydrant"** shall mean any apparatus for drawing water directly from a water main and which is used principally for firefighting purposes.
- 2.27. **"Fire Protection System"** means an assembly of pipes and fittings within a Building or Structure that is used to convey water from the Water Supply to a sprinkler or standpipe system or as described in the Building Code and CSA Standard.
- 2.28. **"Fire Water Service"** means a Water Supply pipe that conveys water from a water main to a Fire Protection System.
- 2.29. **"Main Shut-Off Valve"** means the privately owned shut-off valve located immediately inside of a Building that turns off Water Supply to all fixtures within the Building.
- 2.30. **"Manager"** means the "General Manager of Infrastructure and Municipal Works" for the Corporation and for the purposes of exercising any of the powers of duties of the Manager under this Bylaw, shall include any employee designated by the said Manager to exercise any such powers or duties.
- 2.31. **"Meter Chamber"** is a Structure, typically underground, that covers and protects a Water Meter assembly and provides a means to access the Water Meter.
- 2.32. **"Meter Tag"** means a tag supplied by the Corporation that provides information on responsibilities pertaining to the Water Meter.
- 2.33. **"Municipal Drinking Water System"** means the Potable Water system as defined by Subsection 2(1) of the *Safe Drinking Water Act*, 2002, S.O 2002, c.32, as amended from time to time.
- 2.34. **"Municipal Fire Hydrant"** shall mean a Fire Hydrant that is owned and maintained by the Corporation; located within the Municipal



Right-Of-Way or on land where a registered easement exists in favour of the Corporation.

- 2.35. **"Municipal Right-Of-Way"** means a road allowance owned by the Corporation for the purposes of operating a public highway under the Municipal Act, 2001, a public walkway, municipal services (parking lot) or public utilities.
- 2.36. **"NFPA"** means the National Fire Protection Association.
- 2.37. **"Occupant"** shall include any lessee, tenant, Owner, the agent of a lessee, tenant or Owner, or any person in possession or Premises.
- 2.38. **"Owner"** shall include any Person that is the registered owner of the Property under consideration or any agent thereof, a person entitled to a limited estate in land, a trustee in whom land is vested, a committee of the estate of a mentally incompetent individual, an executor, an administrator, and a guardian.
- 2.39. **"Penalty Notice"** means a notice given pursuant to Section 4.0 of By-law 2022-112 "Administrative Monetary Penalty System (AMPS)".
- 2.40. **"Person"** means an individual, partnership, association, firm or corporation, business entity, or club, incorporated group or organization, federal or provincial, crown agents, school boards and regional municipalities, to whom the context can apply accordance with the *Interpretation Act*, R.S.O. 1990, c. I.11, as amended, but specifically excludes the Corporation and agents acting on behalf of the Corporation.
- 2.41. **"Potable Water"** water that is safe for human consumption.
- 2.42. **"Premise Isolation"** means isolation of the Building or Structure's Water Supply from the Corporation's Municipal Drinking Water System by means of a Backflow Prevention Device installed at Water Supply entry.
- 2.43. **"Premises"** shall mean any house, tenement, Building, Structure, lot, part of a lot, or both, in which Private Water Service pipes run through or past.



- 2.44. **"Private Fire Hydrant"** shall mean a Fire Hydrant that is located on private Property, is part of a private Water Distribution System, or is connected to a Private Water Main or Private Water Service pipe.
- 2.45. **"Private Water Main"** shall mean a pipe connected to a municipal main, which is installed on private Property, and may supply multiple Private Water Services and/or Private Fire Hydrant laterals.
- 2.46. **"Private Water Service"** means that part of the "service pipe" from the Property line to the Water Meter location.
- 2.47. **"Property"** means both public and private lands, Buildings, Structures, boats, vehicles, railway cars, or mobile homes which are located in the City, and which may be entitled to a service connection.
- 2.48. **"Qualified Person"** means a person who is registered with the Corporation and is authorized to carry out the functions outlined on the "Authorized Functions List" in Appendix A
- 2.49. **"Radio Transmitter"** shall mean the device installed at a separate location from and connected to the Water Meter which transmits the consumption reading and other data of the Water Meter to the AMI Network.
- 2.50. **"Structure"** means anything constructed or built permanently or temporarily which is provided with a source of Potable Water.
- 2.51. **"Temporary Water Meter**" means a non-Corporation owned water meter that is installed to provide an authorized temporary water supply.
- 2.52. **"Test Report"** means a test report consists of a detailed test performed annually by a Qualified Person that identifies whether a Backflow Prevention Device is functioning properly.
- 2.53. **"Wastewater"** means the composite of water and water-carried wastes from residential, commercial, industrial, or institutional Premises or any other source.
- 2.54. **"Water**" shall mean Potable Water supplied by the Corporation.
- 2.55. **"Water Distribution System"** means the Buildings, Structures,



plant, machinery, equipment, appurtenances, devices, conduit, intake, outlets, underground pipelines and installations, and other works designed for transmission, distribution, and storage of Potable Water by the Corporation, and includes lands occupied for such purposes and uses.

- 2.56. **"Water Meter"** means a device or mechanism which is owned by the Corporation for the purpose of measuring the flow or quantity, or both, of water.
- 2.57. **"Watermain**" means the pipe owned by the Corporation which distributes water to abutting properties and the general area.
- 2.58. **"Water Service Connection"** means the part of a water supply pipe located on public Property or street side, going from the Watermain to the property line.
- 2.59. **"Water Supply"** means the supply of Potable Water to a Property that has undergone treatment processes operated by the Corporation.

3.0 Connecting to the Corporation Water Supply

- 3.1. All applications for turning on, and turning off, the supply of water to any Premises, shall be made in writing and upon the prescribed form, at the Taxation and Billing Office of the Corporation.
- 3.2. Every Person making an application for turning on the supply of water shall, at the time of application, pay the prescribed fee in advance. No Water Supply shall be turned on until such payment has been made.
- 3.3. A Water Supply turn-on fee shall be charged, as set out in the Water Rates By-law, in each of the following:
 - a) where the Water Supply is provided to the Property; or
 - b) after a shut-off period greater than thirty (30) days duration, then a new turn-on fee shall be paid.
- 3.4. The Owner of each separately assessed parcel of land that is connected to the Municipal Drinking Water System shall pay the applicable Water Supply fees identified in the Water Rates By-law.



- 3.5. Where the Water Supply to any Premises has been turned off because of non-payment of the rates and charges levied or for any other reason pursuant to this By-law, the Water Supply shall not be turned on again until all rates and charges due in respect of the Water Supply have been paid, and any other additional expenses incurred as a result of turning on or off the Water Supply have been paid.
- 3.6. Every Person requesting that the supply of Water to their Premises be turned off or turned on shall give notice in writing to the Corporation. A minimum of two business days' notice is required.
- 3.7. No Person shall install, lay, repair, renew or take up a Water Service Connection or connect to any Watermain owned by the Corporation, located on Corporation Property or within the Municipal Right-Of-Way without having the applicable permits issued by the Corporation.
- 3.8. Every Water Service Connection is to be laid in a straight line and at a right angle to the Watermain, as near as practicable.
- 3.9. Where the applicant for a Water Service Connection indicates in his or her application a desired location for the Water Service Connection, the Water Service Connection will be located as indicated providing the proposed location is approved by the Manager.
- 3.10. Where the applicant for a Water Service Connection does not indicate in their application a desired location for the Water Service Connection, the Water Service Connection will be located as determined by the Manager and if the applicant subsequently requires a relocation of the Water Service Connection, such relocation will be at the expense of the applicant. All work shall be done consistent with existing policies and practices.
- 3.11. Unless otherwise directed by the Manager all Water Service Connections shall be laid:
 - a) at a depth of two meters (2 m) below the surface of the soil surrounding the trench in which the pipes are laid or below



the certified road grade where the pipes are laid on a road allowance; and

- b) in accordance with the *Ontario Building Code*, O.Reg 332/12, s.7.3.5.7. Spatial Separation.
- 3.12. Unless otherwise directed by the Manager, all Private Water Service pipes shall be of the same size as the Water Service Connections laid by the Manager or authorized to be laid by a subdivision agreement.
- 3.13. Municipal Water Service Connections to Property line shall not be installed in, over or across the Property of another Owner unless a registered easement is obtained by the applicant for such a location and such arrangement is approved by the Manager.
- 3.14. Upon payment of the service connection charge, the Owner shall either:
- 3.14.1. Carry out all excavation, backfilling and restoration associated with the trench in which the Water Service Connection pipe is to be installed. Upon preparation of an approved trench for the Water Service Connection, the Corporation shall tap the Watermain, supply and install the Corporation Stop, the Water Service Connection piping from the Watermain up to a point at, or near the Property line, and supply and install the Curb Stop and post. The Owner shall be responsible for the installation of the Private Water Service joining the provided Water Service Connection and reimbursing the corporation for all labour, materials, equipment, in addition of a 15% surcharge; or
- 3.14.2. Carry out all excavation, backfilling and restoration associated with the trench in which the Water Service Connection pipe is to be installed, supply and install the Water Service Connection pipe up to the Property line, install the Curb Stop and post, and connect to the Private Water Service. The Corporation shall tap the Watermain and install the Corporation Stop.
- 3.14.3. All work shall be subject to approval by the Manager or their agent.
- 3.15. A separate and independent Water Service Connection shall be required for:



- a) single family dwellings;
- b) each dwelling unit of a semi-detached Building;
- c) each dwelling unit of a linear row housing Building or row housing cluster, with more than two Buildings on one lot, if these dwellings face a road and can be severed; and
- d) any other case where one of the above is created by severance or proposed to be created by severance.
- 3.16. Unless otherwise directed by the Manager, one Water Service Connection of proper size from the Watermain to Property line and a private distribution system shall be provided for:
 - a) apartment buildings;
 - b) commercial buildings;
 - c) condominiums;
 - d) industrial buildings;
 - e) row housing clusters; except for those identified in Section3.15 of this By-law; and
 - f) institutional buildings.
- 3.17. A Water Service Connection installed on Premises for fire protection services shall be equipped with a Backflow Prevention Device in accordance with Subsection 9.2.4 of this By-law at the Owner's expense.
- 3.18. No supply of water shall be provided from the Watermain unless the Water Service Connection is correctly installed according to Corporation standards and provisions specified herein.
- 3.19. The Owner of a Property shall ensure that all Private Water Service pipes, private water systems, and private fire service lines on the Owner's Property are protected from freezing. The Owner shall be responsible for:
 - any damage incurred as a result of freezing of any Private Water Service pipes, private water systems, and private fire service lines on the Owner's Property.



- b) any water loss or discharge which occurs as the result of freezing of any Private Water Service pipes, private water systems, and private fire service lines on the Owner's Property.
- c) thawing of any frozen Private Water Service pipes, private water systems, and private fire service lines on the Owner's Property.

4.0 Water Meters

- 4.1. Installation of a Water Meter and a Radio Transmitter shall be a condition of Water Supply.
- 4.2. All Water supplied to a Property, except water used for firefighting purposes, or Water authorized by the Manager for unmetered use, within the City shall pass through a Water Meter and the rates charged for such water shall be those identified in the Water Rates By-law.
- 4.3. The Owner shall pay all Water Connection and Water Turn On Charges as indicated in the Fees and Charges By-law 2019-047, as amended, before the Corporation will supply the Owner with a Water Meter.
- 4.4. The Water Meter and Radio Transmitter shall be purchased from the Corporation at the rates identified in the Fees and Charges By-law 2019-047, as amended.
- 4.5. All Water Meters and Radio Transmitters shall be owned and remain the property of the Corporation.
- 4.6. The Owner shall be liable for damage caused to the installed Water Meter and Radio Transmitter and shall be responsible for returning the Water Meter and Radio Transmitter to the Corporation if the Water Supply is to be terminated.
- 4.7. The Water Meter must be installed by the Owner according to the installation specifications provided by the Corporation and approved and sealed by an authorized representative of the Corporation.
- 4.8. The Water Meter must be installed within seven (7) days of being supplied by the Corporation.
- 4.9. The Owner must notify the Corporation within 48 hours that the



installation of the Water Meter is complete.

- 4.10. The Owner will run the wire from the Water Meter to the exterior of the Property where the Radio Transmitter will be installed according to the manufacturer's installation specifications.
- 4.11. The Corporation will install the Radio Transmitter according to the manufacturer's specifications and confirm consumption data from the attached is available to the AMI Network.
- 4.12. Each Water Meter will be installed with a Meter Tag. The Meter Tag will reference this By-law and provide a contact number for service and/or repair.
- 4.13. No Person shall remove or tamper with the Meter Tag.
- 4.14. The Corporation may, upon ascertaining that water has been used which has not passed through the Water Meter of such Premises, forthwith, shut off and stop the Water Supply. Reasonable attempt will be made to contact the Owner to notify of the interruption.
- 4.15. The Corporation reserves the right to install a Water Meter on any service inside all serviced Buildings, including residential and non-residential Properties, at any time and thereafter charge water rates identified in the Water Rates By-law for Water consumed as read on the Water Meter register. Should access not be made available for the installation of the Water Meter, the Corporation reserves the right to shut off the Water Supply.
- 4.16. All Properties where a Water Meter is to be installed must have the appropriate private plumbing in place prior to installation.
- 4.17. Pursuant to this By-law, the testing, flow rates and procedures used to determine Water Meter accuracy will be in accordance with the current American Water Works Association Standards.
- 4.18. Every Owner shall make all Water Meters and Radio Transmitters accessible for repairs, maintenance, change outs and readings upon request.
- 4.19. No Person shall obstruct a Radio Transmitter such that it cannot be



accessible for testing, repairs, maintenance, change outs and readings.

- 4.20. If, in the opinion of the Manager, the condition of the Private Water Service pipe and/or valves and of the plumbing system on such piping is such that the Water Meter and Radio Transmitter cannot be safely installed without fear of damage to the Private Water Service pipe and valves, the Manager may require the Owner or Occupant to make such repairs as may be deemed necessary to facilitate the installation of the Water Meter. If, upon reasonable notice, the Owner does not comply with the Manager's request, then the Water Supply to the Property may be turned off.
- 4.21. The maintenance, repair, reading, and disconnection of any Water Meter and Radio Transmitter shall be conducted by authorized employees or agents of the Corporation.
- 4.22. The Corporation shall not be responsible for any damage to Buildings or Properties occasioned by, or in the course of, installation, maintenance, repair, reading or disconnection of any Water Meter or Radio Transmitter, provided that reasonable care has been taken by the employees or agents of the Corporation in the course of such installation, maintenance, repair, reading or disconnection.
- 4.23. Every Owner shall be liable for the safety and care of any Water Meter and Radio Transmitter placed on the Owner's Property, and will be charged for all damage thereto, whether occasioned by frost, hot water, blows or injury from any cause, and for the loss of any Water Meter and Radio Transmitter if the same be removed from their Premises without the consent of the Corporation whether stolen or otherwise, and the cost of every such Water Meter and Radio Transmitter, or of repairing or replacing the same, shall be payable to the Corporation on demand and collect such cost according to law, and until paid, such cost shall remain a lien on such Property and may also be collected in the like manner as taxes.
- 4.24. Water Meters shall be installed at each point at which Private Water Service pipes enter a Building unless the Manager directs in writing, that another location be used. There shall be ample clearance from walls and other obstacles to allow the installation of a meter without



changes being made to the Private Water Service pipe.

- 4.25. Only one Water Meter shall be installed per Private Water Service pipe entering any Building unless otherwise directed by the Manager.
- 4.26. Every Water Meter shall be installed in a manner readily accessible to employees and agents of the Corporation.
- 4.27. Where a Water Meter cannot be placed in a suitable location inside a Building, it shall be placed in a Meter Chamber. The location and construction of the Meter Chamber shall be approved by the Corporation and the cost of such construction shall be the responsibility of the Owner.
- 4.28. Where a Meter Chamber is required, as determined by the Manager, the Meter Chamber shall be provided with a Water Meter and Radio Transmitter and shall be constructed and maintained by the Owner in a manner satisfactory to the Manager and shall be accessible to the employees or agents of the Corporation.
- 4.29. The size and make of Water Meters to be installed shall be established by the Manager and shall be based on either consumption estimates provided by the Owner or, where no estimates provided by the Owner or the estimates provided by the Owner are, in the opinion of the Manager, inappropriate, on the consumption estimates of the Manager.
- 4.30. All pipe connections shall be made to the Private Water Service pipe on the outlet side of the Water Meter. A properly valved and sealed By-pass around the Water Meter shall be permitted.
- 4.31. Fire supply lines which are not supplied by a separate service shall be connected before any Water Meter unless otherwise approved by the Manager.
- 4.32. Where the Owner of a Property requests a service main of a diameter of 3.84 cm (2 inches) or larger, the Owner shall provide a By-pass to the specification of the Manager. This By-pass shall be a type which can be sealed in a closed position by an employee or authorized agent of the Corporation.



- 4.33. An Owner shall immediately notify the Manager of any breakage, stoppage, or irregularity in a Water Meter or Radio Transmitter.
- 4.34. If, in the opinion of the Manager, the condition of the Private Water Service pipe and/or valves and of the plumbing system on such piping is such that the Water Meter cannot be safely removed for the purpose of testing, replacing, repairing or testing in place without fear of damage to the Private Water Service pipe and valves, the Manager may require the Owner or Occupant to make such repairs as may be deemed necessary to facilitate the removal or testing of the Water Meter. If, upon reasonable notice, the Owner does not comply with the Manager's request, then the Water Supply to the Property may be turned off. The Corporation shall not be held responsible for any damages arising from such work.
- 4.35. Any Water Meter will be removed and tested upon request of the Owner. If it is found to register correctly, low, or not to exceed 3% in favour of the Corporation, the expense of removing and testing the Water Meter must be paid by the Owner requesting that such Water Meter be removed and tested.
- 4.36. The Corporation will not supply, install, inspect or read private Water Meters, nor will the Corporation bill Owners based on the consumption on private Water Meters. Water Supply pipes to private Water Meters must be connected to the Owner's plumbing after the Corporation's Water Meter.
- 4.37. Any breakage, stoppage, irregularity, or leaking of a Water Meter, its couplings, or Radio Transmitter must be reported immediately to the Corporation. The Corporation is not liable for damages caused by such leaks.

5.0 Billing for Water and Wastewater Services

- 5.1. Owners of Properties connected to the Municipal Drinking Water System shall be held responsible for all charges as listed in the Water Rates By-law.
- 5.2. The Corporation shall be the sole supplier of all Water Meters and Radio Transmitters registering consumption of water supplied and



billed by the Corporation.

- 5.3. The Owner shall be billed for all water passing through the Water Meter, whether used or wasted.
- 5.4. The register of the Water Meter shall be prima facia evidence of the quantity of water supplied.
- 5.5. Where for any reason the consumption of water on a Property has not been recorded, or where in the opinion of the Corporation, the consumption of water has been wrongly recorded, the Manager shall estimate the quantity of water consumed by averaging the water consumed in the last 12 months and the Owner shall be liable to pay for such estimated consumption.
- 5.6. Where an Owner requests the temporary removal of a Water Meter for construction purposes, the Owner will be responsible for any costs incurred for the removal and re-installation.
- 5.7. Bills which are not paid by the due date shall be subject to an interest charge of 1.25% per month.
- 5.8. The Corporation may add any unpaid balances and interest charges for water and Wastewater services and any unpaid imposed Administrative Penalties issued under this By-law to the tax roll for the associated Property to be collected in the same manner as taxes on the Property.
- 5.9. Owners should refer any bill complaints or disputes in writing to the Corporation immediately upon detection.
- 5.10. Any Owner desiring to question their bill shall do so in writing within twelve (12) months of the issue date shown on such bill.
- 5.11. In the event the Corporation determines it is necessary to make a billing adjustment as a result of an Owner being underbilled, such adjustment shall be retroactive for a period of up to twelve (12) months.
- 5.12. Despite Subsection 5.11, in the event that a billing adjustment is the result of an unauthorized connection to the Municipal Drinking Water



System, or willful interference with or damage to metering equipment, the Owner shall be responsible for all payments of such accounts from the date such unauthorized connection to the Municipal Drinking Water System or interference with the metering equipment occurred.

- 5.13. In the event the Corporation determines it is necessary to make a billing adjustment as a result of an Owner being over-billed, such adjustment will be estimated by the Corporation, and based on such estimate, the Corporation will credit the Owner's account for the overbilled amount without interest for a period not to exceed twelve (12) months.
- 5.14. In the event an Owner has been billed in error for Water Supply they did not receive, the Corporation will credit the Owner's account for any amounts paid by the Owner, without interest, respecting the period during which the Owner was incorrectly billed by the Corporation, such period not to exceed twelve (12) months.
- 5.15. The Corporation may authorize programs or projects which may exempt Persons or Properties from a provision or provisions of this By-law, subject to compliance with the bonusing provisions of the *Municipal Act, 2001*.

6.0 Fire Hydrants

6.1. General

- 6.1.1. No Person shall connect, cause to connect, or allow to remain connected, any piping fixture, fitting, container, or appliance to any Fire Hydrant, in a manner which under any circumstance would allow water, Wastewater or any liquid or substance to enter the Municipal Drinking Water System.
- 6.1.2. No Person shall operate or draw water from any Fire Hydrant except for the purposes of firefighting, or other operations authorized by the Corporation.
- 6.1.3. No Person shall in any way tamper or interfere with any Fire Hydrant, valve, or appurtenance without authorization from the Corporation.



- 6.1.4. Except for Water utilized for fire protection or maintenance and testing operations authorized by the Corporation, no Person shall take water from a Fire Hydrant without supplying and utilizing an appropriate Backflow Prevention Device and appropriate Temporary Water Meter. All Backflow Prevention Devices and Temporary Water Meters are to be approved by the Manager prior to Fire Hydrant operation. The Backflow Prevention Device and Temporary Water Meter is to be supplied by the requesting Persons and promptly removed post-use.
- 6.1.5. Any Persons, other than the Corporation, planning to utilize a Fire Hydrant for the purposes of annual maintenance under Section 6.3.2 of this By-law, flow testing or temporary Water Supply shall:
 - a) Notify the Corporation prior to maintenance;
 - b) Attain a "Fire Hydrant Use" permit from the Corporation prior to Fire Hydrant use and pay any required fees.
- 6.1.6. No Person shall, in any manner, obstruct free access to any Fire Hydrant, valve or other Fire Protection System. In addition, as per the *Fire Code* Subsection 6.6.4.3 and its amendments, no Building, rubbish, snow or any other matter which would cause such obstruction shall be placed closer than three (3) meters to a Fire Hydrant, valve or other Fire Protection System.

6.2. Municipal Fire Hydrants

6.2.1. Any Municipal Fire Hydrant is the property of the Corporation and shall be maintained by the Corporation.

6.3. **Private Fire Hydrants**

- 6.3.1. All Private Fire Hydrants are the responsibility of the Owner, and every such Owner shall ensure that all Private Fire Hydrants located on the Property are, at their own expense, installed, tested and maintained according to:
 - a) Subsections 6.6.4, 6.6.5 and 6.6.6.1 of the *Fire Code* as amended;



- b) *NFPA* Standards 24, 25 and 291;
- c) The Building Code as amended;
- d) Any other applicable standard or practice required by the Corporation.
- 6.3.2. Every Owner of a Private Fire Hydrant shall have it tested, maintained and flowed annually or at the request of the Corporation, by a qualified tester as required by Section 6.6.5 of the *Fire Code*. Owners shall ensure maintenance and testing procedures are in accordance with Section 6.3.1 of this By-law and shall:
 - a) At the request of the Corporation, submit annual inspection reports for each Private Fire Hydrant on the Property to the Corporation. Reports shall be completed on a form approved by the Corporation;
 - b) Retain inspection reports for a period of up to two (2) years and shall make the reports available upon request of the Corporation and CFO.

7.0 Service Conditions

- 7.1. Where a Water Service Connection is provided for a Fire Protection System, no Water shall be taken except for the following purposes:
 - a) fire protection; or
 - b) for the testing or maintenance of the system.
- 7.2. No work having to do with the supply of Water or with the laying, repairing, renewing or the taking up of a Watermain or Water Service Connection shall be done under or upon the streets or Municipal Right-Of-Way except by permit or agreement from the Corporation.
- 7.3. No Person except those authorized by the Corporation shall:
 - a) tap off or make any connection to a Watermain;
 - b) turn off or on any Watermain valve; or



- c) turn off or on, or interfere in any manner with any Water Service Connection.
- 7.4. Where the Manager detects any waste of Water on any Premises due to a leaky valve, a defective or improper pipe or defective or improper fixtures or negligence by the Owner, the Manager shall notify the Owner of the Premises of the repairs, alterations or direction needed to correct the waste of Water.
- 7.4.1. Where repairs, alterations or any directions ordered by the Manager are not made within fourteen (14) calendar days following such notification, the Manager is authorized to turn off the supply of Water to the Premises.
- 7.4.2. Where the condition of any pipe or fixture is such that it causes a waste of Water or damage to any Property, the Manager is authorized to turn off the supply of Water to the Premises without notice. Reasonable attempt will be made to contact the Owner to notify them of the interruption.
- 7.4.3. Where Water Supply had been turned off pursuant to Subsection 7.4.1 or 7.4.2 herein, it shall not be turned on again until the repairs or alterations have been made, the condition of all pipes and fixtures is satisfactory, all fees and charges pursuant to this By-law have been paid in full.
- 7.4.4. The Corporation shall not be responsible for any damages incurred to any Property as a result of turning off the Water Supply to any Premises pursuant to Subsection 7.4.1 or 7.4.2 herein.
- 7.5. The Corporation does not guarantee any determined water pressure or flow rate nor does it guarantee the Water to be free of colour and/or turbidity at all times. Water quality shall meet standards as prescribed by applicable regulations.
- 7.5.1. The Manager shall, prior to the shut off of a Water Supply, provide reasonable notice of the shut-off to the Owners and Occupants of the Property by personal service or prepaid mail or by posting the notice on the Property in a conspicuous place.



- 7.5.2. Despite Subsection 7.5.1, in the event of an emergency or potential emergency, or where in the opinion of the Manager shutting off portions of the system is necessary, the Water may be shut off and kept off as long as is necessary.
- 7.5.3. The Corporation, its agents or servants, shall not be liable for any damage resulting therefrom whether or not notice of the shut off has been given. When so requested in an emergency situation by the Manager or his or her representative, every Owner shall limit or discontinue the use of Water as requested.
- 7.6. No water-operated syphons or water-driven motors are to be used with Water supplied by the Corporation. Any existing installations of this type are to be removed within twelve (12) months' notice in writing.
- 7.7. The Corporation may supervise and inspect any or all work done on private Property with regard to a Water Service Connection with a service pipe, Water Meter, Radio Transmitter, or other related appurtenances associated with the supply of Water.
- 7.8. The Manager shall, in every case, approve the Water Service Connection required, the size of the pipe to be used in supplying Water to any Premises and the location in the street in which such pipes shall be laid.
- 7.9. Where a Water Meter is required, no Person shall install a pipe that is smaller or larger than that approved, between the Watermain and the Water Meter without the consent of the Manager.
- 7.10. Any Person who requests a service larger than that which exists to his or her Premises may be supplied with a larger service pipe at the discretion of the Manager, subject to payment of the cost thereof, and provided that such larger service will not adversely affect the Municipal Drinking Water System. Every connection on such Premises shall be detached from the existing service and attached to the new service forthwith.
- 7.11. Where any departure from the prescribed procedures is permitted in order to accommodate the needs of an Owner, the Owner shall be



charged with the expenses of making the change.

- 7.12. Every Main Shut-Off Valve shall be placed immediately inside the outer wall of the Premises being supplied with Water.
- 7.13. The Owner of every Premises shall be responsible for turning off the Main Shut-Off Valve where damage could occur as a result of the Premises being vacant.
- 7.14. No Person shall connect to a Fire Water Service, anything other than a Fire Protection System.
- 7.15. Notwithstanding Subsection 7.147., the normal supply line may be connected to a Fire Water Service when so approved by the Manager. In such a case, a Curb Stop shall be installed on the other line at the Property line or at a distance from the Building it serves approved by the Manager.
- 7.16. Any and all defects to the Private Water Service, Private Water Main and Meter Chambers shall be repaired by the Owner of the Property being serviced. Should the Corporation become aware of any such defect, and upon written notification to the Owner, the said defect is not repaired, within fourteen (14) days of the date of the notification or within such time as the Manager may deem necessary, then the Corporation may turn off the Water Supply to the Property. If the Corporation is ordered to restore the Water Supply, then the Corporation may repair the defective Water Service Connection and charge the cost to the Owner and collect such cost according to law, and until paid, such cost shall remain a lien on such Property, and may also be collected in the like manner as taxes. The Corporation shall not be held responsible for the cost of restoration.
- 7.17. No Person, other than Persons authorized by the Manager for that purpose shall be permitted to operate the Curb Stop to any Premises.
- 7.18. All Curb Stops must be left clear and accessible at all times so that the Water in the Water Service Connection and Private Water Mains may be turned off or on as may be found necessary by the Manager.
- 7.19. All Private Water Services and Water Meters shall be properly protected from frost and any other damage at the expense and risk of



the Owner of the Property being serviced. The Owner shall be responsible for the water loss occasioned by a leak in the Private Water Service and/or Private Water Main and the charge for such Water loss shall be determined by the Manager, shall be paid by the Owner upon demand by the Corporation and the Corporation shall not be held responsible for any damages arising from such leakage.

- 7.20. When any Premises is left vacant or without heat, it is the Owner's responsibility to shut off the Water Supply from within the Premises and to drain the piping therein. The Owner or Occupant is encouraged to notify the Corporation to have the Curb Stop turned off to stop the Water Supply to prevent damages. The valve will be turned on only at the Owner's request in the Owner's presence.
- 7.21. When any Premises is left vacant, unattended or without heat, where the Water Supply has not been shut off, suffers damage to it and its contents from a leaking or burst Water pipe, the Owner or the Occupant shall not make a claim against the Corporation. Should the Manager become aware of such leaking or burst pipes, the Manager shall turn off the Curb Stop, and the Water supply shall not be turned on until the Manager, at their discretion, considers it advisable.
- 7.22. Every Owner and Occupant of a Premises supplied with Water from the Corporation's Water supply shall grant access at all times between the hours of 08:00 a.m. and 04:30 p.m., Monday to Friday inclusive, to employees and authorized agents of the Corporation for the purpose of Water Meter reading, installing, inspecting, altering and repairing Water lines, Water Meters, Backflow Prevention Devices, fixtures or appurtenances. Failure to allow such access following reasonable requests for same may result in the Water Supply to the Premises being turned off without notice. Reasonable attempt will be made to contact the Owner to notify of the interruption.

8.0 Conditioning, Heating, Cooling, and Heat Pumps

- 8.1. No Person shall install any air conditioning, refrigeration, heating equipment or any other equipment which requires the use of Water without the approval of the Manager.
- 8.2. No Person shall allow the once through use of Water for the purpose



of cooling, with the exception of makeup Water for recirculation systems and boiler blow downs.

8.3. Heat pumps which use Water shall not be permitted.

9.0 Cross-Connection Control and Backflow Prevention

9.1. Application of By-law

- 9.1.1. This Section 9.0 applies to all new and existing industrial, commercial, institutional, and multi-residential Buildings and Structures, except Buildings of residential occupancies as described in Part 9 of the *Building Code Act* as amended from time to time.
- 9.1.2. In addition to and not withstanding Section 9.1.1, this By-law applies to any Structure or Building where a condition exists that may be hazardous or detrimental to the Water Supply as determined by the Corporation.

9.2. Cross-Connection Prohibited

- 9.2.1. No Person or Owner shall connect, cause to be connected, or allow to remain connected to the Municipal Drinking Water System any piping, fixture, fitting, container or appliance, in a manner which under any circumstances, may allow water, Wastewater, non-Potable Water, or any other liquid, chemical or substance to enter the Water Distribution System.
- 9.2.2. In addition to Section 9.2.1 and in accordance with all other provisions of this By-law, every Owner of a Property to which this By-law applies under Section 9.1.1, shall ensure that a Backflow Prevention Device is installed in respect of Premise Isolation in every Building or Structure where a connection to the Municipal Drinking Water System exists.
- 9.2.3. No Person shall connect, cause to be connected, or allow to remain connected to the Municipal Drinking Water System any Auxiliary Water Supply without written approval from the Corporation.
- 9.2.4. Where there is a Fire Protection System within a Building or Structure, the Owner of the Property shall ensure that such Building



or Structure is protected against Backflow in accordance with Part 7 of the Building Code and the CSA Standard.

9.3. **Persons Permitted to Carry Out Work**

- 9.3.1. Only Qualified Persons shall carry out any of the functions set out on the Authorized Functions List.
- 9.3.2. No Persons described in the Authorized Functions List shall carry out any of the corresponding authorized functions unless the Person has registered with the Corporation, provided all requested documentation to the Corporation, paid any applicable fee, and received a Corporation registration number.
- 9.3.3. The re-registration with the Corporation as referred to in Subsection 9.3.2 shall be annually, or at the request of the Corporation.
- 9.3.4. No Person shall submit any documentation to the Corporation as part of the registration process that contains inaccurate or false information.

9.4. **Application of CSA Standard**

- 9.4.1. Except as otherwise set out in this Subsection, the installation, maintenance, and field testing of Backflow Prevention Devices shall be in accordance with the CSA Standard.
- 9.4.2. In the event of a conflict between the CSA Standard and this Section, this Section of the by-law shall prevail.

9.5. Cross Connection Control Survey

- 9.5.1. Every Owner of a Property, to which is described in Subsection 9.1, shall every five (5) years, upon change of ownership, upon Property zoning change or as requested by the Corporation, cause to have a Cross-Connection Control Survey carried out for each Building or Structure on their Property at their own expense.
- 9.5.2. Cross-Connection Control Surveys shall be carried out by a person permitted to do so set out by the Authorized Function List.

9.6. Selection of Backflow Prevention Devices



- 9.6.1. Every Owner shall ensure that every Backflow Prevention Device required for Premise Isolation on their Property is a testable device and:
 - a) is the proper device to be used as determined by the CSA Standard's Selection Guide; or
 - b) when the type of Cross-Connection is not identified in the Selection Guide, the Corporation shall determine which device shall be used.
- 9.6.2. Despite Subsection 9.6.1 of this By-law, the Corporation may permit an existing Backflow Prevention Device as long as the safety of the Municipal Drinking Water System is maintained to the satisfaction of the Corporation in its sole discretion.

9.7. Installation of Backflow Prevention Devices

- 9.7.1. Every Person who installs, replaces, relocates or repairs a Backflow Prevention Device shall ensure that:
 - a) the device is installed in accordance with manufacturer specifications and the requirements of the CSA Standard; and
 - b) the device is located in such a manner, that in the event of Backflow, the device prevents contamination of the Municipal Drinking Water System and any other Potable Water systems.
- 9.7.2. Every Owner of a Property upon which a Backflow Prevention Device is installed, shall ensure that such device is maintained and in proper working order at all times.
- 9.7.3. In the event that the Water Supply cannot be shut down in order to facilitate annual testing, a By-pass shall be installed around the device with a suitable Backflow Prevention Device installed on the By-pass to allow for testing of both devices in accordance with Subsection 9.8.



9.8. **Testing of Backflow Prevention Devices**

- 9.8.1. Every Owner who has a Backflow Prevention Device located on their Property shall ensure, at their own expense, that:
 - a) the device is tested by an Authorized Tester when it is first installed, annually thereafter and at request of the Corporation. The device shall be retested after any cleaning, repairs, overhauls, replacements, or relocations;
 - a Test Report is provided to the Corporation within fourteen (14) days of the test being conducted;
 - c) if any such device fails a test, is malfunctioning or otherwise not in proper working order, the device is to be immediately repaired or replaced; and
 - d) if the device is unable to be repaired immediately, the
 Owner shall cease any activities that may result in Backflow and ensure the device is repaired within three (3) days of the failed test or malfunction.
- 9.8.2. Every Person who tests a Backflow Prevention Device shall:
 - a) carry out testing in accordance with this Section, the CSA Standard, and all applicable legislation;
 - b) provide a legible Test Report to the Corporation, in respect to such test, within fourteen (14) days of completing said test; and
 - upon finding that a device is malfunctioning or otherwise not in working order, immediately notify the Owner of the Property and the Corporation of such condition.

9.9. **General Provisions**

9.9.1. In addition to any other provisions of this By-law, the Corporation may at any time order an Owner to conduct tests, provide reports and undertake any other measures required for the prevention of Backflow or protection of a Cross-Connection.



- 9.9.2. No Person shall submit any documentation to the Corporation that contains inaccurate or false information.
- 9.9.3. All costs associated with installing, testing, maintaining, relocating, replacing, removing, and any other work related to Backflow Prevention Devices shall be at the expense of the Owner.
- 9.9.4. Where an Owner does not comply with any provision of this Section, the Corporation may:
 - a) order the Owner to comply with the by-law requirements and in doing so, shall provide reasonable particulars of the Owner's non-compliance and prescribe the time period for compliance with such order;
 - b) impose a fine in accordance with Section 12.0 of this Bylaw; and
 - shut off the Water Supply to the Property or any portion thereof until such a time as all provisions of this Section <u>9.99</u>. are met.

10.0 Inspection and Access to Property

- 10.1. The Corporation or any Person authorized by the Corporation for the purposes of this By-law may, at reasonable times, enter onto any land on which the Corporation supplies Water for the following purposes:
- 10.1.1. To install, inspect, repair, alter, or disconnect service pipe or wire, machinery, equipment and other works used to supply Water to, or collect Wastewater from the Building or land.
- 10.1.2. To inspect, install, repair, replace, or alter a Water Meter or a Radio Transmitter.
- 10.1.3. To inspect all parts of every Building or Premises to which any Water is supplied for the purpose of inspecting for compliance with this Bylaw. When carrying out an inspection, the Corporation may:



- a) require the production of any documents or things relevant to the inspection;
- b) inspect and remove documents or things relevant to the inspection the purpose of making copies or extracts;
- c) require information from any person concerning a matter related to the inspection; and
- d) make examinations or take tests, samples, photographs necessary for the purpose of the inspection.
- 10.2. For the purposes of carrying out an installation, inspections, repair, disconnection, or other work, the Corporation may shut off or reduce the supply of water to any Building or land.
- 10.3. If an Owner discontinues the use of the Municipal Drinking Water System or the Corporation lawfully decides to cease the supply of Water to any Building or land, the Corporation or individuals authorized by the Corporation may enter onto the Premises:
- 10.3.1. To shut off the supply of Water;
- 10.3.2. To remove any property of the Corporation, or
- 10.3.3. To determine whether the Water Supply or Wastewater collection system is being used lawfully.
- 10.4. Whenever the Corporation exercises a power of entry pursuant to this Section 10.0, the Corporation shall not enter a Premise that is a dwelling unless:
- 10.4.1. The consent of the Occupant and or Owner is first obtained, ensuring the Occupant and or Owner is first advised that entry may be denied;
- 10.4.2. A warrant is obtained under Section 158 of the *Provincial Offences Act;*
- 10.4.3. The delay necessary to obtain a warrant or the consent of the Occupant would result in immediate danger to the health and safety of any person; or
- 10.4.4. The entry of the dwelling is for the purpose of Section 10.1.2 or 10.3 and proper notice is given to the Occupant.



- 10.5. Whenever the Corporation or any person authorized by the Corporation exercises a power of entry pursuant to this By-law, the Corporation shall:
- 10.5.1. Provide reasonable notice to the occupier of the land by personal service, prepaid mail or by posting the notice on the Property in a conspicuous place;
- 10.5.2. As is practical, restore the Property to its original condition where any damage is caused by the inspection that is deemed not relevant to the determination of a contravention or compliance with this By-law.

11.0 **Prohibitions**

- 11.1. No Person shall:
- 11.1.1. willfully hinder or interrupt, or cause or procure to be hindered or interrupted, the Corporation or any of its officers, contractors, agents, servants or workers, in the exercise of any of the power conferred by this By-law;
- 11.1.2. willfully let off or discharge water so that the Water runs waste or useless out of the Municipal Drinking Water System;
- 11.1.3. being an Owner, tenant, Occupant or inmate of any house, Building or other place supplied with Water from the Municipal Drinking Water System, improperly waste the Water or, without the consent of the Corporation, lend, sell or dispose of the Water, give it away, permit it to be taken or carried away, use or apply it to the use or benefit of another, or increase the supply of Water agreed for;
- 11.1.4. without lawful authority, willfully open or close any Curb Stop or Fire Hydrant, or obstruct the free access to any Fire Hydrant, Main Shut-Off Valve, Meter Chamber or Corporation owned pipe by placing on it any building material, rubbish or other obstruction;
- 11.1.5. throw or deposit any injurious or offensive matter into the Water or Municipal Drinking Water System, or upon the source water ice if the water is frozen, or in any way foul the Water or commit any willful damage or injury to the Municipal Drinking Water System, pipes or Water, or encourage the same to be done;



11.1.6. willfully alter any Water Meter or Radio Transmitter placed upon any service pipe or connected therewith, within or without any Building or other place, so as to lessen or alter the amount of Water registered; or lay, or cause to be laid, any pipe or main to connect with any pipe or main of the Municipal Drinking Water System, or in any way obtain or use the Water without the consent of the Corporation; or use Water in contravention with the regulations.

12.0 Enforcement

- 12.1. Any Person who contravenes any provision of this By-law is, upon conviction, guilty of an offence and is liable to any penalty as provided in the *Provincial Offences Act*, R.S.O. 1990.
- 12.1.1. The court in which the conviction has been entered, and any court of competent jurisdiction, thereafter, may make an order prohibiting the continuation or repetition of the offence by the Person convicted, and such order shall be in addition to any other penalty imposed on the Person convicted.
- 12.2. Instead of laying a charge under the *Provincial Offences Act*, R.S.O. 1990, c. P.33 for a breach of any provision in this By-law, an Enforcement Officer may issue a Penalty Notice to the Person who has contravened this By-law in accordance with the Administrative Monetary Penalty System (AMPS) By-law 2022-112, and the Person shall be liable to pay an Administrative Penalty as set out in Schedule A of the AMPS By-law.
- 12.3. Each day on which a Person contravenes any provision of this By-law shall be deemed to constitute a separate offence under this By-law.
- 12.4. Every Person who, by act, default, neglect or omission occasions any loss, damage or injury to any water public utility works, or to any Municipal Drinking Water System plant, machinery, fitting or appurtenance thereof is liable to the Corporation therefore.
- 12.5. Every Person who willfully or maliciously damages or causes or knowingly suffers to be damaged any Water Meter, Radio Transmitter, lamp, lustre, Private Water Service pipe, conduit, wire, rod or water fitting belonging to the Corporation or willfully impairs or knowingly suffers the same to be altered or impaired, so that the



Water Meter indicates less than the actual amount of the Water that passes through it, is guilty of an offence and on conviction is liable to fine, to the use of the Corporation, and for any expenses of repairing or replacing the Water Meter, Radio Transmitter, lamp, lustre, Private Water Service pipe, conduit, wire, rod or fitting and double the value of the surplus Water so consumed, all of which is recoverable under the Provincial Offences Act.

- 12.6. Every Person who willfully removes, destroys, damages, fraudulently alters or in any way injures any Water Meter, Radio Transmitter, Private Water Service pipe, conduit, wire, rod, pedestal, post, plug, lamp or other apparatus or thing belonging to the Corporation is guilty of an offence and on conviction is liable to a fine, to the use of the Corporation and is also liable for all damages occasioned thereby, which are recoverable under the Provincial Offences Act.
- 12.7. If a Person is required by the Corporation to pay an Administrative Penalty under Section 12.2 in respect to a contravention of this By-law, the Person shall not be charged with an offence in respect of the same contravention.

13.0 **Previous By-law Repealed**

13.1. By-law #2016-019 of the Corporation, and all amendments thereto, are hereby repealed.

14.0 Effective Date

This by-law comes into force and effect on the day it is passed.

Read, signed and sealed in open Council this 13th day of August, 2024.

Manon L. Levesque City Clerk Justin Towndale Mayor



Explanatory Note

Purpose

The 2021 Water Conservation and Servicing Master Plan recommended the City of Cornwall implement a Universal Water Metering Program. Updates to the Bylaw are necessary to support the installation of water meters at all water accounts in the City, and to prepare the City of Cornwall and water users for the transition from flat to metered rate billing.

In addition, changes have been included to improve compliance with the Ontario Fire Code, and to reduce risk of contamination to the Municipal Water Supply due to backflow events.

Background / Discussion

The following list summarizes the modifications made to the 2016 By-law for the Regulation of Water Supply within the City of Cornwall (By-law # 2016-019), which is to be repealed:

- General document clean-up, including an updated list of definitions, updated references, and structural changes to be consistent with other City of Cornwall by-laws.
- Updated Short Title.
- Incorporation of Administrative Monetary Penalty System. Penalties for offences will be included in the revised AMPS By-law.
- A water meter and radio transmitter will be a condition of water service.
- Addition of Section 5: Billing for Water and Wastewater Services which outlines the general rules for billing for water services through metered rates. This includes how bills will be calculated if the Corporation is unable to collect a meter reading, how the Corporation will respond to overbilling and underbilling, and reasonable time limits for water users to challenge their bills.
- Added provisions requiring annual Private Fire Hydrant maintenance and testing by property owners.

Additional Notes:

• This revised By-law has been reviewed by the Corporation's legal counsel.



• This by-law is cost neutral, and no additional FTEs are required to ensure compliance.



Appendix A- Authorized Functions List

Item	Function	Professional Engineer with Tester's License	Certified Engineering Technologist with Tester's License	Licensed Master Plumber with Contractor's and Tester License	Journeyman Plumber with Tester's License ¹	Apprentice Plumber with Tester's License ²	Licensed Corporation Staff with Tester's License ³	Fire System Sprinkler Fitter with Tester's License	Lawn Irrigation System Installer with Tester's License	Certified Water Operator or other Fire Prevention Systems Specialist
A	Perform Cross- Connection Survey	x		x	x	x	x			
В	Install, Relocate, or Replace Backflow Prevention Device			x	x	x				
с	Repair of Backflow Prevention Device			x	x	x	x			
D	Test Backflow Prevention Device ⁴	x	х	x	x	x	x	x	x	
E	Item A, B, C and D above in relation to Fire Protection Systems			x	x			x		
F	Item B, C and D above in relation to lawn sprinkler systems			x	x				x	
G	Private Fire Hydrant Maintenance⁵									x

¹Required to be employed by a Licensed Plumbing Contractor.

²Required to be employed by a Licensed Plumbing Contractor and under the direct supervision of a Journeyman or Master Plumber

³Corporation maintenance staff are permitted to perform repairs if they have a tester's license.

⁴Anyone with an OWWA tester license as per CAN/CSA-B64.10, as amended, is permitted.

⁵Annual Registration as a qualified person, Hydrant Inspection Permit must be attained from the Corporation prior to proceeding with work. Relevant experience showing knowledge of proper Fire Hydrant operation can also be used to apply for Fire Hydrant permit.



SECTION 1: APPLICANT INFORMATION

APPLICANT:					
ADDRESS:		POSTAL CODE:			
NAME OF HYDRANT OWNER (IF PRIVATE):		·			
PHONE #:	EMAIL:				
OWNER PHONE #:	OWNER EMAIL:				
ONSITE SUPERVISOR:	ONSITE CONTACTS #:				
CERTIFICATIONS/EXPERIENCE:	CERTIFICATION OR LICEN	CE #:			
LICENCED PLUMBER	PROJECT # (IF CITY CAPIT	AL WORKS):			
LICENCED SPRINKLER/ FIRE PROTECTION					
CERTIFIED WATER OPERATOR					
OTHER:					
RELEVANT EXPERIENCE IN HYDRANT OPERATION*	*Please Fill Out Experience F Apply	Form if License or Certification # Doesn't			
	1.1.1.1.1				

SECTION 2: HYDRANT USAGE INFORMATION

HYDRANT OWNER: City of Cornwall / Private Hydra	nt 🗆 HYDRANT ID(s):						
TYPE OF HYDRANT USAGE: Annual Maintenance / Fire Flow Testing / Water Usage							
HYDRANT(S) ADDRESS:							
# OF HYDRANTS TO BE USED/ INSPECTED:	WORK START DATE:						
ESTIMATED WATER TO BE USED (m3):	WORK FINISH DATE:						

SECTION 3: GENERAL INFORMATION AND TERMS

- 1. This permit is valid for the operation of the fire hydrant(s) at the specified location on the planned date(s) only.
- 2. Except for water utilized for Annual Maintenance or Fire Flow Testing authorized by the Corporation, no person shall take water from a hydrant without the utilization of an appropriate Backflow Prevention Device as deemed suitable by the Corporation. Contractors are to supply their own Backflow Prevention Device, and have the device tested once installed, prior to operating hydrant. Contractors may also be asked to supply an appropriate Temporary Water Meter to measure water usage under the permit. City staff are to be present on site to witness the installation and testing.
- 3. Annual Hydrant Inspection and Maintenance procedure to meet standards of Sections 6.6.4 & 6.6.5 of The *Ontario Fire Code*, as amended. Fire Flow Capacity Testing and Hydrant marking are to be carried out in accordance with NFPA 291.

- 4. Annual Hydrant Inspection and Maintenance for Private Fire Hydrants are to be reported on the Corporation's report template or a Corporation approved report template.
- 5. The permit holder is responsible for the de-chlorination of any water discharged to sensitive areas such as, but not limited to ditches, drains, creeks, rivers, or any storm sewer system.
- 6. Any damage caused during this permit's use, to the Corporation's infrastructure, or any private property through improper or negligent operation of a hydrant are the responsibility of the permit holder.

SECTION 4: ACKNOWLEDGEMENT

Г

NAME OF APPLICANT (PRINT)		SIGNATU	IRE OF APPLICANT		DATE
FOR OFFICE USE ONLY	ADMINSTRATOR'S	SIGNATURE:	DATE APPROVED:	PERMIT #:	

SECTION 5: REFERENCE SHEET – If Certification or Trade License does not apply as per requirements of Appendix A – Authorized Functions List, please list 2 references for similar past hydrant experience.

1. Project Title: (please print)						
Owner/Location:						
Contact Person:	Telephone No.					
Date:	Email:					
Description of Project:						

2. Project Title: (please print)							
Owner/Location:							
Contact Person:	Telephone No.						
Date:	Email:						
Description of Project:	I						



WATER SUPPLY BY-LAW 2024-06

MUNICIPAL WORKS DIVISION CORNWALL FIRE SERVICES

1225 Ontario Street PO Box 877 Cornwall, ON. K6H 5T9 Tel: (613) 930-2787 x 2253 Fax: (613) 933-8567 Email: <u>backflow@cornwall.ca</u>

10 Fourth Street West PO Box 877 Cornwall, ON. K6H 5T9 Tel: (613) 930-2787 x 2311

FIRE HYDRANT INSPECTION REPORT

As per the requirements of Water Supply By-Law 2024-066, all privately owned fire hydrants are required to be maintained, inspected, and tested annually in accordance with 6.6.4 and 6.6.5 of O. Reg 213/07 *Ontario Fire Code and NFPA* 25 as amended. Fire Hydrants are to be colour coded as per requirements of 6.6.6.1 of 213/07 *Ontario Fire Code* and *NFPA* 291. For premises with multiple hydrants, a form with completed MAINTENANCE and INSPECTION sections are required for each hydrant, with each sheet signed by the qualified person. Completed reports are to be submitted to Municipal Works by hand to listed address, mail or via email at: backflow@cornwall.ca

	NAME OF OWNER:					DATE C	F INSPECTION:				INSPECTION TYPE (Ch	neck App	oropriate	Test)
PROPERTY	FACILITY ADDRESS:					CONTA	CT:				ANNUAL MAINTENANCE			
ROPI	ADDRESS OF OWNER:					POSTA	L CODE:							
₽.	CONTACT PHONE#:			CON	NTACT EMAI	L:					FIRE FLOW TEST			
	SERVICING COMPANY:			1				HYDRANT PERMIT			1			
SERVICE	COMPANY ADDRESS:								,		POSTAL CODE:			
SER	TECHNICIAN NAME:			LICENSE/ CERTIFICATION #:				PHONE #:			EMAIL#			
	HYDRANT #:	Н	/DRANT M/		RANT LOCA	TION:							√ =	
	(OR LOCATION IF UNKNOWN) HYDRANT IS ACCESSIBLE AND FREE OF										✓ = SATISFACTORY	UNS	ATISFAC	TORY
							x							
	THERE ARE NO LEAKS FROM HYDRANT			·	ONDER CA	PS, OTHER								
NOL	HYDRANT BARREL / STEM IS IN GOOD C													
INSPECTION	OPERATING NUT IS WORKING AND DOE		'E ROUNDE	D CORNERS?										
INSI	OUTLET/ NOZZLE THREADS ARE NOT D	AMAGED?												
	OUTLET PORT CAPS SECURED, CLEAN, SEALED?													
	HYDRANT DRAINS COMPLETELY WITHIN	N 60 MIN. OF	F CLOSING	VALVE, DRAIN VALVE OPERATING	PROPERLY	?								
	OPEN HYDRANT AND FLOW NOT LESS THEN 1 MIN. AT FULL CAPACITY UNTIL WATER IS CLEAR TIME NOZZLE SIZES (FLOWING NOZZLES) FLOWING NOZZLES (FLOWING NOZZLES) (FLOWING NOZZNA) (FLOWING NOZZNA) (FLOWING NOZZNA) (FLOWING NOZZNA) (FLOWING						ZZLES ONLY)							
*		RESIDUAL PRESSURE	(PSI):	PITOT READING (PSI):	G		FLOW @ 20 PSI (GPM):		FLOW (GPM):		NOZZLE COEFFIC	ENT:		
	PART IN WORKING CONDITION	YES	NO	ACTION TAK	EN YES	NO		ACTION TAKEN	YES	NO	ACTION T	AKEN	YES	NO
	MAIN VALVE			Difficulty Operat	ting 🗌			Cannot Operate			Re	placed		
MAINTENANCE	CAPS			Miss	ing 🗌			Replaced			Gr	eased		
TEN	HYDRANT PAINT (As per NFPA 291?)			Repain	ted 🗌									
MAIN	OPERATING NUT			Greas	sed 🗌			Replaced						
	NOZZLES			Caul	ked 🗌			Replaced						
	MAIN VALVE PACKING.			Leak	ing 🗌			Tightened			Re	placed		
	eby declare that the information provided is tru rnwall By-Law 2024-066, 213/07 the Ontario I				ance with Cit	/ SIGNAT	URE OF OWNER/PROPE	ERTY MANAGER			REMARKS/COMMENTS			
S	GNATURE OF QUALIFIED PERSON		DATE			- SIGNAT	URE	DATE						
FOR	OFFICE USE ONLY		ADMINIS	STRATORS SIGNATURE:		DATE F	RECEIVED:	DATE APPRO	/ED:					

The personal information collected herein is subject to the *Municipal Freedom of Information and Protection of Privacy Act*. The information is collected under the authority of City of Cornwall By-Law 2024-066 and may be used for the enforcement and administration of the By-law and will be stored by the City for such period of time which facilitates the enforcement and administration of the By-Law. Completing of this form constitutes consent by the owner and qualified person to these terms and uses, unless otherwise modified or revised in writing and delivered to the Municipal Works Division for the City of Cornwall.

The Corporation of the City of Cornwall Regular Meeting of Council By-law 2024-067

Department:	Planning, Development and Recreation
Division:	Building and By-law
By-law Number:	2024-067
Report Number	2024-158-Planning, Development and Recreation
Meeting Date:	August 13, 2024
Subject:	AMPS Amendments- Business Licence, Lot Grading, and Water Supply By-Laws

Whereas pursuant to Section 102.1(1) of the *Municipal Act, 2001, S.O. 2001, c.25,* a municipality may require a person to pay an administrative penalty if the municipality is satisfied that the person has failed to comply with any by-laws respecting the parking, standing or stopping of vehicles.

Whereas the City has adopted an Administrative Monetary Penalty System By-Law 2022-112 for the purpose of requiring a person to pay an administrative penalty if the municipality is satisfied that the person has failed to comply with a Designated By-Law.

Now therefore be it resolved that the Council of The Corporation of the City of Cornwall enacts as follows:

- 1. That Schedule "A" of By-Law 2022-122 is amended as follows:
 - a. That the list of Designated By-Laws in Column 1 is amended to include the Business Licence By-Law 2024-033 as Table 13, Water Supply By-Law as Table 14, and Lot Grading By-Law as Table 15.
 - b. That Tables 13, 14, and 15 of this By-Law be added in their entirety to Schedule "A"; and

2. That these amendments now hereby form part of the Administrative Monetary Penalty System By-Law 2022-122.

Read, signed and sealed in open Council this 13th day of August, 2024.

Manon L. Levesque City Clerk Justin Towndale Mayor

Explanatory Note

Purpose

To amend the Administrative Monetary Penalty System (AMPS) By-Law to include violations for the recently approved Business Licensing, Lot Grading, and Water Supply By-Laws.

Background / Discussion

Administrative Monetary Penalty System was first presented to Council in June 2021 and subsequently adopted in October 2022. AMPS is a program to manage minor By-Law violations within the City as an alternative to the traditional Court proceedings with Provincial Offences. The City adopted eleven By-Laws in it's AMPs Program upon adoption. The goal was to introduce new By-Laws to AMPS as the program evolved and new By-Laws been reviewed, updated or created.

The City has recently adopted the Business Licensing, Lot Grading, and Water Supply By-Laws in 2024. Following approval of these By-Laws, Staff reviewed and created Administrative Monetary Penalties for all violations relating to their respective By-Laws.

The violations and penalties set forth, as presented, reflect a balance between equal and fair penalties all while being non-punitive. The purpose of AMPS is to provide the different Services with the enforcement tools for minor violations. Violators will be served with penalty notices (fines) as deemed appropriate, when failing to comply with various by-law. This will help the City trend to a more cost-neutral approach.

Staff is recommending that the amendments for the new violations introduced to AMPS be adopted as presented.

Schedule "A"

Designated By-Law under the previsions of the Administrative Monetary Penalty System

The following By-Laws shall be considered Designated By-Laws as defined in the Administrative Monetary Penalty System By-Law (AMPS):

Designated By-Law	Table	By-Law Number
Business Licence	13	2024-033
Water Supply	14	2004-066
Lot Grading	15	2024-039
Column 1	Column 2	Column 3

- 1. Column 1 sets out the Designated By-Laws.
- 2. Column 2 in the following tables sets out the Short Form Wording to be used in a Penalty Notice to describe the violation of the corresponding Designated By-Law in Column 1.
- 3. Column 3 sets out the By-Law Number, as amended of the Designated By-Laws.



TABLE	TABLE 13: BY-LAW NO. 2024-033, BUSINESS LICENSING BY-LAW, AS AMENDED									
ITEM	COLUMN 1 SHORT FORM WORDING	COLUMN 2 SECTION	COLUMN 3 FIRST OFFENCE	COLUMNE 4 SECOND OFFENCE	COLUMN 5 THIRD OFFENCE					
1	Carrying on a business without a valid business licence.	3.1	\$ 375.00	\$ 750.00	\$ 1,250.00					
2	Carrying on a business in any name other than that in which the business is Licenced.	3.2	\$ 150.00	\$ 300.00	\$ 500.00					
3	Failing to permanently display Licence in a prominent place.	4.8	\$ 75.00	\$ 125.00	\$ 200.00					
4	Failing to display Licence in a prominent place on vehicle or equipment.	4.9	\$ 75.00	\$ 125.00	\$ 200.00					
5	Failing to carry Licence on person while carrying on the business.	4.10	\$ 75.00	\$ 125.00	\$ 200.00					
6	Failing to maintain Business in a clean and sanitary condition.	4.11	\$ 150.00	\$ 300.00	\$ 500.00					
7	Failing to provide adequate storage and disposal of garbage and waste.	4.11	\$ 150.00	\$ 300.00	\$ 500.00					
8	Failing to provide sufficient levels of illumination to permit safe use of the premise.	4.11	\$ 150.00	\$ 300.00	\$ 500.00					



TABLE	TABLE 13: BY-LAW NO. 2024-033, BUSINESS LICENSING BY-LAW, AS AMENDED									
ITEM	COLUMN 1 SHORT FORM WORDING	COLUMN 2 SECTION	COLUMN 3 FIRST OFFENCE	COLUMNE 4 SECOND OFFENCE	COLUMN 5 THIRD OFFENCE					
9	Discriminated against a member of the public.	4.12	\$ 375.00	\$ 750.00	\$ 1,250.00					
10	Refused service to a person since they are hard of seeing accompanied by a guide dog.	4.13	\$ 375.00	\$ 750.00	\$ 1,250.00					
11	Transferred licence from one person to another.	4.15	\$ 150.00	\$ 300.00	\$ 500.00					
12	Transferred licence from one location to another.	4.15	\$ 150.00	\$ 300.00	\$ 500.00					
13	Failing to pay for a Multiple Location fee.	4.16	\$ 150.00	\$ 300.00	\$ 500.00					
14	Failing to notify the Licensing Agent of a name change.	4.19.(a)	\$ 150.00	\$ 300.00	\$ 500.00					
15	Failing to complete application on form provided.	5.1	\$ 75.00	\$ 125.00	\$ 200.00					
16	Failing to have all persons listed on the application.	5.5	\$ 150.00	\$ 300.00	\$ 500.00					



TABLE	TABLE 13: BY-LAW NO. 2024-033, BUSINESS LICENSING BY-LAW, AS AMENDED									
ITEM	COLUMN 1 SHORT FORM WORDING	COLUMN 2 SECTION	COLUMN 3 FIRST OFFENCE	COLUMNE 4 SECOND OFFENCE	COLUMN 5 THIRD OFFENCE					
17	Acting as a representative of a Business Licence while being under the age of 18.	5.9	\$ 150.00	\$ 300.00	\$ 500.00					
18	Failing to carry valid general liability insurance of not less than 2 million dollars.	5.12	\$ 150.00	\$ 300.00	\$ 500.00					
19	Failing to provide proof of valid general liability insurance upon demand from a Licensing Agent or Officer.	5.13	\$ 75.00	\$ 125.00	\$ 200.00					
20	Failing to notify the licensing agent within 15 days of any changes to the required insurance.	5.15	\$ 150.00	\$ 300.00	\$ 500.00					
21	Failing to report any changes to the information or documents required to be filed with the City within 15 days of the changes.	5.21	\$ 150.00	\$ 300.00	\$ 500.00					
22	Failing to obtain written approval by the City prior to any changes to the Floor or Site Plan.	5.21.(a)	\$ 150.00	\$ 300.00	\$ 500.00					



TABLE 13: BY-LAW NO. 2024-033, BUSINESS LICENSING BY-LAW, AS AMENDED							
ITEM	COLUMN 1 SHORT FORM WORDING	COLUMN 2 SECTION	COLUMN 3 FIRST OFFENCE	COLUMNE 4 SECOND OFFENCE	COLUMN 5 THIRD OFFENCE		
23	Failing to report a change regarding the corporation names and addresses of officers and directors within 7 days.	5.23.(a)	\$ 150.00	\$ 300.00	\$ 500.00		
24	Failing to report a change regarding the location of the corporate head office within 7 days.	5.23.(b)	\$ 150.00	\$ 300.00	\$ 500.00		
25	Failing to report a change regarding the corporations' change of ownership of shares within 7 days.	5.23.(c)	\$ 150.00	\$ 300.00	\$ 500.00		
26	Altering a business licence in any way.	5.24	\$ 150.00	\$ 300.00	\$ 500.00		
27	Defacing a business licence in any way	5.24	\$ 150.00	\$ 300.00	\$ 500.00		
28	Allowing a business licence to be altered in any way.	5.25	\$ 150.00	\$ 300.00	\$ 500.00		
29	Allowing a business licence to be defaced in any way.	5.25	\$ 150.00	\$ 300.00	\$ 500.00		
30	Failing to post Hours of Operation at every entrance to the Premises, visible from the exterior.	6.7	\$ 75.00	\$ 125.00	\$ 200.00		

City of Cornwall – Administrative Monetary Penalty System By-Law This table forms part of Schedule "A" of By-Law 2022-112 848



TABLE 13: BY-LAW NO. 2024-033, BUSINESS LICENSING BY-LAW, AS AMENDED								
ITEM	COLUMN 1 SHORT FORM WORDING	COLUMN 2 SECTION	COLUMN 3 FIRST OFFENCE	COLUMNE 4 SECOND OFFENCE	COLUMN 5 THIRD OFFENCE			
31	Failing to post Hours of Operation at every entrance to the Premises from which the Business Operates.	6.8	\$ 75.00	\$ 125.00	\$ 200.00			
32	Failing to ensure every principal entrance is unlocked and accessible during the Hours of Operation.	6.9	\$ 75.00	\$ 125.00	\$ 200.00			
33	Failing to renew Business Licence prior to its date of expiry.	7.2	\$ 150.00	\$ 300.00	\$ 500.00			
34	Failing to allow, at any reasonable time, an employee or agent of the City authorized by the Licensing Agent to inspect their place of Business and any other Premises, equipment, vehicles or property used for purposes related to the trade, Business or occupation, other than a room or place actually being used as a dwelling, to determine compliance with the requirements of this By-Law.	9.3	\$ 375.00	\$750.00	\$ 1,250.00			
35	Obstructing, hindering, or attempting to obstruct or hinder an Officer, authorized agent.	9.7	\$ 500.00	\$ 1,000.00	\$ 1,500.00			

City of Cornwall – Administrative Monetary Penalty System By-Law This table forms part of Schedule "A" of By-Law 2022-112 849



TABLE ²	TABLE 13: BY-LAW NO. 2024-033, BUSINESS LICENSING BY-LAW, AS AMENDED								
ITEM	COLUMN 1 SHORT FORM WORDING	COLUMN 2 SECTION	COLUMN 3 FIRST OFFENCE	COLUMNE 4 SECOND OFFENCE	COLUMN 5 THIRD OFFENCE				
36	Constructing or equipping a place of Business to hinder the enforcement of the by-law.	9.8	\$ 500.00	\$ 1,000.00	\$ 1,500.00				
37	Failing to provide full licence fee with application.	10.1	\$ 150.00	\$ 300.00	\$ 500.00				
38	Failing to comply with an order.	11.7	\$ 375.00	\$750.00	\$ 1,250.00				



TABLE '	TABLE 14: BY-LAW NO. 2024-066, WATER SUPPLY BY-LAW, AS AMENDED								
ITEM	COLUMN 1 SHORT FORM WORDING	COLUMN 2 SECTION	COLUMN 3 FIRST OFFENCE	COLUMNE 4 SECOND OFFENCE	COLUMN 5 THIRD OFFENCE				
1	Installing, laying, repairing, renewing or connecting any Private Water Service Pipe without a permit from the Corporation	3.7	\$1,000.00	\$2,000.00	\$3,000.00				
2	Causing any Private Water Service Pipe to be installed, laid, repaired, renewed or connected without a permit from the Corporation	3.7	\$1,000.00	\$2,000.00	\$3,000.00				
3	Allowing for supplied Water to not pass through a Water Meter	4.2	\$375.00	\$750.00	\$1,125.00				
4	Causing for supplied Water to not pass through a Water Meter	4.2	\$375.00	\$750.00	\$1,125.00				
5	Tampering or removing a Meter Tag	4.13	\$250.00	\$500.00	\$750.00				
6	Causing or allowing a Meter Tag to be removed or tampered	4.13	\$250.00	\$500.00	\$750.00				



TABLE 14: BY-LAW NO. 2024-066, WATER SUPPLY BY-LAW, AS AMENDED								
ITEM	COLUMN 1 SHORT FORM WORDING	COLUMN 2 SECTION	COLUMN 3 FIRST OFFENCE	COLUMNE 4 SECOND OFFENCE	COLUMN 5 THIRD OFFENCE			
7	Failing to make a Water Meter accessible for repairs, maintenance, change outs, and readings upon request	4.18	\$150.00	\$300.00	\$450.00			
8	Obstructing a Radio Transmitter	4.19	\$150.00	\$300.00	\$450.00			
9	Causing the Obstruction of a Radio Transmitter	4.19	\$150.00	\$300.00	\$450.00			
10	Altering, damaging, removing or interfering with a Water Meter or Radio Transmitter	4.23	\$500.00	\$1,000.00	\$1,500.00			
11	Causing the alteration, damage, removal or interference of any Water Meter or Radio Transmitter	4.23	\$500.00	\$1,000.00	\$1,500.00			
12	Failing to notify the Manager of any breakage, stoppage, irregularity or leaking of a Water Meter and Radio Transmitter	4.33	\$150.00	\$300.00	\$450.00			



TABLE 14: BY-LAW NO. 2024-066, WATER SUPPLY BY-LAW, AS AMENDED								
ITEM	COLUMN 1 SHORT FORM WORDING	COLUMN 2 SECTION	COLUMN 3 FIRST OFFENCE	COLUMNE 4 SECOND OFFENCE	COLUMN 5 THIRD OFFENCE			
13	Failing to notify the Corporation of any breakage, stoppage, irregularity or leaking of a Water Meter and Radio Transmitter	4.37	\$150.00	\$300.00	\$450.00			
14	Connecting to any Fire Hydrant in a way that would allow anything to enter the Municipal Drinking Water System.	6.1.1	\$1,000.00	\$2,000.00	\$3,000.00			
15	Causing to be connected to a Fire Hydrant in a way that would allow anything to enter the Municipal Drinking Water System.	6.1.1	\$1,000.00	\$2,000.00	\$3,000.00			
16	Unauthorized operation of a Fire Hydrant	6.1.2	\$1,000.00	\$2,000.00	\$3,000.00			
17	Causing the unauthorized operation of a Fire Hydrant	6.1.2	\$1,000.00	\$2,000.00	\$3,000.00			
18	Tampering or interfering of any Fire Hydrant, valve or appurtenance	6.1.3	\$500.00	\$1,000.00	\$1,500.00			
19	Causing the tampering or interference of any Fire Hydrant	6.1.3	\$500.00	\$1,000.00	\$1,500.00			

City of Cornwall – Administrative Monetary Penalty System By-Law This table forms part of Schedule "A" of By-Law 2022-112 853



TABLE 14: BY-LAW NO. 2024-066, WATER SUPPLY BY-LAW, AS AMENDED								
ITEM	COLUMN 1 SHORT FORM WORDING	COLUMN 2 SECTION	COLUMN 3 FIRST OFFENCE	COLUMNE 4 SECOND OFFENCE	COLUMN 5 THIRD OFFENCE			
20	Taking water from a Fire Hydrant without installing an approved Backflow Prevention Device or Water Meter	6.1.4	\$375.00	\$750.00	\$1,125.00			
21	Failing to notify the Corporation prior to maintenance on a Fire Hydrant	6.1.5.(a)	\$500.00	\$1,000.00	\$1,500.00			
22	Failing to obtain a Fire Hydrant Use permit	6.1.5.(b)	\$375.00	\$750.00	\$1,125.00			
23	Obstructing access to a Fire Hydrant, valve, or other Fire Protection System	6.1.6	\$375.00	\$750.00	\$1,125.00			
24	Causing the obstruction of access to a Fire Hydrant, valve, or other Fire Protection System	6.1.6	\$375.00	\$750.00	\$1,125.00			
25	Failing to maintain or test a Private Fire Hydrant	6.3.2	\$250.00	\$500.00	\$750.00			



TABLE 14: BY-LAW NO. 2024-066, WATER SUPPLY BY-LAW, AS AMENDED								
ITEM	COLUMN 1 SHORT FORM WORDING	COLUMN 2 SECTION	COLUMN 3 FIRST OFFENCE	COLUMNE 4 SECOND OFFENCE	COLUMN 5 THIRD OFFENCE			
26	Failing to submit an annual inspection report	6.3.2.(a)	\$250.00	\$500.00	\$750.00			
27	Failing to retain an annual inspection report for up to two years	6.3.2.(b)	\$250.00	\$500.00	\$750.00			
28	Installing, laying, repairing, renewing or connecting to any Watermain or Water Service Connection under or upon the streets or Municipal Right-of-Way without a permit from the Corporation	7.2	\$1,000.00	\$2,000.00	\$3,000.00			
29	Causing the laying, repairing, renewing or connecting to any Watermain or Water Service Connection under or upon the streets or Municipal Right-of-Way without a permit from the Corporation	7.2	\$1,000.00	\$2,000.00	\$3,000.00			
30	Unauthorized tampering of, or connection to, any Watermain or its appurtenances	7.3	\$1,000.00	\$2,000.00	\$3,000.00			



TABLE 14: BY-LAW NO. 2024-066, WATER SUPPLY BY-LAW, AS AMENDED								
ITEM	COLUMN 1 SHORT FORM WORDING	COLUMN 2 SECTION	COLUMN 3 FIRST OFFENCE	COLUMNE 4 SECOND OFFENCE	COLUMN 5 THIRD OFFENCE			
31	Causing the unauthorized tampering of, or connection to, any Watermain or its appurtenances	7.3	\$1,000.00	\$2,000.00	\$3,000.00			
32	Connecting an undersized or oversized pipe between Water Meter and Watermain without consent of the Manager	7.9	\$1,000.00	\$2,000.00	\$3,000.00			
33	Causing the connection of an undersized or oversized pipe between a Water Meter and water main without consent of the Manager	7.9	\$1,000.00	\$2,000.00	\$3,000.00			
34	Unauthorized connection to a Fire Water Service for purposes other than a Fire Protection System	7.14	\$1,000.00	\$1,500.00	\$2,000.00			
35	Causing the unauthorized connection to a Fire Water Service for purposes other than a Fire Protection System	7.14	\$1,000.00	\$2,000.00	\$3,000.00			
36	Unauthorized operation of a Curb Stop	7.17	\$500.00	\$1,000.00	\$1,500.00			



TABLE 14: BY-LAW NO. 2024-066, WATER SUPPLY BY-LAW, AS AMENDED							
ITEM	COLUMN 1 SHORT FORM WORDING	COLUMN 2 SECTION	COLUMN 3 FIRST OFFENCE	COLUMNE 4 SECOND OFFENCE	COLUMN 5 THIRD OFFENCE		
37	Causing the unauthorized operation of a Curb Stop	7.17	\$500.00	\$1,000.00	\$1,500.00		
38	Obstructing access to a Curb Stop	7.18	\$150.00	\$300.00	\$450.00		
39	Causing the obstruction of a Curb Stop	7.18	\$150.00	\$300.00	\$450.00		
40	Unauthorized installation of air conditioning, refrigeration, heating or other equipment to the Water Supply without the approval of the Manager	8.1	\$500.00	\$1,000.00	\$1,500.00		
41	Causing the unauthorized installation of air conditioning, refrigeration, heating or other equipment that connects to the Water Supply without the approval of the Manager	8.1	\$500.00	\$1,000.00	\$1,500.00		
42	Allowing the once through use of Water for the purpose of cooling which is not for makeup Water for a recirculation system or boiler blow down	8.2	\$500.00	\$1,000.00	\$1,500.00		



TABLE	TABLE 14: BY-LAW NO. 2024-066, WATER SUPPLY BY-LAW, AS AMENDED								
ITEM	COLUMN 1 SHORT FORM WORDING	COLUMN 2 SECTION	COLUMN 3 FIRST OFFENCE	COLUMNE 4 SECOND OFFENCE	COLUMN 5 THIRD OFFENCE				
43	Causing for the allowance of once through use of Water for the purpose of cooling which is no for makeup Water for a recirculation system or boiler blow down	8.2	\$500.00	\$1,000.00	\$1,500.00				
44	Connecting to or remaining connected to, any source that allows any non-potable substance to enter the Municipal Drinking Water System	9.2.1	\$1,000.00	\$2,000.00	\$3,000.00				
45	Causing the connection to any source that allows any non-potable substance to enter the Municipal Drinking Water System	9.2.1	\$1,000.00	\$2,000.00	\$3,000.00				
46	Failing to install Backflow Prevention Device when required	9.2.2	\$500.00	\$1,000.00	\$1,500.00				
47	Connecting any Auxiliary Water Supply to the Municipal Drinking Water System without approval from the Corporation	9.2.3	\$1,000.00	\$2,000.00	\$3,000.00				
48	Causing the connection of any Auxiliary Water Supply to the Municipal Drinking	9.2.3	\$1,000.00	\$2,000.00	\$3,000.00				

City of Cornwall – Administrative Monetary Penalty System By-Law This table forms part of Schedule "A" of By-Law 2022-112 858



TABLE	TABLE 14: BY-LAW NO. 2024-066, WATER SUPPLY BY-LAW, AS AMENDED							
ITEM	COLUMN 1 SHORT FORM WORDING	COLUMN 2 SECTION	COLUMN 3 FIRST OFFENCE	COLUMNE 4 SECOND OFFENCE	COLUMN 5 THIRD OFFENCE			
	Water System without approval from the Corporation							
49	Failing to ensure that the Fire Protection System within a Building or Structure is protected against Backflow	9.2.4	\$1,000.00	\$2,000.00	\$3,000.00			
50	Authorized functions carried out by non- registered person without Corporation approval	9.3	\$100.00	\$200.00	\$300.00			
51	Failing to carry out a Cross Connection Control Survey	9.5.1	\$250.00	\$500.00	\$750.00			
52	Failing to maintain a Backflow Prevention Device in proper working order	9.7.2	\$500.00	\$1000.00	\$1500.00			
53	Failing to install a By-pass with a suitable Backflow Prevention Device	9.7.3	\$500.00	\$1000.00	\$1500.00			

City of Cornwall – Administrative Monetary Penalty System By-Law This table forms part of Schedule "A" of By-Law 2022-112 859



TABLE 14: BY-LAW NO. 2024-066, WATER SUPPLY BY-LAW, AS AMENDED						
ITEM	COLUMN 1 SHORT FORM WORDING	COLUMN 2 SECTION	COLUMN 3 FIRST OFFENCE	COLUMNE 4 SECOND OFFENCE	COLUMN 5 THIRD OFFENCE	
54	Failing to have Backflow Prevention Device(s) tested initially, annually or at the request of the Corporation	9.8.1.(a)	\$250.00	\$500.00	\$750.00	
55	Failing to submit a Backflow Prevention Device(s) Test Report within 14 days of test	9.8.1.(b)	\$250.00	\$500.00	\$750.00	
56	Failing to repair or replace a device that has failed a test, malfunctions or otherwise is not in proper working order	9.8.1.(c)	\$250.00	\$500.00	\$750.00	
57	Failing to cease any activity that may result in Backflow	9.8.1.(d)	\$250.00	\$500.00	\$750.00	
58	58 Failing to have malfunctioning Backflow Prevention Device repaired or replaced within three days of failed test or malfunction		\$500.00	\$1000.00	\$1500.00	
59	Failing to carry out a test of a Backflow Prevention Device in accordance with applicable legislation	9.8.2.(a)	\$100.00	\$200.00	\$300.00	



TABLE 14: BY-LAW NO. 2024-066, WATER SUPPLY BY-LAW, AS AMENDED						
ITEM	COLUMN 1 SHORT FORM WORDING	COLUMN 2 SECTION	COLUMN 3 FIRST OFFENCE	COLUMNE 4 SECOND OFFENCE	COLUMN 5 THIRD OFFENCE	
60	Failing to submit Backflow Prevention Device Test Report within 14 days of test	9.8.2.(b)	\$100.00	\$200.00	\$300.00	
61	Failing to notify the Corporation of a Backflow Device that is malfunctioning or not in working order	9.8.2.(c)	\$100.00	\$200.00	\$300.00	
62	Submitting inaccurate or false documentation	9.9.2	\$250.00	\$500.00	\$1,000.00	
63	Hindering or obstructing any officer, agent or contractors of the Corporation	11.1.1	\$500.00	\$1,000.00	\$1,500.00	
64	Causing or procuring to cause any hinderance or obstruction of any officer, agent or contractor of the Corporation	11.1.1	\$500.00	\$1,000.00	\$1,500.00	
65	Discharging of Water so that it runs waste or useless	11.1.2	\$500.00	\$750.00	\$1,000.00	
66	Causing the discharge of Water so that it runs waste or useless	11.1.2	\$500.00	\$750.00	\$1,000.00	



TABLE 14: BY-LAW NO. 2024-066, WATER SUPPLY BY-LAW, AS AMENDED						
ITEM	COLUMN 1 SHORT FORM WORDING	COLUMN 2 SECTION	COLUMN 3 FIRST OFFENCE	COLUMNE 4 SECOND OFFENCE	COLUMN 5 THIRD OFFENCE	
67	Waste, lend, sell, dispose of, give away, or permit to be carried away any Water for the use and benefit of another, or increase the supply of Water agreed for	11.1.3	\$500.00	\$1,000.00	\$1,500.00	
68	Causing the wasting, lending, sale, disposal of, giving away, or permitting to be carried away any Water for the use and benefit of another, or increase the supply of Water agreed for	11.1.3	\$500.00	\$1,000.00	\$1,500.00	
69	Throwing or depositing any injurious or offensive material into any Water, Municipal Water System, or source water ice surfaces that would cause it to be damaged	11.1.5	\$1,000.00	\$2,000.00	\$3,000.00	
70	Causing to be thrown or deposited, any injurious or offensive material into any Water, Municipal Water System, or source water ice surface that would cause it to be damaged	11.1.5	\$1,000.00	\$2,000.00	\$3,000.00	



TABLE 14: BY-LAW NO. 2024-066, WATER SUPPLY BY-LAW, AS AMENDED						
ITEM	COLUMN 1 SHORT FORM WORDING	COLUMN 2 SECTION	COLUMN 3 FIRST OFFENCE	COLUMNE 4 SECOND OFFENCE	COLUMN 5 THIRD OFFENCE	
71	Altering any Water Meter or Radio Transmitter placed upon a service pipe or connected therewith, within or without any Building or other place	11.1.6	\$500.00	\$1,000.00	\$1,500.00	
72	Causing to be altered, any Water Meter or Radio Transmitter placed upon a service pipe or connected therewith, within or without any Building or other place	11.1.6	\$500.00	\$1,000.00	\$1,500.00	



TABLE #15LOT GRADING BY-LAW, AS AMENDED

TABLE 15: BY-LAW NO. 2024-039, LOT GRADING BY-LAW, AS AMENDED							
ITEM	COLUMN 1 SHORT FORM WORDING	COLUMN 2 SECTION	COLUMN 3 FIRST OFFENCE	COLUMNE 4 SECOND OFFENCE	COLUMN 5 THIRD OFFENCE		
1	Commencing construction activities, altering the grading or drainage without a permit	4.1	\$175.00	\$300.00	\$500.00		
2	Undertaking Site Alterations within a Floodplain, Wetland or area regulated by the Conservation Authority without approval	4.2	\$175.00	\$300.00	\$500.00		
3	Altering the finished grade by more than 0.3 m vertically without a permit	4.3	\$175.00	\$300.00	\$500.00		
4	Altering the finished grade within 0.6 m of a property line without a permit	4.4	\$175.00	\$300.00	\$500.00		
5	Undertaking site alterations or erecting a structure within common yard swale	4.5	\$175.00	\$300.00	\$500.00		
6	Directing surface drainage towards any buildings or structure when prohibited	4.6	\$175.00	\$300.00	\$500.00		

City of Cornwall – Administrative Monetary Penalty System By-Law This table forms part of Schedule "A" of By-Law 2022-112 864



TABLE #15LOT GRADING BY-LAW, AS AMENDED

TABLE 15: BY-LAW NO. 2024-039, LOT GRADING BY-LAW, AS AMENDED					
ITEM	COLUMN 1 SHORT FORM WORDING	COLUMN 2 SECTION	COLUMN 3 FIRST OFFENCE	COLUMNE 4 SECOND OFFENCE	COLUMN 5 THIRD OFFENCE
7	Directing surface drainage towards any adjacent land when prohibited	4.7	\$175.00	\$300.00	\$500.00
8	Failing to direct surface drainage to an approved outlet	4.8	\$175.00	\$300.00	\$500.00
9	Allowing a property to remain out of conformity with Lot Grading Permit	4.9	\$175.00	\$300.00	\$500.00
10	Failing to comply with any provision of the Lot Grading By-Law	4.10	\$175.00	\$300.00	\$500.00
11	Failing to comply with any provision of an approved Lot Grading plan	4.10	\$175.00	\$300.00	\$500.00
12	Obstructing, hindering, or attempting to obstruct or hinder an officer, authorized agent	13.5	\$500.00	\$1,000.00	\$1,500.00

City of Cornwall – Administrative Monetary Penalty System By-Law This table forms part of Schedule "A" of By-Law 2022-112 865



The Corporation of the City of Cornwall Regular Meeting of Council By-law 2024-068

Department:	Planning, Development and Recreation
Division:	Planning
By-law Number:	2024-068
Report Number	2024-147-Planning, Development and Recreation
Meeting Date:	August 13, 2024
Subject:	Bylaw 2024-068 CIP for 12 McConnell and 129 Carleton

Whereas the Council of The Corporation of the City of Cornwall has provided in its 2023 Capital Budget to provide for loans/grants for the improvement of properties known as the Renaissance Housing Rehabilitation Program; and

Whereas, pursuant to the said Program, the applicant Karri McDonald-Hambrook at 12 McConnell Avenue and Rafi Haque and Fahad Masud at 129 ½ -129 Carleton have applied for a loan/grant to improve the property through interior and exterior renovations under the Rules provided by the Renaissance Program.

Now therefore be it resolved that the Council of The Corporation of the City of Cornwall enacts as follows:

 a)That the Council hereby authorizes the following loan – RHRP#2023-07 applicant Karri McDonald-Hambrook being PT LT 12 Plan 24 As In S324532; Cornwall PIN#60156-0095 (LT) pursuant to a loan Agreement for the amount of \$10,000 (Municipal Address of 12 McConnell Avenue);



b) That the Council hereby authorizes the following loan – RHRP#2024-04 applicant Rafi Haque and Fahad Masud being PT LT 242 Plan 79 As In S281483; Cornwall PIN#60155-0247 (LT) pursuant to a loan Agreement for the amount of \$10,000 (Municipal Address of 129 ½ -129 Carleton);

- 2. That the Mayor and Clerk be and are hereby authorized to execute all documents to complete this matter; and
- 3. That this By-law take effect on the day of passing by City Council.

Read, signed and sealed in open Council this 13th day of August, 2024.

Manon L. Levesque City Clerk Justin Towndale Mayor



Explanatory Note

Purpose

The Purpose and Effect of this By-law is to allow the City Solicitor to register liens against properties approved under the Renaissance Housing Rehabilitation Program for the amount of \$10,000 (RHRP#2023-07 12 McConnell and RHRP#2024-04 129 ½ - 129 Carleton).

Background / Discussion

The City of Cornwall, under the Planning and Municipal Acts, respectively, administers the Renaissance Housing Rehabilitation Program funding incentive programs which, in part, offer Forgivable Loans, primarily on a matching dollar basis to residential property owners within the designated Renaissance Community Improvement Area. The Loans are secured by a lien registered against the property for a period of 5 years, for example.

This By-law is necessary to allow the City to enter into said Funding Agreements and to subsequently register, on title, as applicable, said Agreements as Mortgages for each stated approved application and to further provide and administer municipal funds to the identified property owners under the RHRP initiative.



The Corporation of the City of Cornwall Regular Meeting of Council By-law 2024-069

Department:	Planning, Development and Recreation
Division:	Economic Development
By-law Number:	2024-069
Report Number	2024-162-Planning, Development and Recreation
Meeting Date:	August 13, 2024
Subject:	Bylaw 2024-069 regarding the Sale of Land in the Cornwall Business Park

Whereas The Corporation of the City of Cornwall wishes to see progressive development of employment lands in the Cornwall Business Park; and

Whereas Broccolini Investment Inc. wishes to purchase 50 acres of land in the Cornwall Business Park; and

Now therefore be it resolved that the Council of The Corporation of the City of Cornwall enacts as follows:

- 1. That The Corporation of the City of Cornwall be and is hereby authorized to enter into an Agreement of Purchase and Sale with Broccolini Investment Inc. for the sale of 50 acres in the Cornwall Business Park;
- 2. That the Mayor and Clerk be and is hereby authorized to execute all documents to complete this matter.

Read, signed and sealed in open Council this 13th day of August, 2024.

Manon L. Levesque City Clerk Justin Towndale Mayor



Explanatory Note

Purpose

To obtain Council's approval to the sale of 50 acres in the Cornwall Business Park by the City to Broccolini Investment Inc., pursuant to an Agreement of Purchase and Sale.

Background / Discussion

Cornwall Economic Development has received an offer from Broccolini Investment Inc. to purchase a 50 acre site in the Cornwall Business Park. The site is part of the 240 acre Northwest Expansion for which the City will be extending its road, water and sewer network.

Staff are supportive of the proposal as the developer has a strong history of developing properties.



The Corporation of the City of Cornwall Regular Meeting of Council By-law 2024-070

Department:	Infrastructure and Municipal Works
Division:	Transit
By-law Number:	2024-070
Report Number:	2024-52-Infrastructure and Municipal Works
Meeting Date:	August 13, 2024
Subject:	Investing in Canada Infrastructure Program Agreement

Whereas it is deemed expedient to authorize The Corporation of the City of Cornwall to enter into an Agreement with His Majesty the King in right of the Province of Ontario, represented by the Minister of Transportation for the Province of Ontario for funding under the Investing in Canada Infrastructure Program (ICIP): Public Transit Stream.

Now therefore, the Council of The Corporation of the City of Cornwall hereby enacts as follows:

- That the Mayor and Clerk are hereby authorized to execute on behalf of the City of Cornwall the Transfer Payment Agreement for the Investing in Canada Infrastructure Program (ICIP): Public Transit Stream ("Agreement") between His Majesty the King in right of the Province of Ontario, represented by the Minister of Transportation for the Province of Ontario, and the City of Cornwall in a form satisfactory to Legal Services.
- 2. That the Mayor and Clerk have the delegation of authority to execute any and all required documentation, on behalf of the City of Cornwall, as required under the Investing in Canada Infrastructure Program.



- 3. That the City of Cornwall commits to spending Investing in Canada Infrastructure Program funding in accordance with all of the terms and conditions specified in the Agreement.
- 4. That the City of Cornwall commits to spending Investing in Canada Infrastructure Program funding only on implementing the approved projects identified in the Agreement.

Read, signed, and sealed in open Council this 13th day of August, 2024.

Manon L. Levesque City Clerk Justin Towndale Mayor



The Corporation of the City of Cornwall Regular Meeting of Council By-law 2024-071

Department:	Infrastructure and Municipal Works
Division:	Infrastructure Planning
By-law Number:	2024-071
Report Number	2024-53-Infrastructure and Municipal Works
Meeting Date:	August 13, 2024
Subject:	By-law 2024-071 Assumption Services East Ridge Subdivision Phase 8

Whereas the Corporation of the City of Cornwall has now received all documentation and deliverables as specified in the Subdivision Agreement for East Ridge Subdivision Phase 8, registered under Instrument Number ST126358.

Whereas the Developer Cartwave Realty Limited has met all obligations under the agreement; and

Whereas the Corporation wishes to assume the municipal services constructed under the terms of the Subdivision Agreement.

Now therefore be it resolved that the Council of The Corporation of the City of Cornwall enacts as follows:

 That the City of Cornwall assume all municipal services constructed as part of the Subdivision Agreement dated March 12, 2020, for the East Ridge Subdivision Phase 8, registered as Plan 52M-55 in the City of Cornwall, County of Stormont; and



- That the Subdivision Agreement, specifically Paragraph 41 and Schedule "T" must remain on title for all individual lots as described under Plan 52M-55; and
- 3. That the Mayor and Clerk be and are hereby authorized to execute all documents to complete this matter.

Read, signed and sealed in open Council this 13th day of August, 2024.

Manon L. Levesque City Clerk Justin Towndale Mayor



Explanatory Note

Purpose

An explanatory note to the By-Law authorizing the City of Cornwall to assume the municipal services constructed under the terms of the subdivision agreement for East Ridge Subdivision Phase 8.

Background / Discussion

As a requirement of the subdivision agreement, when all of the obligations of the Developer have been fulfilled, a request may be made by the Developer to the City, for assumption of the municipal services infrastructure associated with the plan of subdivision.

The City of Cornwall and Cartwave Realty Limited, entered into a subdivision agreement registered under Instrument Number ST126358, dated March 12, 2020. The developer has now met all obligations under this agreement including the construction of municipal services infrastructure, being roads, boulevards, streetlights, signs, watermains, storm and sanitary sewer mains including all appurtenances and individual lot pre-services, sidewalks, and boulevard tree planting. The Developer's Consultant has provided as-built drawings, test results, CCTV reports and letters which certify that all infrastructure has been completed in accordance with the terms of the subdivision agreement.

All mandatory maintenance periods from the Developer have lapsed, and in accordance with the registered Subdivision Agreement, all municipal services infrastructure is eligible for assumption.

The assumed infrastructure will be added to the City's linear assets and will be the responsibility of the City to operate and maintain in accordance with the O.Reg. 239/02 - Minimum Maintenance Standards. Liability for operations of the infrastructure transfers from the Developer to the City on the date of Assumption.

This subdivision was registered as Plan 52M-55 on July 27, 2021. It includes the following infrastructure that will be the City's future maintenance, operations, and reconstruction responsibility:

• 500 meters of road

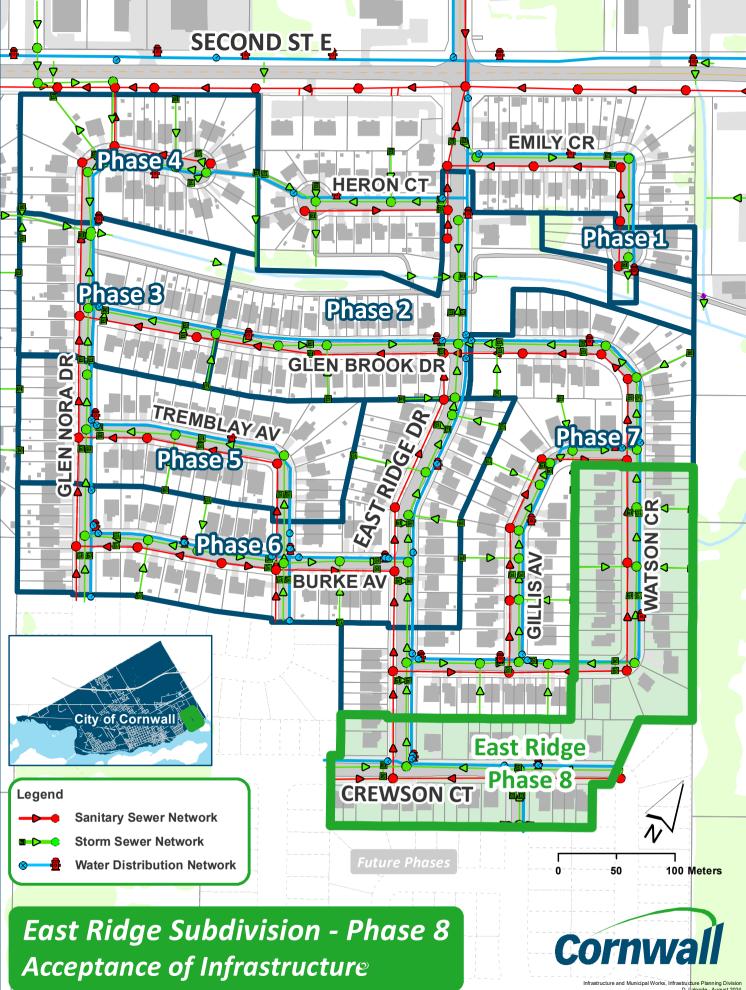


- 790 metres of storm sewer and other related appurtenances
- 520 metres of sanitary sewer and other related appurtenances
- 560 metres of watermain
- 1100 metres of concrete curb and gutter
- 690 metres of 1.5 metres wide concrete sidewalk
- 50 boulevard trees
- 16 streetlights
- required street signs

There will be future costs associated with the operations and long-term maintenance of the additional inventory of infrastructure and public highways associated with works completed under the subdivision agreement.

In accordance with the conditions of the Subdivision Agreement, staff recommend the City assume the municipal services infrastructure associated with Phase 8 of the East Ridge Subdivision.

Please refer to the attached sketch showing the location of the subject Phase 8 of the East Ridge Subdivision.



D. 4



The Corporation of the City of Cornwall Regular Meeting of Council By-law 2024-072

Department:	Financial Services
Division:	Finance
By-law Number:	2024-072
Report Number	2024-46-Financial Services
Meeting Date:	August 13, 2024
Subject:	A By-Law of the Corporation of the City of Cornwall to authorize the borrowing upon a debenture in the principal amount of \$13,017,084.46 towards the construction of 550 9Th Street, East, Cornwall, Ontario

Whereas subsection 401 (1) of the *Municipal Act*, 2001, as amended (the "**Act**") provides that a municipality may incur a debt for municipal purposes, whether by borrowing money or in any other way, and may issue debentures and prescribed financial instruments and enter prescribed financial agreements for or in relation to the debt; and

Whereas subsection 408 (2.1) of the Act provides that a municipality may issue a debenture or other financial instrument for long-term borrowing only to provide financing for a capital work; and

Whereas the Council of The Corporation of The City of Cornwall (the "**Municipality**") has approved a tender dated as of December 14, 2021, a copy of which is attached hereto as Schedule "A" and forms part of this By-Law, authorizing certain capital works, being the construction of a mixed-use apartment building with 24 affordable units and facilities ancillary thereto on the lands and premises municipally known as 550 9th Street East, Cornwall, Ontario, K6H 2V7 (collectively the "**Capital Works**"); and

Whereas the Council of the Municipality desires to: (i) authorize the entering into of a loan agreement dated as of August _____, 2024 (the "**Loan Agreement**") for



the provision of long-term borrowing from Canada Mortgage Housing Corporation ("**CMHC**") in respect of the Capital Works; (ii) authorize the entering into of an operating agreement dated as of August _____, 2024 (the "**Operating Agreement**") in respect of the operation of the Capital Works; and (iii) issue a debenture for the Capital Works in the amount of \$13,017,084.46; and

Whereas before authorizing the Capital Works and before authorizing any additional cost amount and any additional debenture authority in respect thereof (if any), the Council of the Municipality had its Treasurer calculate an updated limit in respect of its most recent annual debt and financial obligation limit received from the Ministry of Municipal Affairs and Housing in accordance with the applicable regulation and, prior to the Council of the Municipality authorizing the Capital Works, each such additional cost amount and each such additional debenture authority (if any), the Treasurer determined that the estimated annual amount payable in respect of the Capital Works, each such additional debenture authority (if any), would not cause the Municipality to exceed the updated limit and that the approval of the Capital Works, each such additional cost amount and each such additional debenture authority (if any) by the Ontario Land Tribunal pursuant to such regulation was not required; and

Whereas the Municipality has submitted an application to CMHC for long-term borrowing through the issue of a debenture to CMHC in respect of the Capital Works (the "**Application**") and the Application has been approved; and

Whereas to provide long-term financing for the Capital Works it is now deemed to be expedient to borrow money by the issue of a debenture in the principal amount of \$13,017,084.46 dated August _____, 2024, and payable as hereinafter set forth;

Now therefore the council of the corporation of the city of cornwall enacts as follows:

1. The Capital Works, the submitting of the Application and the execution and delivery of the Loan Agreement and the Operating Agreement by the Municipality are hereby confirmed, ratified and approved. For the Capital Works, the borrowing upon the credit of the Municipality of the principal amount of \$13,017,084.46 and the issue of a debenture therefor to be repaid and/or forgiven as hereinafter set forth, are hereby authorized.



- 2. The Mayor and the Treasurer of the Municipality are hereby authorized to cause a debenture to be issued in the principal amount of \$13,017,084.46 (the "**Debenture**"). The Debenture shall bear the Municipality's municipal seal and the signatures of the Mayor and the Treasurer of the Municipality, all in accordance with the provisions of the Act. The municipal seal of the Municipality and the signatures referred to in this section may be printed, lithographed, engraved or otherwise mechanically reproduced. The Debenture is sufficiently signed if it bears the required signatures and each person signing has the authority to do so on the date he or she signs.
- 3. The Debenture shall be in fully registered form as a certificate in the principal amount of \$13,017,084.46, in the name of CMHC, substantially in the form attached as Schedule B hereto and forming part of this By-law, with provision for payment of principal and interest in accordance with the terms of the Loan Agreement as set forth in the amortization schedule attached as Schedule C hereto and forming part of this By-law (the **"Amortization Schedule"**).
- 4. The Debenture shall be dated August _____, 2024, and as to both principal and interest shall be expressed and be payable in lawful money of Canada. The Debenture shall mature, and the underlying amounts shall be repaid and/or forgiven, as applicable: (i) during a period of twenty (20) years from the date thereof with respect to the forgivable loan facility in an amount up to \$2,750,000; and (ii) during a period of ten (10) years from the date thereof with respect to the repayable loan facility in an amount up to \$10,267,084.46, as may be extended for an additional ten (10) years in accordance with the Loan Agreement.
- 5. For each year in which payments of interest, or combined principal and interest, as applicable, are due in respect of the Capital Works, there shall be raised as part of the Municipality's general levy the amounts of interest, or combined principal and interest, as applicable, payable by the Municipality as set forth in the Amortization Schedule, to the extent that the amounts have not been provided for by any other available source including other taxes or fees or charges imposed on persons or property by a by-law of any municipality.
- 6. The Debenture may contain any provision for its registration thereof authorized by any statute relating to municipal debentures in force at the time of the issue thereof.



- 7. The Municipality shall maintain a registry in respect of the Debenture in which shall be recorded the name and the address of the registered holder and particulars of the Debenture and in which particulars of cancellations, exchanges, substitutions and transfers of the Debenture, may be recorded and the Municipality is authorized to use electronic, magnetic or other media for records of or related to the Debenture or for copies of the same.
- 8. The Municipality shall not be bound to see to the execution of any trust affecting the ownership of the Debenture or be affected by notice of any equity that may be subsisting in respect thereof. The Municipality shall deem and treat the registered holder of the Debenture as the absolute owner thereof for all purposes whatsoever notwithstanding any notice to the contrary and all payments to or to the order of the registered holder shall be valid and effectual to discharge the liability of the Municipality on the Debenture to the extent of the amount or amounts so paid. If the Debenture is registered in more than one name, the principal of and interest from time to time payable on the Debenture shall be paid to or to the order of all the joint registered holders thereof, failing written instructions to the contrary from all such joint registered holders, and such payment shall constitute a valid discharge to the Municipality. In the case of the death of one or more joint registered holders, despite the foregoing provisions of this section, the principal of and interest on the Debenture registered in their names may be paid to the survivor or survivors of such holders and such payment shall constitute a valid discharge to the Municipality.
- 9. In the event of an assignment of all or part of CMHC's rights and obligations under the Loan Agreement, the Debenture will be transferable or exchangeable with prior written notice to the Municipality. Such transfer or exchange shall occur at the office of the Treasurer of the Municipality



upon presentation for such purpose accompanied by an instrument of transfer or exchange, in a form approved by the Municipality and which form is in accordance with the prevailing Canadian transfer legislation and practices, executed by the registered holder thereof or such holder's duly authorized attorney or legal personal representative. Upon registration of such transfer or exchange and cancellation of the Debenture presented, the Mayor and the Treasurer shall issue and deliver a new Debenture of an equal aggregate principal amount in any authorized denomination as directed by the transferor, in the case of a transfer or as directed by the registered holder in the case of an exchange.

- 10. The Mayor and the Treasurer shall issue and deliver a new Debenture in exchange or substitution for the Debenture outstanding on the registry with the same maturity and of like form which has become mutilated, defaced, lost, subject to a mysterious or unexplainable disappearance, stolen or destroyed, provided that the applicant therefor shall have: (a) paid such costs as may have been incurred in connection therewith; (b) (in the case when a Debenture is mutilated, defaced, lost, mysteriously or unexplainably missing, stolen or destroyed) furnished the Municipality with such evidence (including evidence as to the certificate number of the Debenture) and an indemnity in respect thereof satisfactory to the Municipality in its discretion; and (c) surrendered to the Municipality any mutilated or defaced Debenture in respect of which the new Debenture is to be issued in substitution.
- 11. The Debenture issued upon the registration of transfer or exchange or in substitution for the Debenture or part thereof shall carry all the rights to interest if any, accrued and unpaid which was carried by the Debenture or part thereof and shall be so dated and shall bear the same maturity date and, subject to the provisions of this By-law, shall be subject to the same terms and conditions as the Debenture in respect of which the transfer, exchange or substitution is effected.



- 12. The cost of all transfers and exchanges, including the printing of authorized denominations of the new Debenture, shall be borne by the Municipality. When the Debenture is surrendered for transfer or exchange, the Treasurer of the Municipality shall: (a) in the case of an exchange, cancel and destroy the Debenture surrendered for exchange; (b) in the case of an exchange, certify the cancellation and destruction in the registry; (c) in the case of an exchange; and (d) in the case of a transfer, enter in the registry particulars of the registered holder as directed by the transferor.
- 13. Reasonable fees in respect of the Debenture, in the normal course of business, other than reasonable fees for the substitution of a new Debenture for the Debenture that is mutilated, defaced, lost, mysteriously or unexplainably missing, stolen or destroyed and for the replacement of any of the principal and interest cheques (if any) that are mutilated, defaced, lost, mysteriously or unexplainably missing, stolen or destroyed may be imposed by the Municipality. When a new Debenture is issued in substitution in these circumstances, the Municipality shall: (a) treat as cancelled and destroyed the Debenture in respect of which the new Debenture will be issued in substitution; (b) certify the deemed cancellation and destruction in the registry; (c) enter in the registry particulars of the new Debenture issued in substitution; and (d) make a notation of any indemnities provided.
- 14. Except as otherwise expressly provided herein, any notice required to be given to a registered holder of the Debenture will be sufficiently given if a copy of such notice is mailed or otherwise delivered to the registered address of such registered holder in accordance with the provisions of the Loan Agreement.



- 15. The Mayor and the Treasurer are hereby authorized to cause the Debenture to be issued, one or more of the Mayor, Clerk and Treasurer are hereby authorized to generally do all things and to execute all other documents and other papers in the name of the Municipality in order to carry out the issue of the Debenture and the Treasurer is authorized to affix the Municipality's municipal seal to any of such documents and papers.
- 16. The money received by the Municipality from the issue of the Debenture to CMHC, including any premium, and any earnings derived from the investment of that money, after providing for the expenses related to its issue, if any, shall be used to finance the Capital Works, or apportioned and applied to the Capital Works, as applicable, and to no other purpose except as permitted by the Act.
- 17. This By-law takes effect on the day of passing.

Read, signed and sealed in open Council this 13th day of August, 2024.

Manon L. Levesque City Clerk Justin Towndale Mayor



Explanatory Note

Purpose

An explanatory note to the By-law authorizing The Corporation of the City of Cornwall (the "**City**") to:

- (i) enter into a loan agreement dated as of August _____, 2024 (the "Loan Agreement") for the provision of long-term borrowing from Canada Mortgage Housing Corporation ("CMHC") in respect of certain capital works, being the construction of a mixed-use apartment building with 24 affordable units and facilities ancillary thereto on the lands and premises municipally known as 550 9th Street East, Cornwall, Ontario, K6H 2V7 (collectively the "Capital Works");
- (ii) enter into an operating agreement dated as of August _____, 2024 (the "Operating Agreement") in respect of the operation of the Capital Works; and
- (iii) issue a debenture for the Capital Works in the amount of \$13,017,084.46 (the "**Debenture**").

Background / Discussion

Council approved a tender dated as of December 14, 2021 authorizing the Capital Works. Thereafter, the City submitted an application to CMHC for long-term borrowing through the issue of a debenture to CMHC in respect of the Capital Works (the "**Application**").

The Application was approved, and CMHC will issue the following loans under the National Housing Co-Investment Fund:

- 1. a repayable loan facility in an amount up to \$10,267,084.46 (the "**Repayable Loan**"); and
- 2. a forgivable loan facility in an amount up to \$2,750,000 (the "**Forgivable Loan**").



The Debenture shall mature, and the underlying amounts shall be repaid and/or forgiven, as applicable: (i) during a period of twenty (20) years from the date thereof with respect to the Forgivable Loan; and (ii) during a period of ten (10) years from the date thereof with respect to the Repayable Loan, as may be extended for an additional ten (10) years in accordance with the Loan Agreement.

For each year in which payments of interest, or combined principal and interest, as applicable, are due in respect of the Capital Works, there shall be raised as part of the City's general levy the amounts of interest, or combined principal and interest, as applicable, payable by the City in accordance with the terms of the Loan Agreement, to the extent that the amounts have not been provided for by any other available source including other taxes or fees or charges imposed on persons or property by a by-law of any municipality.

SCHEDULE "A" Copy of Tender

See Attached



The Corporation of the City of Cornwall Special Meeting of Council

Report

Department:	Financial Services
Division:	Purchasing
Report Number:	2021-122-Financial Services
Prepared By:	Nicole Robertson, Supervisor
Meeting Date:	December 14, 2021
Subject:	Tender 21-T30 Construction of Affordable Housing Complex (9th & McConnell)

Purpose

To obtain costing for the construction of a mixed-use, multi-residential social/affordable housing complex, to be located at the corner of Ninth Street and McConnell Avenue in Cornwall, Ontario

Recommendation

That Tender 21-T30 be awarded to Robert J. Bourgon & Associates Limited, from Cornwall, Ontario, at the total bid price of \$18,866,610.08 (net cost to the Corporation - \$16,989,966.74) being the best bid meeting the tender specifications.

Financial Implications

The total budget for this project has been estimated between \$18,000,000 and \$19,000,000.

Through the Social Services Relief Fund (SSRF) Phase 2 funding program, the City of Cornwall has been approved to receive \$2,644,461 to assist with the cost of the construction of a new social / affordable new mixed-use multi residential buildings on a vacant City of Cornwall owned property at Ninth Street and



McConnell Avenue. The Ministry also provided \$1,000,000 in funding through the Canada-Ontario Community Housing Initiative and \$125,000 through the Ontario Priorities Housing Initiative.

An additional municipal contribution of \$1,640,000 (\$1,050,000 from the Social Housing Regeneration reserve, \$340,000 from the Cornwall and Area Housing Corporation – CAHC Capital Reserve, and \$250,000 from the previous sale of bungalows from CAHC), will be allocated to support the construction of this project.

The net amount to borrow for this build is estimated between \$12,500,000 and \$13,500,000. It is anticipated that this amount will be in the form of a loan provided through Canada, Mortgage and Housing Corporation's Co-investment Fund (application is currently in progress).

Strategic Priority Implications

This project aligns with Council's Strategic Plan to grow quality housing stock, including affordable housing.

Background / Discussion

The City of Cornwall was approved to receive \$2,644,461 of SSRF Phase 2 funding and \$1,000,000 in funding through the Canada-Ontario Community Housing Initiative to assist with the construction of a new 77-unit mixed-use, multi-residential building on a vacant City of Cornwall owned property at Ninth Street and McConnell Avenue. This vacant property was selected for this capital project after being identified as an ideal location in the recently published 2020 Social and Housing Services Cornwall and Area Housing Revitalization Plan, due to its proximity to grocery stores, schools, health services, transit routes, and several major employers. Following construction, the new building will become part of the social housing portfolio owned by the Cornwall and Area Housing Corporation (CAHC); to be transferred to the City of Cornwall as part of CAHC's merger with the municipality effective January 1, 2022. This build is considered an expansion of an existing property located at Ninth Street and Marlborough Street.



The following tenders were received and opened by Purchasing Services on November 18, 2021:

Robert J. Bourgon & Associates Limited, Cornwall, Ontario

Bid Price:	\$16,696,115.11
HST:	\$2,170,494.97
Total Bid Price:	\$18,866,610.08

Fred Trottier Construction Ltd., Ottawa, Ontario

Bid Price:	\$17,874,140.07
HST:	\$2,323,638.21
Total Bid Price:	\$20,197,778.28

Corebuild Construction Limited, North York, Ontario

Bid Price:	\$19,681,579.00
HST:	\$2,558,605.27
Total Bid Price:	\$22,240,184.27



Document Title:	Tender 21-T30 Construction of Affordable Housing Complex - 2021-122-FS.docx
Attachments:	
Final Approval Date:	Dec 14, 2021

This report and all of its attachments were approved and signed as outlined below:

Mellissa Morgan - Dec 14, 2021 - 10:34 AM

Tracey Bailey - Dec 14, 2021 - 10:38 AM

Maureen Adams - Dec 14, 2021 - 10:53 AM

The Corporation of The City of Cornwall

Schedule B to By-law Number _____

No._____

\$13,017,084.46

C A N A D A Province of Ontario The Corporation of The City of Cornwall

FULLY REGISTERED DEBENTURE

The Corporation of The City of Cornwall (the "**Municipality**"), for value received, hereby promises to pay to

CANADA MORTGAGE HOUSING CORPORATION ("CMHC")

or registered assigns, subject to the conditions attached hereto which form part hereof (the "**Conditions**"), upon presentation and surrender of this debenture (or as otherwise agreed to by the Municipality and CMHC), the principal amount of

THIRTEEN MILLION SEVENTEEN THOUSAND EIGHTY-FOUR DOLLARS FORTY-SIX CENTS

-----(\$13,017,084.46) -----

by monthly instalments of interest, or combined principal and interest, as applicable, in the manner and in the amounts set forth in the attached amortization schedule (the "**Amortization Schedule**") and pursuant to the Conditions, in lawful money of Canada. The applicable rate of interest, the payments of principal and interest and the outstanding amount of principal are shown in the Amortization Schedule.

This debenture is subject to the Conditions.

DATED at The Corporation of The City of Cornwall as of August _____ 2024.

IN TESTIMONY WHEREOF and under the authority of By-law Number ______ of the Municipality duly passed on the _____ day of August, 2024 (the "**By-law**"), this debenture is sealed with the municipal seal of the Municipality and signed by the Mayor and by the Treasurer thereof.

Date of Registration: August _____, 2024

	(Seal)
, Mayor	, Treasurer

CONDITIONS OF THE DEBENTURE

Form, Denomination, and Ranking of the Debenture

- 1. The debenture issued pursuant to the By-law (the "**Debenture**") is issuable as a fully registered Debenture without coupons.
- 2. The Debenture is a direct, general, unsecured and unsubordinated obligation of the Municipality. The Debenture ranks concurrently and equally in respect of payment of principal and interest with all other debentures of the Municipality except for the availability of money in a sinking or retirement fund for a particular issue of debentures.
- 3. The Debenture is one fully registered Debenture registered in the name of CMHC and held by CMHC.

Registration

4. The Municipality shall maintain at its designated office a registry in respect of the Debenture in which shall be recorded the name and the address of the registered holder and particulars of the Debenture and in which particulars of cancellations, exchanges, substitutions and transfers of the Debenture, may be recorded and the Municipality is authorized to use electronic, magnetic or other media for records of or related to the Debenture or for copies of the same.

<u>Title</u>

5. The Municipality shall not be bound to see to the execution of any trust affecting the ownership of the Debenture or be affected by notice of any equity that may be subsisting in respect thereof. The Municipality shall deem and treat the registered holder of the Debenture as the absolute owner thereof for all purposes whatsoever notwithstanding any notice to the contrary and all payments to or to the order of the registered holder shall be valid and effectual to discharge the liability of the Municipality on the Debenture to the extent of the amount or amounts so paid. Where the Debenture is registered in more than one name, the principal of and interest from time to time payable on such Debenture shall be paid to or to the order of all the joint registered holders thereof, failing written instructions to the contrary from all such joint registered holders, and such payment shall constitute a valid discharge to the Municipality. In the case of the death of one or more joint registered holders, despite the foregoing provisions of this section, the principal of and interest on the Debenture registered in their names may be paid to the survivor or survivors of such holders and such payment shall constitute a valid discharge to the Municipality.

Payments of Principal and Interest

6. The record date for purposes of payment of principal of and interest on the Debenture is as of 5:00 p.m. on the first Business Day of each month preceding any payment date including the maturity date. Principal of and interest on the Debenture is payable by the Municipality

to the person registered as holder in the registry on the relevant record date. The Municipality shall not be required to register any transfer, exchange or substitution of the Debenture during the period from any record date to the corresponding payment date.

- 7. The Municipality shall make all payments in respect of interest, or combined principal and interest, as applicable, on the Debenture on the specified dates as set forth in the Amortization Schedule, in accordance with terms of the loan agreement between the Municipality and CMHC dated as of August _____, 2024 (the "Loan Agreement").
- 8. If the Municipality defaults in the payment of any instalment of interest, or combined principal and interest, as applicable, on the specified dates as set forth in the Amortization Schedule, and such failure remains unremedied for three (3) Business Days following CMHC's written notice of default to the Municipality, then, in such event, CMHC shall not be obliged to make any further advance under the Loan Agreement, and CMHC may at its option, by written notice to the Municipality, (i) terminate its commitments under the Loan Agreement, and (ii) declare the Debenture to be immediately due and payable in whole, without presentment, demand, protest or other notice of any kind, all of which are hereby waived by the Municipality.
- 9. Payments in respect of principal of and interest on the Debenture shall be made only on a day on which CMHC is open for business in Ottawa, Ontario excluding Saturday, Sunday and any other day which shall be a holiday or a day on which banking institutions are closed in the Province of Ontario (a "**Business Day**"), and if any date for payment is not a Business Day, payment shall be made on the next following Business Day as noted on the Amortization Schedule.
- 10. In the event of an assignment of all or part of CMHC's rights and obligations under the Loan Agreement, the Debenture will be transferable or exchangeable with prior written notice to the Municipality. Such transfer or exchange shall occur at the office of the Treasurer of the Municipality upon presentation for such purpose accompanied by an instrument of transfer or exchange, in a form approved by the Municipality and which form is in accordance with the prevailing Canadian transfer legislation and practices, executed by the registered holder thereof or such holder's duly authorized attorney or legal personal representative. Upon registration of such transfer or exchange and cancellation of the Debenture presented, the Mayor and the Treasurer shall issue and deliver a new Debenture of an equal aggregate principal amount in any authorized denomination as directed by the transferor, in the case of a transfer or as directed by the registered holder in the case of an exchange.
- 11. The Municipality shall issue and deliver the Debenture in exchange for or in substitution for the Debenture outstanding on the registry with the same maturity and of like form in the event of a mutilation, defacement, loss, mysterious or unexplainable disappearance, theft or destruction, provided that the applicant therefor shall have: (a) paid such costs as may have been incurred in connection therewith; (b) (in the case of a mutilated, defaced, lost, mysteriously or unexplainably missing, stolen or destroyed Debenture) furnished the Municipality with such evidence (including evidence as to the certificate number of the Debenture) and an indemnity in respect thereof satisfactory to the Municipality in its

discretion; and (c) surrendered to the Municipality any mutilated or defaced Debenture in respect of which the new Debenture is to be issued in substitution.

- 12. The Debenture issued upon any registration of transfer or exchange or in substitution for any Debenture or part thereof shall carry all the rights to interest if any, accrued and unpaid which were carried by such Debenture or part thereof and shall be so dated and shall bear the same maturity date and, subject to the provisions of the By-law, shall be subject to the same terms and conditions as the Debenture in respect of which the transfer, exchange or substitution is effected.
- 13. The cost of all transfers and exchanges, including the printing of authorized denominations of the new Debenture, shall be borne by the Municipality. When the Debenture is surrendered for transfer or exchange, the Treasurer of the Municipality shall: (a) in the case of an exchange, cancel and destroy the Debenture surrendered for exchange; (b) in the case of an exchange, certify the cancellation and destruction in the registry; (c) in the case of an exchange, enter in the registry particulars of the new Debenture issued in exchange; and (d) in the case of a transfer, enter in the registry particulars of the registered holder as directed by the transferor.
- 14. Reasonable fees for the substitution of a new Debenture for the Debenture that is mutilated, defaced, lost, mysteriously or unexplainably missing, stolen or destroyed and for the replacement of mutilated, defaced, lost, mysteriously or unexplainably missing, stolen or destroyed principal and interest cheques (if any) may be imposed by the Municipality. When a new Debenture is issued in substitution in these circumstances, the Municipality shall: (a) treat as cancelled and destroyed the Debenture in respect of which the new Debenture will be issued in substitution; (b) certify the deemed cancellation and destruction in the registry; (c) enter in the registry particulars of the new Debenture issued in substitution; and (d) make a notation of any indemnities provided.

Notices

15. Except as otherwise expressly provided herein, any notice required to be given to a registered holder of the Debenture will be sufficiently given if a copy of such notice is mailed or otherwise delivered to the registered address of such registered holder. If the Municipality or any registered holder is required to give any notice in connection with the Debenture on or before any day and that day is not a Business Day, then such notice may be given on the next following Business Day.

<u>Time</u>

16. Unless otherwise expressly provided herein, any reference herein to a time shall be considered to be a reference to Toronto time.

Governing Law

17. The Debenture is governed by and shall be construed in accordance with the laws of the Province of Ontario and the federal laws of Canada applicable in Ontario.

The Corporation of The City of Cornwall

Schedule C to By-law Number _____

For the purpose of this Schedule, the following terms and phrases shall have the following meanings:

"Accessibility Criteria" means the accessibility requirements as set forth in CMHC's minimum accessibility requirements published from time to time.

"Affordability Criteria" means the Municipality will maintain the affordability of the housing within the Project for a period of 20 years from the Date of Occupancy, such that average rents for a minimum of 31% of the Project's Housing Units are below 80% of the Median Market Rental Rate.

"Business Day" means a day on which CMHC is open for business in Ottawa, Ontario excluding Saturday, Sunday and any other day which shall be a holiday or a day on which banking institutions are closed in the Province of Ontario.

"CMHC" means Canada Mortgage and Housing Corporation.

"Construction" means the design and execution of the Project in accordance with the Plans and Specifications.

"Date of Occupancy" means July 31, 2023.

"**Debenture**" means the debenture in the principal amount of \$13,017,084.46 to be issued pursuant to By-law Number ______.

"Debt Service Coverage Ratio" means, as of the date of determination, the ratio of the Municipality's annual net operating income (determined in accordance with GAAP) from the Project Lands to the cash required annually by the Municipality to cover the repayment of all interest and principal on outstanding indebtedness relating to the Project Lands, for the Municipality's most recently ended four full fiscal quarters for which internal annual or quarterly financial statements are available.

"Drawdown" means an advance of the Loans by CMHC to the Municipality.

"**Drawdown Date**" means a date which is at least ten (10) Business Days prior to the proposed date of the Drawdown.

"Drawdown Notice" means the form of notice attached as Schedule B to the Loan Agreement.

"Encumbrance" means, with respect to any Person, any mortgage, debenture, pledge, hypothec, lien, charge, assignment by way of security, title retention agreement or arrangement, hypothecation or security interest granted or permitted by such Person or arising by operation of law, in respect of any of such Person's property, or any consignment by way of security or capital lease of property by such Person as consignee or lessee, as the case may be, or any other security

agreement, trust or arrangement having the effect of security for the payment of any debt, liability or other obligation.

"Energy Efficiency Criteria" means the Project will be constructed such that (a) a minimum 33.3% decrease in energy consumption; and (b) a minimum 32.8% decrease in greenhouse gas emissions will be achieved, in each case as at the date of advance relative to performance levels achievable by a building equivalent to the new building that is being constructed as the Project except that it is designed to meet the requirements of the National Energy Code of Canada for Buildings 2015.

"Event of Default" means any one or more of the following events:

- (a) use of the proceeds of the Loans received by the Municipality for purposes other than the purpose set out in Section 2(b) of the Loan Agreement, including use of the proceeds of the Loans for any purpose other than the purpose for which they were advanced;
- (b) fraud or intentional misrepresentation by the Municipality;
- (c) gross negligence or criminal acts of the Municipality resulting in the forfeiture, seizure or loss of any portion of the Project;
- (d) misapplication or misappropriation of rents, insurance proceeds or condemnation awards received by the Municipality;
- (e) the Municipality fails to pay when due any amounts payable under the Loan Documents, and such failure remains unremedied for three (3) Business Days;
- (f) the Municipality breaches or fails to fulfill any one or more of its obligations under the Loan Documents and has not remedied such breach or failure to the sole satisfaction of CMHC, within thirty (30) days of the date on which such breach occurred, or within any other timeframe that the parties have agreed to in writing;
- (g) any fraud, misconduct, or false Integrity Declaration (or failure by the Municipality to advise CMHC of any change in circumstances, subsequent to the Municipality's submission to CMHC of the Integrity Declaration, which would thereafter prevent the Municipality from confirming the truth and accuracy of the contents therein);
- (h) any representation or warranty made or deemed to have been made by the Municipality in any Loan Document or in any certificate or ancillary document provided for in any Loan Document shall be false or inaccurate in any materially adverse respect;
- (i) if CMHC (in its sole discretion) considers that the Project no longer satisfies any of the applicable Affordability Criteria, Accessibility Criteria and Energy Efficiency Criteria or that the Municipality no longer satisfies the Viability Criteria;
- (j) the Municipality breaches or fails to fulfill any one or more of its obligations under the Operating Agreement and has not remedied such breach or failure to the sole satisfaction

of CMHC, within thirty (30) days of the date on which such breach occurred, or within any other timeframe that the parties have agreed to in writing;

- (k) if CMHC (in its sole discretion) considers that the Project is not proceeding in a timely manner or if the Municipality otherwise discontinues or abandons the Project (for a single period of twenty (20) days or more);
- (l) if substantial completion of the Project was not achieved by July 31, 2023;
- (m) if CMHC (in its sole discretion) considers that a Material Adverse Change has occurred in the financial condition, operation or ownership of the Municipality;
- (n) the Municipality is unable to pay its debts as such debts become due, or is, or is adjudged or declared to be, or admits to being, insolvent;
- (o) if proceedings are started by any person to dissolve, liquidate, or wind-up the Municipality or to suspend any of its operations;
- (p) any secured creditor, encumbrancer or lienholder, or any trustee, receiver, receiver and manager, agent, bailiff or other similar official appointed by or acting for any secured creditor, encumbrancer or lienholder, takes possession of, or forecloses or retains, or sells or otherwise disposes of, or otherwise proceeds to enforce security over all or any significant part of the assets of the Municipality or gives notice of its intention to do any of the foregoing;
- (q) any Encumbrance securing an obligation of the Municipality to CMHC shall, in whole or in part, cease to be a perfected as a result of an action or inaction of the Municipality as required pursuant to the Loan Documents;
- (r) an event of default by the Municipality under any agreement in relation to the Project or Project Lands, the Loan Agreement or under any other CMHC loan or contribution program; or
- (s) if any other event or circumstance occurs that CMHC (in its sole discretion) considers is likely to materially and adversely affect the ability of the Municipality to successfully proceed with the Project or otherwise perform all or any of its obligations under the Loan Documents.

"Forgivable Loan" means a forgivable loan facility in an amount up to \$2,750,000.

"GAAP" means those accounting principles that are from time to time approved by the Chartered Professional Accountants of Canada, or any successor institute, including International Financial Reporting Standards or Accounting Standards for Private Enterprises, as the case may be.

"Housing Unit" means:

(a) a dwelling unit, including a bed, where the Project is shelter accommodation; or

(b) a self-contained residential dwelling unit intended for human habitation as housing accommodation, where the Project is affordable rental housing, shelter housing, transitional housing, supportive housing, community housing, mixed use market and affordable rental housing or urban indigenous community housing.

"**Integrity Declaration**" means the declaration made by the Municipality and submitted to CMHC in connection with its application for the Loans, including any schedules attached thereto, with any amendments thereto as acknowledged by CMHC.

"Interest Capitalization Date" means the first day of the month following the Drawdown Date.

"Interest Capitalization Period" means the Interest Capitalization Date until the Interest Payment Commencement Date.

"Interest Payment Commencement Date" means the first day of the month following the date of advance.

"Interest Rate" means the fixed rate of interest confirmed by CMHC pursuant to Section 4 of the Loan Agreement.

"Loan Agreement" means the loan agreement between the Municipality and CMHC dated as of August _____, 2024.

"Loan Documents" means (a) the Loan Agreement, (b) the Debenture, (c) the Operating Agreement, and all present and future agreements, documents, certificates and instruments delivered by the Municipality to CMHC pursuant to or in respect of the Loan Agreement, in each case as the same may from time to time be amended, and "Loan Document" means any one of the Loan Documents.

"Loans" means, collectively, the Repayable Loan and the Forgivable Loan, and "Loan" means any one of them.

"Material Adverse Change" means any event or occurrence which, when considered individually or together with other events or occurrences, has a material adverse effect on (a) the business, assets, liabilities, operations, results of operations, condition (financial or other) or prospects of any of the Municipality, (b) the Construction and/or operation of the Project, or (c) the ability of the Municipality to perform their obligations in all material respects. For greater certainty, Material Adverse Change does not include a change in general economic conditions unless same in turn causes any of the foregoing events.

"Median Market Rental Rate" means the median market rental rate for the regional market and unit type of the Project as described in CMHC's rental market survey or any successor publication published from time to time.

"Municipality" means The Corporation of the City of Cornwall.

"**Operating Agreement**" means the agreement entered into between the Municipality and CMHC with respect to, *inter alia*, the obligation of the Municipality to adhere to certain covenants relating to the Project, as set out in more detail therein, during and after the expiration of the Term.

"Outside Stabilization Date" means October 31, 2024.

"**Person**" includes an individual, a partnership, a joint venture, a trust, an unincorporated organization, a company, a corporation, an association, a government or any department or agency thereof, and any other incorporated or unincorporated entity.

"**Plans and Specifications**" means the plans and specifications (including all structural, architectural, mechanical, electrical, landscape and interior design and specifications) pertaining to the development and execution of the Project prepared by or at the direction of the Municipality and as approved by CMHC, as amended from time to time.

"**Project**" means the construction of mixed use market and affordable housing, which shall have a minimum of 24 affordable Housing Units and facilities ancillary thereto, located on the Project Lands.

"**Project Lands**" means the lands and premises municipally known as 550 9th Street East, Cornwall, Ontario K6H 2V7, Canada and legally described as PT LT 7 CON 1 CORNWALL PT 1, 6 52R1840 (PARTS 9 & 12 ON 52R8180, CLOSED BY BY-LAW NO. 2018/142, INSTRUMENT ST101501); CORNWALL; SUBJECT TO AN EASEMENT AS IN ST142382, being PIN 60177-0112 (LT).

"Repayable Loan" means a repayable loan facility in an amount up to \$10,267,084.46.

"**Stabilization**" means the date at which the Municipality is able to demonstrate to CMHC's reasonable satisfaction that the Project has achieved twelve (12) consecutive months of annualized residential effective gross income of no less than \$880,623.98.

"**Term**" means, as applicable (A) with respect to a Repayable Loan, ten (10) years commencing on the date of the advance under the Loan Agreement, provided that (i) if the advance is made on the 1st day of a month, the Term will commence on the 1st day of that month, and (ii) if the advance is made after the 1st day of a month, the Term will commence on the 1st day of the following month, and (B) with respect to a Forgivable Loan, a period commencing on the date of the advance under the Loan Agreement, provided that (i) if such advance is made on the 1st day of a month, the Term will commence on that day, and (ii) if such advance is made after the 1st day of a month, the Term will commence on the 1st day of the following month, and the Forgivable Loan term will end on the date that is twenty (20) years after the date of the final advance under the Loan Agreement, if such date is on the 1st day of a month, or the 1st day of the month following the date of the final advance under the Loan Agreement, if the date of such final advance is not on the 1st day of a month. The Term may be extended at the sole discretion of CMHC on such terms as the parties may mutually agree at the time of extension.

CMHC will agree to extend the Term of the Repayable Loan under the Loan Agreement for an additional ten (10) years (the "**Extension**"), provided that: (i) there is no Event of Default (or no event has occurred which constitutes, or which, with notice, lapse of time, or both, would

constitute, an Event of Default) existing under the Loan Documents; and (ii) the representations and warranties made by the Municipality under the Loan Agreement or any Loan Document are deemed to be repeated and remain true and correct, as of the date of the Extension. Any and all terms and conditions under the Loan Documents will continue to apply to the Extension with necessary modifications, including but not limited to the following terms:

- (i) CMHC shall apply a new Interest Rate for the Repayable Loan, in its sole and absolute discretion;
- (ii) CMHC may be required to amend the amortization schedule for the Repayable Loan, which will set out the blended interest and principal payment amounts; and
- (iii) the Term for the Repayable Loan will be extended for a ten (10) year period commencing no later than the end of the Term as defined herein.

The Municipality acknowledges that the Extension is offered as a one-time option for the Municipality's benefit, and the Municipality shall have thirty (30) days prior to the end of the Term of the Repayable Loan to notify CMHC in writing of its decision to decline the Extension. If the Municipality fails to notify CMHC within thirty (30) days of its election to decline the Extension, then the Extension is deemed accepted by the Municipality. In order to give effect to the Extension, the parties agree to enter into an amending agreement to the Loan Agreement, and any other documents as may be required by CMHC, which will form part of the entire Loan Agreement between the parties.

"Viability Criteria" means with respect to the Project's rental income generating space(s) (e.g. office and retail spaces), the Project achieves a minimum Debt Service Coverage Ratio of 1x.

A. Repayable Loan Facility of \$10,267,084.46

Interest

- 1. Following the delivery by the Municipality of the Drawdown Notice, either four or five Business Days before the Drawdown Date, the Interest Rate for the Repayable Loan will be calculated as follows:
 - (i) where the interest rate determined by CMHC is less than or equal to 4.88%, then such interest rate will be set for the Repayable Loan and CMHC's interest rate confirmation shall be delivered to the Municipality; and
 - (ii) in the event the interest rate determined by CMHC exceeds 4.88%, then either (1) the Municipality must provide satisfactory evidence that additional equity or other contributions satisfactory to CMHC will be funded to the Project, and/or (2) the amount of the Repayable Loan will be reduced, such that a minimum debt service coverage ratio of 1x can be achieved using the amortization period and applicable interest rate and, once satisfactory evidence that additional equity or other contributions has been provided and/or the Repayable Loan amount has been reduced, such that the required minimum debt service coverage ratio can be

achieved, then such interest rate will be set for the Repayable Loan and CMHC's interest rate confirmation shall be delivered to the Municipality.

- 2. The Repayable Loan will, from the Drawdown Date, bear interest on the unpaid principal amount thereof at the Interest Rate.
- 3. Interest on the Repayable Loan will be calculated semi-annually not in advance, commencing on the Interest Capitalization Date, or as CMHC may otherwise determine. Interest only payments shall be due and payable on the Repayable Loan in arrears monthly on the 1st day of the month commencing on the Interest Capitalization Date until the date specified in Section 5 below.
- 4. Notwithstanding Section 3 above, the Interest Capitalization Period will be financed under the Repayable Loan by CMHC adding such interest amounts to the principal balance of the Repayable Loan; provided further that if, however, the Repayable Loan is or becomes fully drawn by the Municipality during the Interest Capitalization Period such that the interest amounts cannot be capitalized without exceeding the maximum Repayable Loan amount, then any interest due shall be payable by the Municipality from its own resources on the relevant monthly due dates during the Interest Capitalization Period.
- 5. Interest only payments shall be due and payable by the Municipality on the Repayable Loan monthly as described in Section 3 above from its own resources commencing from the Interest Payment Commencement Date until and including the earlier of (i) Stabilization; and (ii) the Outside Stabilization Date, as described in the following sentence. Commencing from Stabilization, blended payments of principal and interest shall be made on the Repayable Loan according to an amortization schedule in accordance with Section 7; provided that, if Stabilization has not been achieved by the Outside Stabilization Date, then CMHC may, in its sole and absolute discretion, require that blended payments of principal and interest shall be made commencing from the Outside Stabilization Date.
- 6. Interest will continue to accrue after maturity and default and/or judgment, if any, until payment thereof, and interest will accrue and be compounded monthly on overdue interest, if any.

Repayment of Principal

- 7. Commencing from Stabilization, the principal balance outstanding under the Repayable Loan will be amortized according to an amortization schedule to be agreed between CMHC and the Municipality at such time based on an amortization period of 50 years, resulting in blended payments of principal and interest being payable on the 1st Business Day of each month following Stabilization until the end of the Term. Repayment in full of the remaining principal balance of the Repayable Loan and any interest or other payments due to CMHC shall be due on the final day of the Term.
- 8. If Stabilization has not occurred by the Outside Stabilization Date, CMHC may in its sole and absolute discretion require that blended payments of principal and interest shall be made on the Repayable Loan commencing from the Outside Stabilization Date.

9. The Repayable Loan shall be closed to voluntary prepayment, either in whole or in part, prior to the expiration of the Term, as applicable.

B. Forgivable Loan Facility of \$2,750,000

Interest

- 1. The Forgivable Loan is interest-free for so long as the conditions specified in the Loan Agreement are met and the Forgivable Loan is not in default. If the Forgivable Loan is in default, CMHC may, at its option, by notice to the Municipality declare that the Forgivable Loan shall bear interest at five percent (5%) per annum. In such case, the Forgivable Loan will bear interest on the unpaid principal amount thereof from the date of such declaration until the date on which the Forgivable Loan is repaid in full at the rate of five percent (5%) per annum, accruing monthly not in advance, commencing on the first day of the month following the month in which such declaration was made by CMHC or as CMHC may otherwise agree in its sole and absolute discretion. Interest payments shall be due and payable in arrears monthly on the 1st day of the month until and including the date on which the Forgivable Loan is repaid in full or as CMHC may otherwise agree in its sole and absolute discretion.
- 2. Interest will continue to accrue after maturity and default and/or judgment, if any, until payment thereof, and interest will accrue and be compounded monthly on overdue interest, if any.

Repayment of Principal

- 3. An equal portion of the principal amount of the Forgivable Loan shall be forgiven on each anniversary of: (i) the date of the advance, if such date is on the 1st day of a month, or (ii) the 1st day of the month following the date of the advance of the Project, if the date of the advance is not on the 1st day of a month, provided that the Municipality has fulfilled its obligations under the Loan Agreement. To the extent any principal amount of the Forgivable Loan is not forgiven, repayment in full of the remaining principal balance of the Forgivable Loan and any interest or other payments due to CMHC shall be due on the final day of the Term, or as CMHC may otherwise agree in its sole and absolute discretion.
- 4. The Forgivable Loan shall be closed to voluntary prepayment, either in whole or in part, prior to the expiration of the Term, as applicable.



cmhc.ca

Dated the _____ day of _____, 20_____

Private and Confidential

The Corporation of the City of Cornwall 340 Pitt Street Cornwall, Ontario K6J 3P9

Attention: Lisa Smith

CMHC File No.: 26754432

Dear Sirs/Mesdames:

On behalf of the Government of Canada, Canada Mortgage and Housing Corporation ("CMHC") is pleased to offer The Corporation of the City of Cornwall (the "Borrower") the loans described below under the National Housing Co-Investment Fund (the "Program"), which is administered by CMHC as part of Canada's National Housing Strategy, to assist with the financing of the construction of a mixed use apartment building with a minimum of 24 affordable units and facilities ancillary thereto that the Borrower is undertaking on the lands and premises, which are legally and municipally described in Schedule E (the "Project Lands"), subject to the terms and conditions contained HEREIN.

1. INTERPRETATION

Schedule A contains the definitions of capitalized terms which are used in this Agreement.

2. LOANS

- (a) Subject to the terms and conditions of this Agreement, CMHC hereby establishes in favour of the Borrower:
 - a repayable loan facility (the "Repayable Loan") in an amount up to \$10,267,084.46, by way of one advance in accordance with the Drawdown Schedule that is in place at any time; and
 - (ii) a forgivable loan facility (the "**Forgivable Loan**") in an amount up to \$2,750,000, by way of one advance in accordance with the Drawdown Schedule that is in place at any time.
- (b) **Purpose of Loans**. The Loans shall be used in respect of the financing of the Project and shall not be used for any other purpose.
- (c) **Availability**. Following the Closing Date, the Borrower may borrow up to the amount of the Loans, provided that an Event of Default shall not have occurred and be continuing and the other conditions precedent have been satisfied at the time of the Drawdown.
- (d) **Expiration of Commitment**. If the advance of the Loans has not been made by October 31, 2024, then CMHC's obligation to make the Loans shall end at CMHC's sole discretion.

(e) The Loans made by the Lender will be evidenced by a Debenture, substantially in the form of Schedule K (the "**Debenture**").

3. DRAWDOWNS UNDER LOANS

- (a) This Agreement will become effective on the Closing Date and thereafter the Borrower may request an advance (a "**Drawdown**") of the Loans in accordance with its Drawdown Schedule and provided hereunder. A Drawdown Notice given by the Borrower hereunder is irrevocable and will oblige the Borrower to take the action contemplated on the date specified therein.
- (b) Subject to the provisions of this Agreement, the Borrower may make a Drawdown of the Loans by providing CMHC with a notice (a "Drawdown Notice") in substantially the form attached to this Agreement as Schedule B. The Drawdown will be conditional upon satisfaction of all conditions precedent on or prior to the date that the Borrower delivers the Drawdown Notice to CMHC and, as applicable, on the date of the Drawdown.
- (c) Unless otherwise agreed to by CMHC, the Borrower will not be entitled to make any Drawdown more frequently than once per month (which shall occur on any Thursday of each month (or the next Business Day if the Thursday is not a Business Day)), or as otherwise agreed to in writing by CMHC.
- (d) The Borrower must provide CMHC with a copy of the Drawdown Notice at least ten (10) Business Days prior to the proposed date of the Drawdown (a "**Drawdown Date**"). The Drawdown Date must be a Business Day. The Drawdown Notice must be delivered to CMHC by the Borrower on or prior to 4:00 p.m. (Ottawa time) on a Business Day.
- (e) The Drawdown shall be advanced by CMHC into a depository account designated by the Borrower in respect of the Project, the particulars of which have been provided to CMHC (the "**Project Funding Account**").

4. INTEREST

- (a) Following the delivery by the Borrower of the Drawdown Notice, either four (4) or five (5) Business Days before the Drawdown Date, CMHC will calculate the Interest Rate for the Repayable Loan in the following process, provided that the conditions precedent to the Drawdown are satisfied. CMHC's confirmation of the Interest Rate shall be delivered to the Borrower by email on such date:
 - (i) where the interest rate determined by CMHC is less than or equal to 4.88%, then such interest rate will be set for the Repayable Loan and CMHC's interest rate confirmation shall be delivered to the Borrower; and
 - (ii) in the event the interest rate determined by CMHC exceeds 4.88%, then either (i) the Borrower must provide satisfactory evidence that additional equity or other contributions satisfactory to CMHC will be funded to the Project, and/ or (ii) the amount of the Repayable Loan will be reduced, such that a minimum debt service coverage ratio of 1x can be achieved using the amortization period and applicable interest rate and, once satisfactory evidence that additional equity or other contributions has been provided and/or the Repayable Loan amount has been reduced, such that the required minimum debt service coverage ratio can be achieved, then such interest rate will be set for the Repayable Loan and CMHC's interest rate confirmation shall be delivered to the Borrower (provided that MHC shall not be obligated to set a rate or to make the initial advance to the Borrower if the Borrower fails to fund additional equity or secure additional contribution funding for the Project to the satisfaction of CMHC).

- (b) The Repayable Loan will, from the Drawdown Date, bear interest on the unpaid principal amount thereof at the Interest Rate.
- (c) Interest on the Repayable Loan will be calculated semi-annually not in advance, commencing on the Interest Capitalization Date, or as CMHC may otherwise determine. Interest only payments shall be due and payable on the Repayable Loan in arrears monthly on the 1st day of the month commencing on the Interest Capitalization Date until the date specified in Section 4(e) below.
- (d) Notwithstanding Section 4(c) above, interest only payments that are due monthly commencing from the Interest Capitalization Date until the Interest Payment Commencement Date (the "Interest Capitalization Period") will be financed under the Repayable Loan by CMHC adding such interest amounts to the principal balance of the Repayable Loan; provided further that if, however, the Repayable Loan is or becomes fully drawn by the Borrower during the Interest Capitalization Period such that the interest amounts cannot be capitalized without exceeding the maximum Repayable Loan amount, then any interest due shall be payable by the Borrower from its own resources on the relevant monthly due dates during the Interest Capitalization Period.
- (e) Interest only payments shall be due and payable by the Borrower on the Repayable Loan monthly as described in Section 4(c) above from its own resources commencing from the Interest Payment Commencement Date until and including the earlier of (i) Stabilization; and (ii) the Outside Stabilization Date, as described in the following sentence. Commencing from Stabilization, blended payments of principal and interest shall be made on the Repayable Loan according to an amortization schedule in accordance with Section 6(a); provided that, if Stabilization has not been achieved by the Outside Stabilization Date, then CMHC may, in its sole and absolute discretion, require that blended payments of principal and interest shall be made commencing from the Outside Stabilization Date.
- (f) The Forgivable Loan is interest-free for so long as the conditions specified in this Agreement are met and the Forgivable Loan is not in default. If the Forgivable Loan is in default, CMHC may, at its option, by notice to the Borrower declare that the Forgivable Loan shall bear interest at five (5%) percent *per annum* (provided that, for the avoidance of doubt, the accrual of interest following default will not be sufficient to make CMHC whole in the event of a default under this Agreement and CMHC may exercise other default remedies in accordance with this Agreement and the other Loan Documents). In such case, the Forgivable Loan will bear interest on the unpaid principal amount thereof from the date of such declaration until the date on which the Forgivable Loan is repaid in full at the rate of five (5%) percent per annum, accruing monthly not in advance, commencing on the first day of the month following the month in which such declaration was made by CMHC or as CMHC may otherwise agree in its sole and absolute discretion. Interest payments shall be due and payable in arrears monthly on the 1st day of the month until and including the date on which the Forgivable Loan is repaid in full or as CMHC may otherwise agree in its sole and absolute discretion.

5. COMPUTATION OF INTEREST

Interest will continue to accrue after maturity and default and/or judgment, if any, until payment thereof, and interest will accrue and be compounded monthly on overdue interest, if any. The Borrower shall not be obligated to pay any interest, fees or costs under or in connection with this Agreement in excess of what is permitted by law. For the purposes of the *Interest Act* (Canada), the yearly rate of interest to which any rate calculated on the basis of a period of time different from the actual number of days in the year (360 days, for example) is equivalent is the stated rate multiplied by the actual number of days in the year (360 days, in the example), and the parties hereto acknowledge that there is a material distinction between the nominal and effective rates of interest and that they are capable of making the calculations necessary to compare such rates and that the calculations herein are to be made using the nominal rate method and not on any basis that gives effect to the principle of deemed reinvestment of interest.

6. REPAYMENT OF PRINCIPAL

- (a) Commencing from Stabilization, the principal balance outstanding under the Repayable Loan will be amortized according to an amortization schedule to be agreed between CMHC and the Borrower at such time based on an amortization period of 50 years, resulting in blended payments of principal and interest being payable on the 1st Business Day of each month following Stabilization until the end of the Term. Repayment in full of the remaining principal balance of the Repayable Loan and any interest or other payments due to CMHC shall be due on the final day of the Term.
- (b) If Stabilization has not occurred by the Outside Stabilization Date, CMHC may in its sole and absolute discretion require that blended payments of principal and interest shall be made on the Repayable Loan commencing from the Outside Stabilization Date.
- (c) An equal portion of the principal amount of the Forgivable Loan shall be forgiven on each anniversary of: (i) the date of the advance, if such date is on the 1st day of a month, or (ii) the 1st day of the month following the date of the advance of the Project, if the date of the advance is not on the 1st day of a month, provided that the Borrower has fulfilled its obligations under this Agreement and the Project was completed by July 31, 2023. To the extent any principal amount of the Forgivable Loan is not forgiven, repayment in full of the remaining principal balance of the Forgivable Loan and any interest or other payments due to CMHC shall be due on the final day of the Term, or as CMHC may otherwise agree in its sole and absolute discretion.
- (d) The Loans shall be closed to voluntary prepayment, either in whole or in part, prior to the expiration of the Term, as applicable.

7. PAYMENTS GENERALLY

- (a) Amounts payable by the Borrower hereunder shall be paid by direct debit from an account designated by the Borrower, the particulars of which have been provided to CMHC (the "**Project Loan Payment Account**").
- (b) Amounts due on a day other than a Business Day shall be deemed to be due on the Business Day next following such day. Interest payable under this Agreement is payable both before and after any or all of default, maturity date, demand and judgment.

8. CONDITIONS PRECEDENT

- (a) Conditions Precedent to Effectiveness of Agreement. The effectiveness of this Agreement is subject to and conditional upon the satisfaction (in form and substance satisfactory to CMHC, in its sole discretion, acting reasonably) of each of the following conditions precedent (and the date on which the last condition precedent is satisfied or waived and this Agreement becomes effective, as confirmed in writing by CMHC, is referred to herein as the "Closing Date"):
 - (i) CMHC shall have received executed counterparts of this Agreement and the Loan Documents;
 - (ii) CMHC shall have received executed counterparts of the Material Project Documents;
 - (iii) CMHC shall be satisfied with the information obtained in its due diligence reviews, including with respect to zoning, permitting, legal matters, corporate matters, financial matters, and with respect to title to the Project Lands;
 - (iv) CMHC shall be satisfied with sub-searches confirming that no Encumbrances have been registered on title to the Project Lands other than Permitted Encumbrances;

- (v) CMHC shall be satisfied with the legal structure of the Borrower (including any principals) and the Project, including with respect to any other loans, funding and/or contribution agreement between the Borrower and third parties in connection with the Project or Project Lands (each, a "Co-Investment Agreement");
- (vi) CMHC shall be satisfied with PPSA, insolvency and judgment searches against the Borrower in those jurisdictions as CMHC shall make, which shall show that no financing statement or other filings have been filed or remain in effect and no Encumbrances remain in effect against the Borrower or the assets that relate to the Project except for Permitted Encumbrances, and financing statements, certified statements, or other filings, with respect to which the existing secured party has delivered to CMHC PPSA financing discharge statements or other documentation evidencing the termination of its Encumbrances in the assets that relate to the Project;
- (vii) CMHC shall be satisfied with its review of the Project Budget and all Material Construction Contracts, including evidence that the Borrower has entered into: (A) a fixed-price contract for the Project; or (B) a construction management arrangement wherein fixed-price contracts are entered into for no less than twothirds (²/₃) of the budgeted Hard Costs;
- (viii) CMHC shall have received from the Borrower evidence that the party that is acting as the manager of the Construction (whether this is the Borrower, an affiliate of the Borrower or a third party) previously successfully completed (on time and on budget) the management of a construction plan for a similar project;
- (ix) CMHC shall have received from the Borrower a schedule of when advances will be requested in connection with this Agreement and, as required by CMHC, any Co-Investment Agreement, which shall be appended hereto as Schedule D (and, as amended from time to time in accordance with the terms hereof in the form required by CMHC, the "Drawdown Schedule");
- (x) CMHC shall have received such third party reports supported by reliance letters addressed to CMHC, as CMHC requires, including Quantity Surveyor Reports;
- (xi) CMHC shall have received evidence that:
 - (A) the Project will be Constructed such that a minimum of 20.78% of the Housing Units in the new building that is being Constructed as the Project will meet or exceed the Accessibility Criteria and access to all of the Housing Units in the entirety of the Project Lands and the common areas in the Project Lands will be barrier free pursuant to the Accessibility Criteria; and
 - (B) the Project will be Constructed such that the applicable Energy Efficiency Criteria will be met or exceeded;
- (xii) CMHC shall have received in respect of the Borrower:
 - (A) a copy of the by-law of the Borrower authorizing, *inter alia*, the execution and delivery of this Agreement, the borrowing of the Loans and the issue of the Debenture; and

- (B) certificates of the Clerk and Treasurer of the Borrower, including the names and true signatures of the officers authorized to execute, deliver and perform, as applicable, this Agreement and all other documents to be delivered hereunder;
- (xiii) CMHC shall have received a customary written legal opinion as to creation and existence of the Borrower, power and capacity, due authority, execution, delivery, and no breach of constituting documents and applicable law in respect of the entry and performance by the Borrower of the Loan Documents and the Debenture, and in respect of enforceability of the Debenture against the Borrower, addressed to CMHC and dated on or just prior to the Closing Date, from counsel for the Borrower;
- (xiv) CMHC shall have received evidence satisfactory to CMHC from an independent qualified environmental Consultant that the Project Lands and any buildings on the Project Lands are not impacted by Hazardous Materials, provided that any reports prepared by such Consultant shall be supported by reliance letters addressed to CMHC;
- (xv) CMHC shall have received evidence that the Borrower shall have opened the Project Funding Account and entered into a pre-authorized debit (PAD) agreement for making payments to CMHC from the Project Loan Payment Account by direct debit in accordance with Section 7(a), and executed and delivered any documentation required in respect thereof;
- (xvi) CMHC shall have been paid all accrued and unpaid fees, and reasonable costs and expenses to the extent then due and payable to CMHC on or just prior to the Closing Date;
- (xvii) CMHC shall have received a certificate signed on behalf of the Borrower, dated on or just prior to the Closing Date:
 - (A) confirming that the Borrower has received all required co-investment commitments and governmental authorizations and third party approvals (or arrangements reasonably satisfactory to CMHC in lieu of such coinvestment commitments and approvals) from each relevant third party and applicable Governmental Authority that are contemplated hereby and/or that are necessary in connection with the Project and/ or that may be required by Applicable Laws (if any); and
 - (B) confirming the solvency of the Borrower;
- (xviii) CMHC shall have received from the Borrower the documentation and other information that are required by CMHC in respect of its "know-your-customer" policies and procedures;
- (xix) satisfactory labour and material and performance bonds as may be required by CMHC (in each case, in an amount no less than 50% of the amount of the relevant Construction Contract) issued by a surety acceptable to CMHC relating to all or a portion of the Construction, such bonds to be in customary form typically utilized within the construction industry and otherwise acceptable to CMHC (which bonds shall contain dual obligee riders in favour of CMHC) and in such amount as may be required hereunder;

- (xx) CMHC shall have received written confirmation from the Borrower affirming its commitment to contribute annually the sum of \$90,000 from the commercial space in respect of the Project; and
- (xxi) CMHC shall have received such financial and other information or documents relating to the Borrower as CMHC may reasonably require.
- (b) Conditions Precedent to the Drawdown. The obligation of CMHC to advance the Drawdown hereunder is subject to and conditional upon the satisfaction of each of the following conditions precedent on or just prior to the date the applicable Drawdown Notice is delivered (or such earlier date as may be specified below):
 - (i) CMHC shall have received a completed Drawdown Notice from the Borrower;
 - (ii) in the case of the Repayable Loan, the Interest Rate shall have been set in accordance with the terms hereof;
 - the representations and warranties deemed to be repeated pursuant to Section 12 on the Drawdown Date will continue to be true and correct as if made on and as of the Drawdown Date;
 - (iv) no default or Event of Default will have occurred and be continuing on the Drawdown Date, or would result from making the requested advance;
 - (v) a Material Adverse Change will not have occurred and be existing on the Drawdown Date, or would result from making the requested advance;
 - (vi) CMHC shall be satisfied with sub-searches confirming that no Encumbrances have been registered on title to the Project Lands other than Permitted Encumbrances, and in particular, CMHC shall not have received notice of the existence of any claim for Encumbrance made under Construction Lien Laws that has not been discharged from title in accordance with the provisions of this Agreement;
 - (vii) the Borrower must have delivered to CMHC all reporting, as and when required by Section 13;
 - (viii) CMHC shall be satisfied that the Minimum Borrower Contribution will have been invested by the Borrower as of the Drawdown Date;
 - (ix) CMHC shall have received evidence that the Borrower can meet the on-going operational funding requirements for the Project and that, with respect to the Project's rental income generating space(s) (e.g. office and retail spaces), the Project achieves a minimum Debt Service Coverage Ratio of 1x (the "Viability Criteria");
 - (x) CMHC shall have received evidence of (i) a \$105,000 annual subsidy by The Corporation of the City of Cornwall for the Project; (ii) an investment of \$4,027,054.54 by The Corporation of the City of Cornwall in the Project (\$2,634,054.54 by way of project equity and \$1,393,000 by way of a land valuation/land donation); and (iii) an investment of \$3,719,461 in capital by the Ministry of Municipal Affairs and Housing;
 - (xi) CMHC shall have received evidence that the Borrower has in place appropriate insurance as required by CMHC from time to time, including as set forth in Schedule I attached hereto with insurers licensed to carry on business in the

jurisdiction of the Project Lands with an A.M. Best Company, Inc. financial rating of not less than A– (the "**Insurance Requirements**"), including, prior to the Drawdown hereunder, copies of all initial certificates of insurance relating to such insurance;

- (xii) CMHC shall have received evidence that all Permits necessary for Construction which relate to:
 - (A) Construction in respect of which the Drawdown is being made; and
 - (B) all prior Construction,

are in place at the time of the Drawdown;

- (xiii) CMHC shall have received evidence that all required Holdbacks have been made;
- (xiv) CMHC shall have received a then current Project Status Certificate in the form provided in Schedule H signed by an officer on behalf of the Borrower;
- (xv) prior to the Drawdown, CMHC shall have received evidence of the completion of, or of arrangements reasonably satisfactory to CMHC for the completion of, all other actions, recordings and filings of or with respect to this Agreement, the Loan Documents, and the Material Project Documents that CMHC may deem reasonably necessary;
- (xvi) all other terms and conditions of this Agreement upon which the Borrower may obtain advances that have not been waived will have been fulfilled as of the Drawdown Date.
- (c) **Documentation**. All documents and evidence delivered pursuant to this Section must be in full force and effect, and in form and substance satisfactory to CMHC in its sole and absolute discretion, acting reasonably.
- (d) **Waiver**. The conditions set forth in Sections 8(a) and 8(b) are inserted for the sole benefit of CMHC and may be waived by CMHC, in whole or in part (with or without terms or conditions), in respect of any Drawdown without prejudicing the right of CMHC at any time to assert such conditions in respect of any subsequent Drawdown.

9. RECORDS

- (a) CMHC will maintain records evidencing the Drawdown made by the Borrower under this Agreement. CMHC will record the amount of each borrowing thereunder, the payment of principal and interest and all other amounts becoming due or paid to CMHC under this Agreement. CMHC's accounts and records constitute, in the absence of manifest error, conclusive evidence of the indebtedness of the Borrower to CMHC pursuant to this Agreement.
- (b) CMHC reserves the right to review, analyze and audit the costs of the Borrower in connection with the Project to ensure compliance with this Agreement and the Program. The Borrower will maintain proper and detailed records and statements of account, including receipts, vouchers, invoices, and other documents related to the Project Costs and shall permit CMHC, or its designated representative, to access to such records and statements for audit and inspection purposes within five (5) Business Days of such written request from CMHC.

10. LOAN DOCUMENTS

In consideration for the Loans and in addition to all other obligations of the Borrower to CMHC under this Agreement, the Borrower shall provide the following documents in form and substance satisfactory to CMHC in its sole and absolute discretion, acting reasonably (and which, if applicable, shall be registered under applicable legislation), subject only to Permitted Encumbrances, if any:

- (a) executed debenture in respect of the Forgivable Loan and the Repayable Loan in the form specified in Schedule K hereto, evidencing the Indebtedness hereunder (collectively referred to as the "**Debenture**");
- (b) an Operating Agreement;
- (c) if requested by CMHC, any other documents deemed necessary by CMHC in its sole discretion, acting reasonably.

11. RECOURSE

CMHC shall have full recourse to the Borrower and the Project for the full term of the Loan.

12. **REPRESENTATIONS AND WARRANTIES**

The Borrower represents and warrants to CMHC, as of the Closing Date and (subject to any amendments or exceptions from time to time approved in writing by CMHC in its sole and absolute discretion, acting reasonably) as of the Drawdown Date, that:

- (a) it is duly incorporated and established, validly existing and qualified to carry on its operations in Ontario, under the laws of its jurisdiction of incorporation and establishment, namely the *Municipal Act*, 2001;
- (b) it has the power, authority and right:
 - (i) to enter into and deliver, and to exercise its rights and perform its obligations under, the Loan Documents and all other instruments and agreements delivered by it pursuant to any of the Loan Documents, and
 - to own its property and carry on its operations as currently conducted and as currently proposed to be conducted by it and without limiting the foregoing, the Borrower has all necessary power and authority to own its respective interest in the real and personal property comprising the Project Lands and to develop and complete the Project and is duly licensed, registered and qualified to carry out such activities;
- (c) the execution, delivery and performance of the Loan Documents to which it is a party have been duly authorized by all necessary corporate and other actions and do not violate its respective constating documents, any Applicable Laws or any agreements to which it is subject or by which it is bound;
- (d) it has obtained, made or taken all consents, approvals, authorizations, declarations, registrations, filings, notices and other actions whatsoever required as to the date hereof in connection with the execution and delivery by it of each of the Loan Documents to which it is a party and the consummation of the transactions contemplated in the Loan Documents;
- (e) it has paid or made adequate provision for the payment of all taxes levied on it or on the Project Lands or income that are due and payable, including interest and penalties, or has accrued such amounts in its financial statements for the payment of such taxes, except taxes that are not material in amount or that are not delinquent (or if delinquent are either (A) Permitted Encumbrances, or (B)

being contested in good faith, and in respect of which non-payment would not individually or in the aggregate constitute, or be reasonably likely to cause, a Material Adverse Change), and there is no material action, suit, proceeding, investigation, audit or claim now pending, or to its knowledge threatened, by any Governmental Authority regarding any taxes that is reasonably likely to cause a Material Adverse Change nor has it agreed to waive or extend any statute of limitations with respect to the payment or collection of taxes;

- (f) its most recent financial statements provided to CMHC fairly present its financial position as of the date thereof and its results of operations and cash flows for the fiscal period covered thereby, and since the date of such financial statements, there has occurred no Material Adverse Change in its business, operations or financial condition;
- (g) it is not subject to any judgment, order, writ, enforcement charge, injunction, decree or award, or to any restriction, rule or regulation (other than customary or ordinary course restrictions, rules and regulations consistent or similar with those imposed on other Persons engaged in similar businesses) that has not been stayed or of which enforcement has not been suspended and that individually or in the aggregate constitutes, or is reasonably likely to cause, a Material Adverse Change;
- (h) except as disclosed in Schedule L, there is no claim, action, prosecution or other proceeding of any kind pending or threatened against it or any of its assets or properties before any court or administrative agency which could reasonably be expected to have a Material Adverse Change upon its financial condition or operations or its ability to perform its obligations under this Agreement, as applicable, and there are no circumstances of which it is aware which might give rise to any such proceeding which has not been fully disclosed to CMHC;
- no event has occurred which constitutes, or which, with notice, lapse of time, or both, would constitute, a default or an Event of Default or a breach of any covenant or other term or condition in respect of any other of its outstanding debt;
- (j) there are no liabilities (including contingent liabilities) that, in the aggregate, are material in respect of the Project or could reasonably be expected to cause a Material Adverse Change to the Borrower or the Project, which have not been previously disclosed in writing to CMHC;
- (k) it:
- (i) has not committed any act of bankruptcy;
- (ii) is not insolvent, or has not proposed or given notice of its intention to propose, a compromise or arrangement to its creditors generally;
- (iii) has not had an application for a bankruptcy order, or application for the appointment of a receiver, trustee, inspector, monitor, or similar party filed against it;
- (iv) has not made a voluntary assignment in bankruptcy, taken any proceeding with respect to any stay, proposal, sale, compromise or arrangement, taken any proceeding or corporate action to have itself declared bankrupt, liquidated, dissolved or wound-up, taken any proceeding to have a receiver appointed of any part of its assets;
- (v) has not had the holder of any Encumbrance take possession of its property; or

- (vi) has not had an execution or distress become enforceable or become levied, or an enforcement of security or foreclosure, on any material portion of its assets and property;
- (I) it is not in default under a CMHC-insured mortgage, or loan or contribution provided by CMHC nor is it in default under any other mortgage, loan or contribution and any related operating agreements or any Co-Investment Agreement in respect of the Project or Project Lands;
- (m) it is the sole registered owner of the freehold title to the Project Lands with good and marketable freehold title thereto, and any other real and personal property of any nature which is part of the Project Lands (except for such personal property as may be owned by a tenant or leased by the Borrower), in each case free and clear of all Encumbrances except Permitted Encumbrances, and no Person has any agreement or right to acquire an interest in the Project Lands;
- (n) to the best of its knowledge and belief, after due inquiry and all reasonable investigation:
 - (i) it is not engaged in any unfair labour practice that could reasonably be expected to cause a Material Adverse Change; and there is no unfair labour practice complaint pending against it or threatened against it, before any Governmental Authority that if adversely determined could reasonably be expected to cause a Material Adverse Change;
 - (ii) no grievance or arbitration arising out of or under any collective bargaining agreement is pending against it or threatened against it, that is reasonably likely to cause a Material Adverse Change; and
 - (iii) no strike, labour dispute, slowdown or stoppage is pending against it or threatened against it and no union representation proceeding is pending with respect to any employees of it, except (with respect to any matter specified in this sentence, either individually or in the aggregate) such as could not reasonably be expected to cause a Material Adverse Change;
- (o) except as disclosed to CMHC in writing and accepted by CMHC, to the best of its knowledge after due inquiry, it, the Project and the Project Lands are in compliance with all Applicable Laws (other than Environmental Laws, which are addressed below) where such default could reasonably be expected to cause a Material Adverse Change and there are no facts known or which ought reasonably to be known, in either case after due enquiry, which could give rise to a notice of noncompliance to such extent with any Applicable Laws (other than Environmental Laws, which are addressed below);
- (p) to the best of its knowledge, there are no pending or proposed changes to Applicable Laws which would render illegal or materially restrict the Construction or operation of the Project;

(q)

- the Project is zoned to permit the Construction and operation of the Project and the existing and proposed uses of the Project comply in all material respects with all Applicable Laws;
- (ii) it has not received notice of any proposed rezoning of all or any part of the Project that would be reasonably likely to cause a Material Adverse Change in respect of the Construction of the Project or otherwise nor has it received notice of any expropriation of all or any part of the Project Lands; and

- (iii) the only real property interests necessary for the construction of the Project in accordance with the Plans and Specifications are its real property interests in the Project Lands and any easements, interests or rights appurtenant thereto;
- (r) it is in good standing under each Construction Contract;
- (s)
- (i) it has obtained all Material Project Documents and Material Licences necessary or desirable to develop, execute the Construction and operate the Project in accordance with the Project Budget, the Plans and Specifications and the Construction Schedule, other than those not required or able to be obtained until a later stage of Construction or until Total Completion, provided those not obtained may be reasonably expected to be received in the ordinary course of business prior to the date when required to complete the transactions provided for in the Material Project Documents and to permit it to develop, execute the Construction and operate the Project in accordance with the Project Budget, the Plans and Specifications and the Construction Schedule;
- (ii) true copies of each of the Material Project Documents and Material Licences existing as of the date of this Agreement have been delivered to CMHC;
- (iii) it has not been required to obtain or provide any letters of credit or letters of guarantee in connection with the issuance of any Material Project Documents or Material Licence with respect to the Project; and
- (iv) no event has occurred and is continuing that would constitute a material breach of or a material default under any Material Project Document or Material Licence and each Material Project Document to which it is a party is binding upon it; and to the best of its knowledge, is a binding agreement of each other Person who is a party thereto;
- (t) except as identified in Schedule J attached hereto, to the best of its knowledge after due inquiry:
 - there has been no complaint, prosecution, investigation or proceeding, environmental, respecting the operations or assets of the Borrower, including without limitation the Project Lands and assets that relate to the Project by a Governmental Authority or any third party;
 - (ii) the Project Lands and any buildings on the Project Lands are in compliance with and it operates in compliance with all applicable Environmental Laws and there are no Hazardous Materials in, on, under, migrating from or to the Project Lands not in compliance with Environmental Laws; and
 - (iii) it possesses all Permits as may be necessary to conduct its operations and maintain the assets that relate to the Project, in compliance with Requirements of Applicable Law, and such Permits will not expire during the Term;
- (u) except as disclosed to CMHC in Schedule M, to the best of its knowledge after due inquiry:
 - there are no claims, demands, actions or other proceedings pending or, to the knowledge of the Borrower, threatened affecting the development, Construction or operation of the Project on the Project Lands at law or in equity before or by any Governmental Authority, with respect to aboriginal rights, treaty rights or the duty to consult; and

- (ii) neither the Borrower, nor the Project Lands are subject to any outstanding judgement, order, writ, injunction or decree with respect to aboriginal rights, treaty rights or the duty to consult affecting the development, construction or operation of the Project on the Project Lands, and neither the Project nor the Project Lands are subject to a modern treaty;
- (v) it is not a non-resident for the purposes of Section 116 of the *Income Tax Act* (Canada);
- (w) it is in compliance with all terms and conditions of all insurance policies issued in respect of the Project; and
- (x) the contents of the Integrity Declaration remain true and correct.

13. **REPORTING COVENANTS**

The Borrower covenants and agrees with CMHC to deliver (or cause to be delivered) to CMHC, at the expense of the Borrower:

- (a) <u>Monthly Progress Reports</u>: during the Construction of the Project, following the earliest of (i) the advance to the Borrower hereunder, and (ii) the advance under any Co-Investment Agreement, as soon as available and in any event within thirty (30) days after the end of each month progress reports prepared by an Independent Cost Consultant in relation to the Project, in each case providing detailed information regarding the planning, design, construction, financing, revenue generation and performance monitoring of the Project including:
 - (i) an updated to the Drawdown Schedule, Project Budget and Construction Schedule together with comments on any material variances from the original Drawdown Schedule, Project Budget and Construction Schedule provided to CMHC;
 - comments on any material changes to the Project or any potential or actual problem areas which have been identified and may affect completion of the Project in accordance with the Project Budget and Construction Schedule provided to CMHC; and
 - Project consultants' certificate(s), substantially in the form of Schedule G attached hereto and contractor statutory declarations on properly sealed CCDC Form 9A-2001 or, alternatively, on other forms of statutory declarations that contain, at a minimum, the information contained in CCDC Form 9A-2001;
- (b) One-time Project Reports Upon Completion: within sixty (60) days of the date of advance, a report to CMHC identifying all material deviations from the Plans and Specifications, including those that may have impacted the Project's energy consumption or greenhouse gas ("GHG") emissions plan, accessibility plan and overall eligibility under the Program; where such deviations have resulted in or are likely to have a 10% or more change in the energy consumption or GHG emissions of the Project, and an updated Energy Consumption GHG Emission Analysis Report for use by CMHC to assess energy consumption and GHG emission reduction performance of the completed Project as against the Energy Efficiency Criteria;
- (c) <u>Annual Program Criteria Compliance Reports</u>: following the Date of Occupancy, detailed information in relation to the Project, such as financing, revenue generation and performance monitoring of the Project, on an annual basis within one hundred and twenty (120) days of the end of the fiscal year of the Borrower, and such other information as CMHC deems necessary, including reports, the frequency of which may vary, that include, but are not limited to, the following information:

- (i) a current rent roll;
- (ii) number of units at market rents (if any);
- (iii) ongoing satisfaction of the Viability Criteria;
- (iv) percentage of units that satisfy or exceed the Affordability Criteria; and
- (v) number of units occupied by priority population served by the Project (if any);
- (d) <u>Annual Financial Statements:</u> as soon as available and in any event within one hundred and twenty (120) days after the end of each of its fiscal year, the annual financial statements of the Borrower, if applicable, reflecting the results for residential components and for non-residential components (such as commercial space) separately, including a balance sheet/statement of financial position, statement of income/statement of operations, statement of changes in equity/statement of changes in net assets, statement of cash flows and source and application of funds for such fiscal year, which will be prepared in accordance with GAAP on an audited basis;

and any auditor's report shall include: 1) a statement as to whether the Replacement Reserve Fund has been maintained, and the annual contribution has been funded to the Replacement Reserve Fund, in accordance with section 14(a)(xvii) hereof; and 2) a statement as to whether all earnings accruing to the Replacement Reserve Fund have been recorded and form part of such fund.

- (e) The Borrower shall ensure that the use of personal information of tenants or occupants required to fulfill the foregoing reporting obligations, if any, is authorized and consented to by such persons and is otherwise in accordance with applicable privacy laws.
- (f) All reporting required under this Agreement shall be stand-alone Project reporting, isolating the Project's financial and operating information from that of other projects owned by the Borrower, if any.

14. COVENANTS

- (a) **Positive Covenants**. The Borrower covenants and agrees with CMHC, while this Agreement is in effect and except as otherwise permitted by the prior written consent of CMHC, to:
 - (i) complete the Project in accordance with the Plans and Specifications;
 - (ii) pay all sums of money when due by it under this Agreement;
 - (iii) satisfy the Viability Criteria;
 - (iv) keep its existence in full force and effect and carry on and conduct its business and operations in a proper, efficient and businesslike manner, in accordance with good business practice and all Applicable Laws;
 - take all reasonable action to maintain all rights, privileges and franchises necessary in the normal conduct of its business and to comply in all material respects with all Material Project Documents, Material Licences and Requirements of Applicable Law;
 - (vi) permit CMHC or its representatives, from time to time, to visit and inspect the Project and from time to time at reasonable intervals upon reasonable notice, the premises, properties and assets of the Borrower and examine and obtain copies of the records of the Borrower or other information in respect of the Project and

discuss the affairs of the Borrower in respect of the Project with the auditors, counsel and other professional advisers of the Borrower;

- (vii) promptly provide CMHC and the Independent Cost Consultant with all information reasonably requested by any of them from time to time at reasonable intervals in connection with this Agreement concerning its financial condition and the Project and during normal business hours and from time to time at reasonable intervals upon reasonable notice, permit representatives of CMHC to inspect the Project and to examine and take extracts from its financial records, including records stored in computer data banks and computer software systems regarding the Project, and to discuss its financial condition with its senior officers and its auditors;
- (viii) maintain documents, vouchers, records and accounts that pertain to the Project for not less than seven (7) years following the date of receipt or production of such documents, vouchers, records and accounts and maintain books, records and accounts in accordance with GAAP;
- (ix) keep its assets that relate to the Project fully insured in accordance with the Insurance Requirements;
- (x) keep all property necessary for its operations in good working order and condition, normal wear and tear excepted, except to the extent that the failure to do so does not constitute and could not individually or in the aggregate reasonably be expected to cause a Material Adverse Change;
- (xi) comply with the provisions of Construction Lien Laws, including retaining any Holdbacks required thereby, if applicable, and in the event that any Encumbrance is registered under Construction Lien Laws against the Project Lands (or notice of such Encumbrance is provided to CMHC), the Borrower shall cause such Encumbrance to be vacated or discharged within ten (10) days of the earlier of: (i) the date of registration thereof or the date the Borrower has received written notice thereof, or (ii) the date that the Borrower has been provided written notice thereof by CMHC, with any payment thereunder being made from financial resources other than the Loans (and, for the avoidance of doubt, no Drawdown will be permitted under the Loans until such Encumbrance is vacated or discharged to the satisfaction of CMHC);
- (xii) pay or discharge, or cause to be paid or discharged, before the same will become delinquent (i) all taxes imposed upon it or upon its income or profits or in respect of its operations or the Project Lands and file all tax returns in respect thereof, (ii) all lawful claims for labour, materials and supplies, (iii) all required payments under any of its Debt, and (iv) all other obligations; provided, however that it will not be required to pay or discharge or to cause to be paid or discharged any such amount so long as the validity or amount thereof is being contested in good faith by appropriate proceedings and an appropriate financial reserve in accordance with GAAP and satisfactory to CMHC has been established;
- (xiii) provide evidence satisfactory to CMHC annually of the payment of all taxes assessed and levied in relation to the Project Lands, as soon as available and in any event within thirty (30) days of the confirmation that all of the current year's taxes have been paid;
- (xiv) diligently and efficiently manage and operate the Project to meet its financial obligations on a sustainable and permanent manner on a long-term basis and to maintain the Project Lands in a satisfactory state of repair, in accordance with (i) prudent industry practice; (ii) the Material Project Documents and Material

Licences; (iii) the Project Budget and the Construction Schedule; and (iv) all insurance policies issued in respect of the Project, in all material respects;

- (xv) if requested by CMHC, provide a copy of any advance request (together with supporting documentation) made pursuant to any Co-Investment Agreement;
- (xvi) establish and maintain a replacement reserve fund (the "**Replacement Reserve Fund**") funded into the Project Funding Account;
- (xvii) fund, annually, an amount equivalent to 4% of Effective Gross Income by way of maintaining the Replacement Reserve Fund in the Project Funding Account;
- (xviii) in the case of the Repayable Loan, if completion of the Project has been achieved but a portion of the Repayable Loan remains undrawn after December 31, 2024, then upon request by CMHC, the Borrower shall deliver a Drawdown Notice in respect of the entire outstanding undrawn amount of the Repayable Loan and the Borrower shall enter into an agreement with CMHC setting out the terms and conditions for making ongoing progress draws for capital expenses associated with the Project or other expenses associated with the Project as authorized by CMHC;
- (xix) to deposit all income in respect of the Project (whether from rent or operating subsidies, and whether or not all or part of the Project Lands are managed or operated by a separate manager/ operator) received by the Borrower into the Project Loan Payment Account;
- (xx) it will from time to time, when requested by CMHC, provide to CMHC evidence of its full compliance with its representations and warranties in Section 12; and
- (xxi) it shall (A) maintain in place appropriate insurance as required by CMHC from time to time, including in accordance with the Insurance Requirements and otherwise in accordance with this Agreement and the Operating Agreement; and (B) once a new construction project is completed and the Borrower begins operations at the Project Lands but prior to the Date of Occupancy, provide copies of all certificates of insurance relating to such insurance.
- (b) **Special Covenants**. The Borrower covenants and agrees with CMHC, while this Agreement is in effect and except as otherwise permitted by the prior written consent of CMHC, that:
 - (i) <u>Affordability</u> the Borrower will maintain the affordability of the housing within the Project for a period of 20 years from the Date of Occupancy, such that average rents for a minimum of 31% of the Project's Housing Units are below 80%¹ of the Median Market Rental Rate (the "Affordability Criteria");
 - (ii) <u>Accessibility</u> the Project will be constructed such that a minimum of 20.78% of the Housing Units in the new building that is being constructed as the Project will meet or exceed the accessibility criteria required by CMHC and access to all of the Housing Units in the entirety of the Project Lands and the common areas in the

¹ Please refer to CMHC's Rental Market Survey which can be accessed at: <u>https://www03.cmhc-schl.gc.ca/hmip-pimh/en#Profile/1/1/Canada</u>

Project Lands will be barrier free pursuant to the accessibility criteria required by CMHC²; and

- (iii) Energy Efficiency the Project will be constructed such that (A) a minimum 33.3% decrease in energy consumption; and (B) a minimum 32.8% decrease in greenhouse gas emissions will be achieved, in each case as at the date of advance relative to performance levels achievable by a building equivalent to the new building that is being constructed as the Project³ except that it is designed to meet the requirements of the National Energy Code of Canada for Buildings 2015 (collectively, the "Energy Efficiency Criteria").
- (c) **Notices.** The Borrower covenants and agrees with CMHC, while this Agreement is in effect, to promptly notify CMHC on becoming aware:
 - (i) of Stabilization having occurred;
 - (ii) of the Date of Occupancy;
 - (iii) of the occurrence of any litigation, dispute, arbitration or other proceeding the result of which if determined adversely would be a judgement or award against it that would result in a Material Adverse Change, and from time to time provide CMHC with all information requested by CMHC concerning the status of any such proceeding;
 - (iv) of any Material Adverse Change or any matter that is likely to have a Material Adverse Change of which it becomes aware or ought to have been aware, using reasonable diligence;
 - (v) of any event which constitutes, or which, with notice, lapse of time, or both, would constitute a default or an Event of Default of which it becomes aware or ought to have been aware, using reasonable diligence;
 - (vi) of any circumstance whereby the Drawdown Schedule will be materially altered, including material changes under any funding and/or contribution agreement between the Borrower and third parties in connection with the Project or the Project Lands, any delays in respect of the Total Completion of the Project and any circumstance where Project Costs are expected to exceed the current Budgeted Project Costs as set out in the most recent Project Budget;
 - (vii) of the occurrence of an event of Force Majeure, describing in reasonable detail the effects of such event on the Project, the action which the Borrower intends to take to remedy such event and the estimated date when the event of Force Majeure will be remedied and will cease to impair the Project;
 - (viii) of the cessation of any event of Force Majeure;

² Please refer to CMHC's Accessibility Standards – New Construction which can be accessed at: <u>https://assets.cmhc-schl.gc.ca/sites/cmhc/nhs/co-investment-fund/nhs-co-invest-fund-environmental-and-accessibility-new-construction-en.pdf?rev=b1472a6b-1049-4640-b8de-f429bc2a9d90</u>

³ Please refer to CMHC's Environmental Efficiency Requirements — New Construction which can be accessed at: <u>https://assets.cmhc-schl.gc.ca/sites/cmhc/nhs/co-investment-fund/nhs-co-invest-fund-environmental-and-accessibility-new-construction-en.pdf?rev=b1472a6b-1049-4640-b8de-f429bc2a9d90</u>

- (ix) of any damage to or destruction of any property that forms part of the Project or the Project Lands, which might give rise to an insurance claim, if the cost of any repairs to or replacement of assets of the Borrower exceeds \$0;
- (x) of any material instrument related to the Project of which the Borrower has notice or which is registered against title to the Project, and provide to CMHC a true copy of such instrument;
- (xi) of any threatened expropriation or notice of expropriation with respect to the Project Lands, such notice to be delivered forthwith upon the Borrower becoming aware of such threatened expropriation or its receipt of notice of such proceedings and the Borrower hereby covenants and agrees that no such claim with respect to the Project Lands shall be compromised or settled without the prior written consent of CMHC; or
- (xii) of any non-compliance in any material respect with Environmental Laws relating to the Project Lands or the buildings on the Project Lands, and of any notice, investigation, non-routine inspection or material inquiry by any Governmental Authority in connection with any Environmental Laws relating to the Project Lands or the buildings on the Project Lands, except in respect of non-compliance with Environmental Laws relating to the Project Lands or the buildings on the Project Lands that has been disclosed in writing to and accepted by CMHC.
- (d) **Negative Covenants.** The Borrower covenants and agrees with CMHC, while this Agreement is in effect and except as otherwise permitted by the prior written consent of CMHC, not to be unreasonably withheld or delayed, that it shall not:
 - (i) take any action, or permit any action to be taken, constituting or likely to result in a breach of any provision in this Agreement;
 - make any Disposition, or permit any Disposition to be made, of the Project, the Project Lands or any part thereof or interest therein, other than Permitted Leases, without the prior written consent of CMHC (not to be unreasonably withheld or delayed);
 - (iii) make any Disposition, or permit any Disposition to be made, other than in the ordinary course of business and on commercially reasonable terms, of the subject Project located at 550 Ninth Street East, Cornwall, Ontario, unless CMHC in its sole and absolute discretion consents to such transfer in writing;
 - (iv) change its name without providing CMHC with at least thirty (30) days' prior written notice thereof;
 - (v) make any change to its fiscal year end (except as may be required by Applicable Laws);
 - (vi) in each case except as may be required by Applicable Law but without prejudice to Section 15(o), consolidate, amalgamate or merge with any other Person; enter into any corporate reorganization or other transaction intended to effect or otherwise permit a change in its existing corporate structure; voluntarily liquidate, wind-up or dissolve itself, or permit any voluntary liquidation, winding-up or dissolution, and the Borrower agrees in any case (for the avoidance of doubt, even in the case of such events as may be required by Applicable Law which do not require prior written consent of CMHC) that (A) CMHC may make such adjustment(s) to the terms of this Agreement and the other Loan Documents and

the structure of the transactions contemplated herein and therein as it determines appropriate in its sole and absolute discretion for the purpose of carrying into effect the purposes of this Agreement and the other Loan Documents and execution of the Project pursuant to the Program, in light of such event or circumstance; (B) the Borrower will cooperate with CMHC in making such changes and/or, at the request of CMHC and at its own cost, will execute and deliver to CMHC all such schedules, assignments, instruments, deeds and documents and do all such further acts and things which CMHC may require for the purpose of carrying into effect the purposes of this Agreement and the other Loan Documents and execution of the Project pursuant to the Program in light of such event or circumstance (in particular, to the extent that the Borrower or CMHC determines that such event or circumstance requires the execution and delivery of different forms of documentation or new or different documentation with one or more different legal entities); and (C) the Borrower will pay any fees and costs of CMHC (including CMHC's counsel) in connection with any of the foregoing;

- (vii) in each case except as may be required by Applicable Law but without prejudice to Section 15(o), amend its organizational documents, or permit its organizational documents to be amended, in a manner that would be prejudicial to the interests of CMHC under the Loan Documents, and the Borrower agrees in any case (for the avoidance of doubt, even in the case of such events as may be required by Applicable Law which do not require prior written consent of CMHC) that (A) CMHC may make such adjustment(s) to the terms of this Agreement and the other Loan Documents and the structure of the transactions contemplated herein and therein as it determines appropriate in its sole and absolute discretion for the purpose of carrying into effect the purposes of this Agreement and the other Loan Documents and execution of the Project pursuant to the Program, in light of such event or circumstance; (B) the Borrower will cooperate with CMHC in making such changes and/or, at the request of CMHC and at its own cost, will execute and deliver to CMHC all such schedules, assignments, instruments, deeds and documents and do all such further acts and things which CMHC may require for the purpose of carrying into effect the purposes of this Agreement and the other Loan Documents and execution of the Project pursuant to the Program in light of such event or circumstance (in particular, to the extent that the Borrower or CMHC determines that such event or circumstance requires the execution and delivery of different forms of documentation or new or different documentation with one or more different legal entities); and (C) the Borrower will pay any fees and costs of CMHC (including CMHC's counsel) in connection with any of the foregoing;
- (viii) effect a continuation into any other jurisdiction;
- (ix) permit any Encumbrance to exist upon the Project Lands except Permitted Encumbrances;
- (x) without the prior consent of CMHC and the concurrence of the Independent Cost Consultant, (A) revise (or permit to be revised) the Plans and Specifications in any material respect (and upon any revision to forthwith provide a copy to CMHC); or
 (B) make (or permit to be made) any material modifications to the Project after Total Completion that could cause the Project not to be maintained and operated in accordance with the Plans and Specifications as approved by CMHC;
- (xi) permit the Project to be owned, maintained or operated by or on behalf of any Person other than the Borrower;

- (xii) make any material amendment, variation or alteration, or consent to any assignment or transfer of, or waive or surrender any of its material rights or material entitlements under, any Material Project Document;
- (xiii) amend or permit the amendment of the Project Budget without the prior consent of CMHC and the concurrence of the Independent Cost Consultant (regardless of whether such changes are within the initial contingency budget), and upon any revision of the Project Budget, the Borrower will forthwith provide a copy to CMHC;
- (xiv) revise or permit the revision of the Construction Schedule to permit Total Completion later than that contemplated in the then current Construction Schedule, except with the consent of CMHC and only so long as the Borrower can demonstrate that it has contributed additional Borrower Contribution sufficient to cover any increased Budgeted Project Costs including any Cost Overruns arising in connection therewith, and upon any revision of the Construction Schedule, the Borrower will forthwith provide a copy to CMHC;
- (xv) enter into or renew, amend, terminate, forfeit or cancel any Material Construction Contracts (or permit such actions) without CMHC's prior approval, and for such purposes the Borrower shall provide drafts of all Construction Contracts and any amendments thereto to CMHC prior to their acceptance by the Borrower;
- (xvi) enter into or renew, amend, terminate, forfeit or cancel any Leases, unless such Lease is a Permitted Lease or such amendments, renewals, terminations, forfeitures or cancellations reflect in all material respects good business practice and such material terms as a prudent owner of a similar property would accept having regard to all relevant factors and the leasing practice in the market at the relevant time;
- (xvii) become a non-resident of Canada within the meaning of Section 116 of the *Income Tax Act* (Canada); or
- (xviii) incur any Debt other than Permitted Debt.

15. DEFAULT

Without limiting any other rights of CMHC under this Agreement, if any one or more of the following events (herein an "**Event of Default**") has occurred and is continuing:

- use of the proceeds of the Loans received by the Borrower for purposes other than the purpose set out in Section 2(b), including use of the proceeds of the Loans for any purpose other than the purpose for which they were advanced;
- (b) fraud or intentional misrepresentation by the Borrower;
- (c) gross negligence or criminal acts of the Borrower resulting in the forfeiture, seizure or loss of any portion of the Project;
- (d) misapplication or misappropriation of rents, insurance proceeds or condemnation awards received by the Borrower;
- (e) the Borrower fails to pay when due any amounts payable under the Loan Documents, and such failure remains un-remedied for three (3) Business Days following CMHC's written notice of default to the Borrower;

- (f) the Borrower breaches or fails to fulfill any one or more of its obligations under the Loan Documents and has not remedied such breach or failure to the sole satisfaction of CMHC, acting reasonably, within thirty (30) days following CMHC's written notice of default to the Borrower, or within any longer timeframe that the parties have agreed to in writing;
- (g) any fraud, misconduct, or false Integrity Declaration (or failure by the Borrower to advise CMHC of any change in circumstances, subsequent to the Borrower's submission to CMHC of the Integrity Declaration, which would thereafter prevent the Borrower from confirming the truth and accuracy of the contents therein);
- (h) any representation or warranty made or deemed to have been made by the Borrower in any Loan Document or in any certificate or ancillary document provided for in any Loan Document shall be false or inaccurate in any materially adverse respect;
- (i) if CMHC (in its sole discretion) considers that the Project no longer satisfies any of the applicable Affordability Criteria, Accessibility Criteria and Energy Efficiency Criteria or that the Borrower no longer satisfies the Viability Criteria;
- the Borrower breaches or fails to fulfill any one or more of its obligations under the Operating Agreement and has not remedied such breach or failure to the sole satisfaction of CMHC, within thirty (30) days of the date on which such breach occurred, or within any other timeframe that the parties have agreed to in writing;
- (k) if CMHC (in its sole discretion) considers that the operation of the Project is not proceeding in accordance with the Operating Agreement or if the Borrower otherwise discontinues or abandons the Project being operated as affordable housing in accordance with the Operating Agreement (for a single period of twenty (20) days or more);
- (I) if CMHC (in its sole discretion) considers that a Material Adverse Change has occurred in the financial condition, operation or ownership of the Borrower;
- (m) the Borrower is unable to pay its debts as such debts become due, or is, or is adjudged or declared to be, or admits to being, insolvent;
- (n) if proceedings are started by any person to dissolve, liquidate, or wind-up the Borrower or to suspend any of its operations;
- (o) any secured creditor, encumbrancer or lienholder, or any trustee, receiver, receiver and manager, agent, bailiff or other similar official appointed by or acting for any secured creditor, encumbrancer or lienholder, takes possession of, or forecloses or retains, or sells or otherwise disposes of, or otherwise proceeds to enforce security over all or any significant part of the assets of the Borrower or gives notice of its intention to do any of the foregoing;
- (p) an event of default by the Borrower under any agreement in relation to the Project or Project Lands, Co-Investment Agreement (if any) or under any other CMHC loan or contribution program; or
- (q) if any other event or circumstance occurs that CMHC (in its sole discretion, acting reasonably) considers is likely to materially and adversely affect the ability of the Borrower to successfully proceed with the Project or otherwise perform all or any of its obligations under the Loan Documents,

then, in such event, the ability of the Borrower to make further Drawdowns under the Loans shall immediately terminate and CMHC may at its option, by written notice to the Borrower, (i) terminate its commitments hereunder, and (ii) declare the Loans to be immediately due and payable in whole, whereupon the principal of the Loans so declared to be due and payable, together with accrued interest

thereon and all fees and other obligations of the Borrower accrued hereunder, shall become due and payable immediately, in each case without presentment, demand, protest or other notice of any kind, all of which are hereby waived by the Borrower.

16. **REMEDIES**

The rights set out herein shall be without limitation, and shall be in addition to all other rights and remedies of CMHC otherwise available under any other provision of the Loan Documents, by operation of law, at equity or otherwise, all of which are hereby expressly preserved, all of which rights shall be cumulative. Furthermore, the Borrower acknowledges and agrees that:

- (a) the Program and the Loans made to the Borrower in support of the Project are intended to further the public interest by achieving certain social outcomes which are of fundamental importance to the federal government of Canada and its agencies, including CMHC;
- (b) CMHC would not have made the Loans to the Borrower without receiving the commitment of the Borrower to comply with the covenants set forth in this Agreement (including the special covenants set out under Section 14(b)) and the Operating Agreement;
- (c) in the event that an Event of Default occurs under this Agreement, CMHC, the Program, other affordable housing providers, the broader affordable housing sector and the public interest will sustain harm, the extent of which cannot be pre-determined or remedied through compensation;
- (d) without restricting or limiting the remedies CMHC may otherwise have upon a breach of this Agreement, CMHC may seek relief by other available legal and equitable remedies, including, without limitation, damages, disgorgement of profits and/or remedies of seizure, injunction and specific performance notwithstanding the termination of this Agreement; and
- (e) all costs and expenses, including the fees of appraisers, advisors, consultants and lawyers, associated with enforcing CMHC's rights under the Loan Documents shall be at the cost of the Borrower.

17. INDEMNIFICATION

- (a) The Borrower irrevocably and unconditionally agrees to indemnify and hold harmless CMHC, and any of its officers, directors, employees, controlling persons, members and representatives, and any of its successors (each of the foregoing, an "Indemnified Person") from and against any and all losses, claims, damages, liabilities, fees, costs and expenses (including fees and disbursements of legal counsel, accounting advisors, receivers and other advisors, together with any interest that may accrue), whether individual, joint and several, or otherwise, to which any such indemnified Person may become subject rising out of or in connection with:
 - (i) the Loan Documents and the Loans;
 - (ii) enforcement of rights and remedies of CMHC in respect of the Borrower under the Loan Documents or at law; and
 - (iii) the failure of the Borrower to comply with all Environmental Laws and any losses suffered by such Indemnified Person for, in connection with, or as a direct or indirect result of, the presence of any Hazardous Material situated in, on or under or migrating from or to the Project Lands, or as a direct or indirect result of, any legal or administrative proceedings with respect to the presence of any Hazardous Material in, on or under, migrating from or to the Project Lands or the buildings on the Project Lands, or the discharge, emission, leak, spill, radiation or disposal by the Borrower of any Hazardous Material into or upon the Project Lands or the

buildings on the Project Lands, the atmosphere, or any watercourse or body of water; including the costs (including legal and professional fees on a full indemnity basis) of defending and/or counterclaiming or claiming against third parties in respect of any action or matter and any cost, liability or damage arising out of a settlement entered into by such Indemnified Person of any such action or matter,

or any actual or threatened claims, actions, suits, inquiries, litigation, investigation or proceeding (any such claims, actions, suits, inquiries, litigation, investigation or proceeding, a "**Proceeding**") relating to any of the foregoing, regardless of whether any such Indemnified Person is a party thereto, provided that none of the Borrower, or any of such Person's respective affiliates, or the respective directors, officers, employees, advisors, and agents of any of the foregoing, shall be liable for any indirect, special, punitive or consequential damages in connection with this Agreement; and provided further that the foregoing shall not apply to indemnified Person may be or become liable. This indemnity is independent of and in addition to any right CMHC may have to seek recovery of costs in any litigation that may result in respect of this Agreement, and shall form part of the obligations secured. The indemnity obligations contained in this Section 17 shall survive and remain in full force and effect in accordance with their terms, notwithstanding the termination of this Agreement or the repayment, satisfaction or discharge of all obligations under any Loan Document.

- (b) The Borrower also agrees to pay (or, at the discretion of such Indemnified Person, reimburse) each such Indemnified Person promptly upon demand for any reasonable fees of legal counsel, court costs, fees of expert witnesses, and other reasonable fees, costs or expenses incurred in connection with investigating or defending any of the foregoing or in connection with the enforcement of any provision of this Agreement, provided that the indemnity will not, as to any Indemnified Person, apply to losses, claims, damages, liabilities or related expenses to the extent that they are found in a court of competent jurisdiction to have resulted from the gross negligence or willful misconduct of such Indemnified Person.
- (c) The Borrower will not, without the prior written consent of each applicable Indemnified Person, effect any settlement of any pending or threatened Proceedings in respect of which indemnity could have been sought hereunder by such Indemnified Person unless such settlement (i) includes an unconditional release of such Indemnified Person in form and substance reasonably satisfactory to such Indemnified Person from all liability on claims that are the subject matter of such Proceedings, (ii) does not include any statement as to or any admission of fault, culpability or a failure to act by or on behalf of any Indemnified Person, and (iii) includes customary confidentiality and non-disparagement agreements.
- (d) Any costs incurred by CMHC under this Agreement shall, from the date of such costs being incurred by CMHC through to the date such costs are repaid by the Borrower, be deemed advanced to the Borrower and shall form part of the obligations secured by this Agreement.

18. FUNDING AND RIGHT TO TERMINATE

- (a) Notwithstanding any provision to the contrary, CMHC may terminate this Agreement by written notice to the Borrower if CMHC, in its sole and absolute discretion, acting reasonably, considers that (i) fraud, misconduct or misrepresentation by the Borrower or a representative of the Borrower has occurred; or (ii) the Borrower has made a false Integrity Declaration or the Borrower has failed to advise CMHC of any change in circumstances, subsequent to the submission by the Borrower to CMHC of the Integrity Declaration, which would thereafter prevent the Borrower from confirming the truth and accuracy of the contents therein.
- (b) CMHC may terminate this Agreement for any reason upon ten (10) Business Days' written notice to the Borrower (a "**Notice of Termination**"), if funding for the Program is no longer available due to no or insufficient appropriations by the Government of Canada. In such event, CMHC will

advance funding for the invoices relating to the Project Costs that have been completed up to the date of the Notice of Termination.

19. COMMON TERMS

The following provisions apply to this Agreement and the other Loan Documents and are referred to in the Loan Documents as the "**Common Terms**".

- (a) Information. (i) The Borrower represents that all information that has been or will be, directly or indirectly, made available to CMHC (or any of its agents, advisors or representatives) by the Borrower (or any of its agents, advisors, or representatives) in connection with this Agreement and the other Loan Documents ("Information"), is or will be, when furnished correct in all material respects and will not, when furnished, contain:
 - (i) any untrue statement of a material fact, or
 - (ii) omit to state a material fact that would otherwise make the statements materially misleading in light of the circumstances under which such statements are made,
 - (iii) and the Borrower agrees that, if at any time before or after the execution of this Agreement and the other Loan Documents, the Borrower becomes aware that any of the statements in paragraphs (i) and (ii) above are or are reasonably likely to be or become incorrect in any material respect, then the Borrower will promptly notify CMHC thereof and, if applicable, promptly supplement the Information or remedy the situation so that such representations will be correct in all material respects.
- (b) **Expenses**. The Borrower agrees to pay all reasonable and documented or invoiced out-of-pocket fees, costs, and expenses incurred by CMHC, including, without limitation:
 - (i) fees, disbursements and other charges of all agents, consultants which have been retained in connection with the Loans and Loan Documents; and
 - all costs and expenses of legal counsel engaged to prepare, review and negotiate and/or execute any documentation related to the Loans and Loan Documents, whether or not such documentation is executed or becomes effective and whether or not the Loans are completed,

and, once paid, such fees, costs and expenses shall not be refundable under any circumstances.

(c) **Confidentiality.**

- (i) None of the terms or substance of this Agreement, the lending transaction and the Loan Documents, and all discussions with CMHC in connection with this Agreement and Loan Documents, the lending transaction and the related documentation, and the due diligence, shall be disclosed, directly or indirectly, by the Borrower to any other person or entity, except with CMHC's prior written consent and except as outlined in paragraph (ii) below.
- (ii) In order to allow the Borrower to seek other financing in the event that the Borrower does not already have such monies/support in place, this Agreement may be disclosed to the Borrower's existing or potential investors (including other levels of government such as provinces, territories or municipalities and their respective entities) and to the Borrower and its officers, directors, employees, attorneys, agents, accountants, advisors, controlling persons and equity holders who are

directly involved in the consideration of the Project on a need to know and confidential basis, but the details of this Agreement are otherwise confidential.

- (iii) the Borrower has been advised that as a Crown Corporation, CMHC is subject to federal legislation, including the Access to Information Act (Canada) and the Privacy Act (Canada). In certain specific circumstances, information submitted by the Borrower and guarantor (if any) to CMHC may be required to be disclosed pursuant to federal legislation. In such cases, to the extent reasonably possible, CMHC will make efforts to advise the Borrower of the required disclosure prior to releasing the information.
- (iv) the Borrower agrees that the information submitted to or collected by CMHC in connection with the Borrower's application to the Program and the transactions contemplated hereunder may be used or disclosed for the following purposes:
 - (A) to assess the Borrower's eligibility for the funding requested under the Program;
 - (B) to assess the Borrower's application, including for prioritization of applications received;
 - (C) to communicate to the Borrower possible opportunities under other National Housing Strategy programs;
 - (D) to communicate to the Borrower possible collaboration opportunities with external parties;
 - (E) for information verification and due diligence purposes, including to detect and protect CMHC from errors and fraud;
 - (F) for any purpose related to the provision of CMHC funding or mortgage loan insurance generally, where applicable;
 - (G) for analytics, policy analysis, data analysis, auditing and research by CMHC;
 - (H) for evaluation and efficient administration of the Program; and
 - (I) for use by CMHC and the Government of Canada for any purpose related to the *National Housing Act* (Canada).
- (v) CMHC and parties engaged on its behalf or collaborating with CMHC to administer the Program, where applicable, are authorized to process and store such information and disclose it, on a need to know basis, to the office of the Minister responsible for CMHC, the Government of Canada, and provinces, territories or municipalities that may invest in, or otherwise provide support for, the Borrower's Project or otherwise collaborate with CMHC, for the purposes outlined above.
- (vi) If the Borrower receives the Loans, CMHC, the Minister for CMHC, the Government of Canada and any other provinces, territories or municipalities that invest in, or otherwise provide support for, the Borrower's Project shall have the right to publicize details of the Project, the funding assistance and the name of the successful Borrower. By executing and delivering this Agreement, the Borrower confirms its consent to the disclosure of this information.

(d) Announcements.

- (i) Other than in cases where disclosure is required to be made by Applicable Law, no announcement or public disclosure relating to this Agreement may be made prior to receiving written approval from CMHC. If the Borrower is legally required to announce or publicly disclose the existence of this Agreement by Applicable Law, the Borrower shall promptly notify Lender of such requirement and the information required to form part of such disclosure (the "Agreement Information"). In such cases, the Borrower shall disclose only that portion of the Agreement Information that is required to be disclosed by Applicable Law, unless otherwise consented to by CMHC, and in any event the Borrower shall (to the extent that this does not breach Applicable Law) provide CMHC with the opportunity to review the Agreement Information prior to Borrower disclosing such Agreement Information.
- (ii) If the Borrower plans to publish any reports and/or materials relating to the Project or aspects of the Project supported by the Loans, the Borrower shall (i) notify CMHC in writing of any such publication at least fifteen (15) Business Days prior to such publication and (ii) if so requested by CMHC in writing, acknowledge CMHC's financial support of the Project or aspects of the Project in such publication in the following manner:

"This project received financing from Canada Mortgage and Housing Corporation (CMHC); however, the views expressed are the personal views of the author and CMHC accepts no responsibility for them / Ce projet est financé en partie par la Société canadienne d'hypothèques et de logement (SCHL), cependant, les opinions exprimées sont les opinions personnelles de l'auteur et la SCHL n'accepte aucune responsabilité pour ces opinions."

- (iii) If requested by CMHC, the Borrower shall publicly acknowledge the making of the Loans in a manner acceptable to CMHC, acting reasonably, which may include the erection of one or more signs at the Project with the name and logo of CMHC and/or the federal government in a form approved by CMHC.
- (iv) If requested by CMHC, the Borrower agrees to participate in surveys and other research approaches such as case studies conducted by CMHC or its agents, in respect of the Project, the Program and Canada's National Housing Strategy.

(e) Miscellaneous.

- (i) None of the Borrower, CMHC, any other Indemnified Person, any of their respective affiliates, or the respective directors, officers, employees, advisors, and agents of any of the foregoing, shall be liable for any indirect, special, punitive or consequential damages in connection with the Loans or the Loan Documents; provided, that the foregoing shall not apply to indemnity obligations with respect to damages of such type suffered by a third party and for which an indemnitee may be or become liable.
- (ii) The Borrower acknowledges that information and documents relating to the Loan may be transmitted through the internet, e-mail or similar electronic transmission systems, and that no Indemnified Person shall be liable for any damages arising from the unauthorized use by others of information or documents transmitted in such manner except to the extent that a final, non-appealable judgment of a court of competent jurisdiction finds that such damages resulted from CMHC's gross negligence or willful misconduct (with respect to transmissions by CMHC) or the

gross negligence or willful misconduct of any other Indemnified Party (with respect to any transmission by such other Indemnified Party).

- (iii) The Borrower shall avoid any conflict of interest with respect to the management and supervision of the Project and the entry into and performance of its obligations under this Loan Agreement and the other Loan Documents during the Term of this Agreement and shall promptly declare any existing, potential or apparent conflict and shall, upon direction of CMHC, take steps to eliminate any conflict, or perception that a conflict of interest exists. In the event that any such conflict of interest, real or perceived, cannot be resolved to the satisfaction of CMHC, acting reasonably, CMHC shall have the right to immediately terminate this Agreement by written notice to the Borrower.
- (iv) It is agreed that the Borrower will make no use whatsoever of the name, logo or initials of CMHC without the express written consent of CMHC.
- (v) No member of the House of Commons or the Senate of Canada shall be admitted to any share or part of this Agreement or to any benefit arising therefrom unless that benefit is also available to the public at large.
- (vi) The management and supervision of the Project are the sole and absolute responsibility of the Borrower. The Borrower is in no way the legal representatives or agents of CMHC and are not authorized to create any obligation on behalf of CMHC or to bind CMHC in any way. This Agreement is not a contract for services or a contract of service. CMHC's responsibilities with respect to the Project are limited to providing financial assistance to the Borrower towards the approved expenditures relating to the Project.
- (f) Interpretation. Any reference in this Agreement to gender includes all genders and words importing the singular include the plural and vice versa. The division of this Agreement into Sections, Exhibits and Schedules and the insertion of headings are for convenient reference only and are not to affect or be used in the construction or interpretation of this Agreement. The Schedules are considered to be part of this Agreement.
- (g) **Currency**. Unless otherwise provided, all dollar amounts are in Canadian currency.
- (h) **Accounting Terms**. Accounting terms used in connection with this Agreement are to be interpreted in accordance with accounting principles generally accepted in Canada, including those set out in the CPA Canada Handbook at the relevant time in effect from time to time in Canada applied in a consistent manner.
- (i) Limitations. Neither the preparation and execution of the Loan Documents or the advance of any monies by CMHC shall bind CMHC to make any advance or loan or further advance or loan, or extend any time for payment of any indebtedness or liability of the Borrower to CMHC. The eligibility of the Borrower for the Loans does not constitute an assurance that it will be approved for CMHC loan insurance, or other forms of CMHC or federal assistance.
- (j) Successors and Assignment. This Agreement shall be binding upon and enure to the benefit of the parties hereto and their respective successors and permitted assigns. CMHC may assign all or part of its rights and obligations under this Agreement to any Person. The rights and obligations of the Borrower under this Agreement may not be assigned without the prior written consent of CMHC, not to be unreasonably withheld or delayed.
- (k) **Set-Off**. CMHC is authorized, but not obligated, at any time, to apply any amount, whether or not then due, to which CMHC otherwise owes the Borrower towards satisfaction of the obligations of

the Borrower due to CMHC under this Agreement. In any claims by CMHC against the Borrower, the Borrower may not assert any set-off or counterclaim that it may have against CMHC.

- (I) Notices. Any notice, direction, demand or other communication given under this Agreement shall, except as otherwise permitted, be in writing and given by delivering it (personally or by courier) or sending it by electronic means addressed to the relevant party at the address set out on the signature pages of this Agreement. Any such communication is deemed to have been validly and effectively given if delivered or transmitted by electronic means on the day of such delivery or transmission if such day is a Business Day and delivery or transmission was made prior to 4:00 pm (Ottawa time) and otherwise on the next Business Day. Any party may change its address for service from time to time by notice given in accordance with the foregoing and any subsequent notice shall be sent to the party at its changed address.
- (m) **Amendments and Waivers**. No amendment or waiver of any provision of this Agreement will be effective unless it is in writing signed by the Borrower and CMHC. No failure or delay, on the part of CMHC, in exercising any right or power hereunder or under any Loan Document shall operate as a waiver thereof.
- (n) Rights Cumulative. CMHC's rights and remedies set out in the Loan Documents and in any other agreement held by CMHC from the Borrower are cumulative and no right or remedy contained in the Loan Documents is intended to be exclusive but each will be in addition to every other right or remedy now or hereafter existing at law, in equity or by statute, or pursuant to any other agreement between the Borrower and CMHC that may be in effect from time to time.
- (o) **Severability**. If any term, covenant, obligation or provision in this Agreement is or becomes prohibited or unenforceable in any jurisdiction, such prohibition or unenforceability shall not invalidate or render unenforceable the provision concerned in any other jurisdiction nor invalidate, affect or impair any of the remaining terms, covenants, obligations or provisions of this Agreement.
- (p) **Further Assurances.** The Borrower covenants and agrees with CMHC that it will, forthwith at any time and from time to time at the request of CMHC and at its own cost, execute and deliver to CMHC all such schedules, assignments, instruments, deeds and documents and do all such further acts and things which CMHC may require for the purpose of carrying into effect the purposes of this Agreement or to better evidence any assignment, including in connection with any changes to Applicable Laws (whether arising as a result of statutory amendments, court decisions or otherwise) which requires the execution and delivery of different forms of documentation. After the occurrence of an Event of Default and for so long as such Event of Default is continuing, the Borrower irrevocably constitutes and appoints CMHC, or any receiver appointed by the court or CMHC, its true and lawful attorney (such power of attorney, being coupled with an interest, shall not be revoked by the dissolution, surrender of charter, winding-up, bankruptcy or insolvency of that party), with full power of substitution, to do any of the foregoing in its name whenever and wherever CMHC or any such receiver may consider it to be necessary or expedient. For the avoidance of doubt, the Borrower will bear the reasonable or invoiced out-of-pocket fees, costs and expenses incurred by CMHC in connection with this Section 19(p).
- (q) No Partnership. Nothing herein contained shall be deemed or construed by the parties hereto or by any third party as creating the relationship of principal and agent or of partnership or of joint venture between the Borrower and CMHC; it being understood and agreed that none of the provisions herein contained or any acts of CMHC or the Borrower, shall be deemed to create any relationship between CMHC and the Borrower other than the relationship of lender and borrower. The Borrower shall rely on its own independent experts in connection with the Project.
- (r) Governing Law. This Agreement shall be governed by and interpreted in accordance with the laws of the Province of Ontario and the laws of Canada applicable therein. The courts of such jurisdiction shall exclusively hear any dispute related to the validity, interpretation or performance of this Agreement.

- (s) **Conflict**. To the extent of any conflict, ambiguity or inconsistency between the provisions of this Agreement and the provisions of the other Loan Documents the provisions of this Agreement shall prevail to the extent of such conflict, ambiguity or inconsistency.
- (t) **No Merger**. This Agreement shall not operate by way of merger of any of the obligations hereunder.
- (u) **Entire Agreement**. This Agreement, the Loan Documents and any other written agreement delivered pursuant to or referred to in this Agreement constitute the whole and entire agreement between the parties in respect of the Loans and supersedes all prior understandings, whether written or oral, between CMHC and the Borrower with respect thereto. There are no verbal agreements, undertakings or representations in connection with the Loans.
- (v) **Time**. Time is of the essence in all provisions of this Agreement.
- (w) Counterparts and Electronic Delivery. This Agreement may be executed in any number of separate counterparts and all such signed counterparts will together constitute one and the same instrument. To evidence its execution of an original counterpart of this Agreement, a party may send a copy of its signature on the execution page hereof to the other parties by means of recorded electronic transmission (including in PDF form) and such transmission shall constitute valid delivery of an executed copy of this Agreement to the receiving party.
- (x) Return by Borrower of Mistaken Payments. If the Borrower receives at any time from CMHC any payment in connection with this Agreement which was made as a result of a mistake or error on the part of CMHC or in respect of payments which were not due to the Borrower under this Agreement at such time (each, a "Mistaken Payment"), the Borrower shall pay in full the amount of any such Mistaken Payment to CMHC on demand, together with interest thereon for each day from and including the date such Mistaken Payment was received by the Borrower, at a fluctuating rate per annum equal to the interbank rate for overnight funds which is applicable to such Mistaken Payment in accordance with market practice. A certificate of CMHC submitted to the Borrower with respect to any Mistaken Payment owing under this Section shall be prima facie evidence thereof, absent manifest error. The parties hereto agree that a Mistaken Payment shall not pay, prepay, repay, discharge or otherwise satisfy any obligations owed by the Borrower, except, in each case, to the extent such Mistaken Payment is, and solely with respect to the amount of such Mistaken Payment that is, comprised of funds received by CMHC from the Borrower for the purpose of making such Mistaken Payment. To the extent permitted by applicable law, the Borrower shall not assert any right or claim to a Mistaken Payment, and the Borrower hereby waives, and is deemed to waive, any claim, counterclaim, defense or right of set-off or recoupment with respect to any demand, claim or counterclaim by CMHC for the return of any Mistaken Payment received, including without limitation waiver of any defense based on "discharge for value" or any similar doctrine.

(Signature pages follow)

Please confirm your acceptance of this Agreement by signing the attached copy of this letter in the space provided and returning it to CMHC.

Yours truly,

CANADA MORTGAGE AND HOUSING CORPORATION

By:	
Name:	
Title:	
By:	
Name:	
Title:	
Address:	700 Montreal Road, Ottawa, ON K1A 0P7
Email:	nhs-contracting@cmhc-schl.gc.ca

We have authority to bind CMHC.

We	acknowledge	and	accept	the	foregoing	terms	and	conditions	on	the	 day	of
, 20												

THE CORPORATION OF THE CITY OF CORNWALL

By:	
	Authorized Signing Officer
Name:	
Address:	
Email:	
Den	
By:	
	Authorized Signing Officer
Name:	
Address:	
Email:	

[/][We] have the authority to bind the Borrower.

Schedule A Definitions

For the purpose of this Agreement, the following terms and phrases shall have the following meanings:

"Accessibility Criteria" means the accessibility requirements as set forth in CMHC's minimum accessibility requirements published from time to time.

"Affordability Criteria" has the meaning set out in Section 14(b)(i).

"Agreement Information" has the meaning set out in Section 19(d)(i).

"Applicable Laws" means, with respect to any Person, property, transaction or event, all present or future applicable laws, statutes, regulations, rules, orders, codes, treaties, conventions, judgments, awards, determinations and decrees of any governmental, regulatory, fiscal or monetary body or court of competent jurisdiction in any applicable jurisdiction (and, for avoidance of doubt, Applicable Laws includes Environmental Laws).

"**Borrower Contribution**" means, at any time and from time to time, the aggregate of (a) the net asset value of the Project Lands; (b) any monetary contribution to the Project by the Borrower; and (c) any non-monetary contribution to the Project by the Borrower, as CMHC shall in its sole discretion consent to being included in the calculation of "**Borrower Contribution**".

"**Budgeted Project Costs**" means the costs associated with the Project, including all budgeted Hard Costs and all budgeted Soft Costs described as a line item in the Project Budget, on the basis of an allocation of costs 91.16% for residential and 8.84% for non-residential components (including any Contingency Amount of budgeted Hard Costs and budgeted Soft Costs).

"Business Day" means a day on which CMHC is open for business in Ottawa, Ontario excluding Saturday, Sunday and any other day which shall be a holiday or a day on which banking institutions are closed in the Province of Ontario.

"Certificate of Total Completion" means a certificate issued by the Independent Cost Consultant certifying that all required work under each Construction Contract in respect of the Project has been fully completed.

"Closing Date" has the meaning ascribed thereto in Section 8(a).

"**Co-Investment Agreements**" means the agreements between the Borrower and another Person where such Person has agreed to invest, contribute (whether monetarily or otherwise) or provide funding with respect to the Project, and "**Co-Investment Agreement**" means any of them.

"Common Terms" has the meaning ascribed thereto in Section 19.

"**Construction**" means the design and execution of the Project in accordance with the Plans and Specifications, and "**Construct**" in any verb tense has the corresponding meaning.

"Construction Completion" means the date on which the Independent Cost Consultant has delivered a notice to CMHC that finishing work to be completed after Total Completion of the Project has been completed in all material respects.

"Construction Contracts" means all contracts, sub-contracts and agreements entered into by or on behalf of the Borrower relating to the Construction, including contracts, sub-contracts and agreements relating to the supply of materials or services to or for the Project, and "Construction Contract" shall mean any of them. "**Construction Lien Laws**" means the applicable construction or builders' lien legislation of Ontario, and any amendments or successor legislation thereto.

"**Construction Schedule**" means the construction schedule provided to, and approved by, CMHC, as it may be amended from time to time.

"**Consultant Contracts**" means the contracts entered into by or on behalf of the Borrower with each of the Consultants in respect of the Project.

"Consultants" means, as applicable, the architect and any geotechnical, environmental and other engineers for the Project.

"**Contingency Amount**" means, with respect to the Project Budget, the amount (if any) of any contingency provided in respect of the calculation of Project Costs.

"**Cost Overruns**" means the positive difference, if any, between the then applicable Costs to Complete and the amount of all unpaid Budgeted Project Costs (which, for greater certainty, includes any Contingency Amount) attributable to the Construction in respect of which the Cost to Complete relates.

"**Costs to Complete**" means, as at the date of calculation, that amount established by CMHC with the assistance of the Independent Cost Consultant, which is the aggregate of (without duplication):

- (a) the amount of all Project Costs not then incurred;
- (b) the amount of all Project Costs incurred, to the extent not paid in full; and
- (c) all Holdbacks,

as of such date.

"Date of Occupancy" means July 31, 2023.

"Debenture" has the meaning set out in Section 10(a).

"**Debt**" means, with respect to any Person, all obligations that, in accordance with GAAP, would then be classified as a liability of such Person, provided, however, that there will not be included for the purpose of this definition any obligation that is on account of (A) reserves for deferred income taxes or general contingencies, (B) minority interests in subsidiaries, (C) trade accounts payable and accrued liabilities (including contract loans and income taxes payable) incurred in the ordinary course of business, or (D) deposits made by tenants pursuant to the terms of their related Leases.

"**Debt Service Coverage Ratio**" means, as of the date of determination, the ratio of the Borrower's annual net operating income (determined in accordance with GAAP) from the Project Lands to the cash required annually by the Borrower to cover the repayment of all interest and principal on outstanding indebtedness relating to the Project Lands, for the Borrower's most recently ended four full fiscal quarters for which internal annual or quarterly financial statements are available.

"**Disposition**" means, with respect to a Person, any sale, assignment, transfer, conveyance, lease, licence or other disposition of any nature or kind whatsoever of any property or of any right, title or interest in or to any property, and the verb "**Dispose**" has a corresponding meaning.

"Drawdown" has the meaning set out in Section 3.

"Drawdown Date" has the meaning set out in Section 3(c).

"Drawdown Notice" has the meaning set out in Section 3(b).

"Drawdown Schedule" has the meaning set out in Section 8(a)(viii).

"Effective Gross Income" means gross income generated from both residential and commercial units of the Project Lands.

"Encumbrance" or "Encumbrances" means, with respect to any Person, any mortgage, debenture, pledge, hypothec, lien, charge, assignment by way of security, title retention agreement or arrangement, hypothecation or security interest granted or permitted by such Person or arising by operation of law, in respect of any of such Person's property, or any consignment by way of security or capital lease of property by such Person as consignee or lessee, as the case may be, or any other security agreement, trust or arrangement having the effect of security for the payment of any debt, liability or other obligation.

"Energy Consumption GHG Emission Analysis Report" means a report detailing the analysis of the energy consumption and GHG emission performance of a base case building designed to the National Energy Code of Canada for Buildings 2015 or the National Energy Code of Canada for Buildings 2017 or the National Building Code of Canada 2015 and the analysis of the energy consumption and GHG emissions performance of the completed Project undertaken by a qualified professional satisfactory to CMHC using designated energy simulation software satisfactory to CMHC, and, for greater certainty, (a) for Projects subject to Part 3 of the National Building Code of Canada 2015, professionals with energy modelling experience such as a professional engineer, architect, certified engineering technologist (CET) or certified energy manager (CEM) shall be deemed acceptable to CMHC to complete such report provided they use International Environmental Solutions Ltd.-VE (IES-VE), eQuest, CanQuest or EnergyPlus energy modelling software or, with the prior written consent of CMHC, other energy modelling software used for multi-unit residential buildings acceptable to CMHC; and (b) for Projects subject to Part 9 of the National Building Code of Canada 2015, including low rise single detached houses, semi-detached houses, row houses, duplexes, triplexes and small multi-unit residential buildings with less than four storeys, a Residential Energy Advisor accredited by Natural Resources Canada, or equivalent, shall be deemed acceptable to CMHC to complete such report provided they use HOT2000 energy modelling software or, with the prior written consent of CMHC, other energy modelling software acceptable to CMHC.

"Energy Efficiency Criteria" has the meaning set out in Section 14(b)(iii).

"Environmental Laws" means all requirements of the common law or of statutes, regulations, by-laws, ordinances, treaties, judgments and decrees, and (to the extent that they have the force of law) rules, policies, guidelines, orders, approvals, notices, permits, directives, and the like, of any Governmental Authority in the relevant jurisdiction relating to environmental or occupational health and safety matters (as they relate to exposure to a hazardous substance) and the assets and undertaking of a Person and the intended uses thereof in connection with such matters, including all such requirements relating to: (a) the protection, preservation or remediation of the natural environment (the air, land, surface water or groundwater); (b) solid, gaseous or liquid waste generation, handling, treatment, storage, disposal or transportation; (c) consumer, occupational or public safety and health (as they relate to exposure to a hazardous substance); and (d) hazardous substances or conditions (matters that are prohibited, controlled or otherwise regulated, such as contaminants, pollutants, toxic substances, dangerous goods, wastes, hazardous wastes, liquid industrial wastes, hazardous substance, petroleum and other materials such as urea formaldehyde and polyurethane foam insulation, asbestos or asbestos-containing materials, polychlorinated biphenyls (PCBs) or PCB contaminated fluids or equipment, lead based paint, explosives, radioactive substances, petroleum and associated products, above ground and underground storage tanks or surface impoundments).

"Event of Default" has the meaning set out in Section 15.

"Force Majeure" means any of the following events which prevents or materially impairs the Construction or operation of the Project and is not caused by and is beyond the reasonable control of the Borrower: acts of God, floods, earthquakes, tidal waves, hurricanes, windstorms, severe weather conditions, lightning, fire, wars (whether declared or not), riots, insurrections, rebellions, civil commotions, sabotage, partial or entire failure of utilities, strikes, walkouts or other labour disruptions, delays in transportation, accidents, shortages of and inability to procure labour, materials and supplies (after all reasonable efforts have been made by the Borrower to obtain replacement for such labour, materials and supplies), orders, legislation, regulations and directives of any Governmental Authorities, or epidemics, pandemics, or other national or regional emergencies (including without limitation any localized or widespread occurrence of an infectious virus, disease, pathogen or other harmful agent). For greater certainty, lack of funds, the state of the apartment rental market in the relevant jurisdiction or any wilful or negligent act or omission on the part of the Borrower (or any of them) does not constitute Force Majeure.

"GAAP" means those accounting principles that are from time to time approved by the Chartered Professional Accountants of Canada, or any successor institute, including International Financial Reporting Standards or Accounting Standards for Private Enterprises, as the case may be.

"Governmental Authority" means the government of Canada or any other nation, or of any political subdivision thereof, whether provincial, territorial, state or local, and any agency, authority, instrumentality, regulatory body, court, central bank or other entity exercising executive, legislative, judicial, taxing, regulatory or administrative powers or functions of or pertaining to government, including any supranational bodies and including a Minister of the Crown, Superintendent of Financial Institutions or other comparable authority or agency.

"Hard Costs" means any amounts expended or to be expended for work, services or materials done, performed, placed or furnished in connection with Construction, all as more particularly set out in the Project Budget (and, for the avoidance of doubt, Hard Costs shall not include amounts payable pursuant to the terms of the Consultant Contracts).

"Hazardous Materials" means any contaminant, pollutant, waste or substance that is likely to cause immediately or at some future time harm or degradation to the surrounding environment or risk to human health; and without restricting the generality of the foregoing, including any pollutants, contaminants, waste, hazardous waste or dangerous goods that are regulated by any Environmental Laws or that are designated, classified, listed or defined as hazardous, toxic, radioactive or dangerous or as a contaminant, pollutant or waste by any Environmental Laws.

"**Holdback**" means any amount required to be retained by or on behalf of the Borrower in respect of the value of work, services and materials actually done, performed, placed or furnished on or in the Project, in accordance with Construction Lien Laws.

"Housing Unit" means:

- (a) a dwelling unit, including a bed, where the Project is shelter accommodation; or
- (b) a self-contained residential dwelling unit intended for human habitation as housing accommodation, where the Project is affordable rental housing, shelter housing, transitional housing, supportive housing, community housing, mixed use market and affordable rental housing or urban indigenous community housing.

"Independent Cost Consultant" means the independent cost consultant / quantity surveyor retained by the Borrower in connection with the Project or such other replacement consultant appointed by the Borrower.

"Information" has the meaning ascribed thereto in Section 19(a).

"Insurance Requirements" has the meaning ascribed thereto in Section 8(b)(xi).

"Integrity Declaration" means the declaration made by the Borrower and submitted to CMHC in connection with its application for the Loans, including any schedules attached thereto, with any amendments thereto as acknowledged by CMHC.

"Interest Capitalization Date" means the first day of the month following the Drawdown Date.

"Interest Capitalization Period" has the meaning ascribed thereto in Section 4(d).

"Interest Payment Commencement Date" means the first day of the month following the date of advance.

"Interest Rate" means the fixed rate of interest confirmed by CMHC pursuant to Section 4, provided that, to satisfy the condition precedent in Section 8(b)(ix) hereof, the Interest Rate cannot exceed 4.88%.

"Lease" means any lease, sublease, agreement to lease, offer to lease, licence or right of occupation granted from time to time, by the Borrower entitling the lessee, sublessee or grantee thereunder to use or occupy all or any part of the Project.

"Loan Documents" means (a) this Agreement, (b) the Debenture, (c) the Operating Agreement, and all present and future agreements, documents, certificates and instruments delivered by the Borrower to CMHC pursuant to or in respect of this Agreement, in each case as the same may from time to time be amended, and "Loan Document" means any one of the Loan Documents.

"Loans" means, collectively, the Repayable Loan and the Forgivable Loan, and "Loan" means any one of them.

"Material Adverse Change" means any event or occurrence which, when considered individually or together with other events or occurrences, has a material adverse effect on (a) the business, assets, liabilities, operations, results of operations, condition (financial or other) or prospects of any of the Borrower, (b) the Construction and/or operation of the Project, or (c) the ability of the Borrower to perform their obligations in all material respects. For greater certainty, Material Adverse Change does not include a change in general economic conditions unless same in turn causes any of the foregoing events.

"**Material Construction Contract**" means a Construction Contract or sub-contract that provides for aggregate payments thereunder of at least 5% of the budgeted Hard Costs.

"Material Licences" means all licences, permits or approvals issued by any Governmental Authority to the Borrower and which are at any time on or after the date of this Agreement necessary or material to the business and operations of the Project (including the Construction of the Project), the breach or default of which would result in a Material Adverse Change.

"Material Project Documents" means:

- (a) all Consultant Contracts if the aggregate payments under all such contracts are in excess of \$846,935;
- (b) all Material Construction Contracts;
- (c) any shared facilities and/or reciprocal easement agreements;
- (d) the Project Budget;
- (e) the Plans and Specifications;
- (f) the Construction Schedule;

- (g) any Lease for a term of more than three (3) years; and
- (h) all development agreements and other material contracts with respect to the Project designated as Material Project Documents by CMHC from time to time, provided that CMHC has notified the Borrower of such designation.

"Median Market Rental Rate" means the median market rental rate for the regional market and unit type of the Project as described in CMHC's rental market survey or any successor publication published from time to time.

"Minimum Borrower Contribution" means an amount of Borrower Contribution that ensures that (x) the sum of (A) the Borrower Contribution; (B) the undrawn portion of the Loans; and (C) any other undrawn capital sources that CMHC may, in its sole discretion, approve, at all times exceeds (y) the Costs to Complete.

"Mistaken Payment" has the meaning ascribed thereto in Section 19.

"**Operating Agreement**" means the agreement entered into between the Borrower and CMHC with respect to, *inter alia*, the obligation of the Borrower to adhere to certain covenants relating to the Project, as set out in more detail therein, during and after the expiration of the Term.

"Outside Stabilization Date" means October 31, 2024.

"**Permits**" means all permits, consents, orders, waivers, applications, authorizations, licences, certificates, approvals, registrations, franchises, rights, privileges and exemptions or the like issued or granted by any Governmental Authority, or by any third party with respect to the Project (including any Permits relating to Environmental Laws).

"**Permitted Debt**" means: (a) Debt under this Agreement, (b) Debt secured by a Permitted Encumbrance, (c) liabilities associated with routine operating expenses and required capital improvements, repairs, replacements and tenant inducements in respect of the Project, or as otherwise permitted hereunder which the Borrower has taken or may take without breaching any Applicable Laws (including, without limitation, the *Municipal Act*, 2001 (Ontario) and Ontario Regulation 403/02 *Debt and Financial Obligation Limits*), and (d) all other current and/or future debts, liabilities, obligations and/or financial actions which the Borrower has taken or may take without breaching any Applicable Laws (including, without limitation, the *Municipal Act*, 2001 (Ontario) and Ontario Regulation 403/02 *Debt and Financial Obligation Limits*).

"Permitted Encumbrances" means, in respect of the Project Lands, the Encumbrances described in Schedule C.

"**Permitted Leases**" means (a) Leases for a term of less than three (3) years; or (b) commercial and residential Leases entered into in the ordinary course of business and on commercially reasonable terms.

"**Person**" includes an individual, a partnership, a joint venture, a trust, an unincorporated organization, a company, a corporation, an association, a government or any department or agency thereof, and any other incorporated or unincorporated entity.

"Plans and Specifications" means the plans and specifications (including all structural, architectural, mechanical, electrical, landscape and interior design and specifications) pertaining to the development and execution of the Project prepared by or at the direction of the Borrower and as approved by CMHC, as amended from time to time.

"**PPSA**" means the applicable *Personal Property Security Act* or similar personal property security registry legislation of the jurisdiction in which the Project Lands are located.

"**Project**" means the construction of mixed use market and affordable housing, which shall have a minimum of 24 affordable Housing Units and facilities ancillary thereto, located on the Project Lands.

"**Project Budget**" means the budget of all Project Costs of up to \$20,813,100, on the basis of an allocation of Project Costs 91.16% for residential and 8.84% for non-residential components, which has specified a line by line itemization of Project Costs (including Contingency Amounts) and specifies the net property value of the Project Lands, as prepared by the Borrower and approved by CMHC and the Independent Cost Consultant prior to the Drawdown under the Loans, as amended from time to time, the Project Budget as at the date hereof being that attached as Schedule F.

"**Project Costs**" means the aggregate of all Hard Costs and all Soft Costs expended or to be expended to achieve Construction Completion, on the basis of an allocation of Project Costs 91.16% for residential and 8.84% for non-residential components, in accordance with the Plans and Specifications and Construction Schedule.

"Project Funding Account" has the meaning ascribed thereto in Section 3(e).

"Project Lands" has the meaning ascribed thereto in the Preamble to this Agreement.

"Project Loan Payment Account" has the meaning ascribed thereto in Section 7(a).

"Replacement Reserve Fund" has the meaning set out in Section 14(a)(xvi).

"**Requirements of Law**" means, with respect to any Person, the organizational documents of such Person and any Applicable Laws or any determination of a Governmental Authority, in each case applicable to or binding upon such Person or any of its business or property or to which such Person or any of its operations or property is subject.

"**Soft Costs**" means all amounts expended or to be expended in respect of the Project other than Hard Costs and the cost of acquiring the Project Lands (and, for the avoidance of doubt, Soft Costs includes fees (excluding reimbursables for Hard Costs) payable to Consultants pursuant to the terms of the Consultant Contracts, taxes, surveys, construction insurance, bonding costs, legal fees, promotion of the Project, financing, leasing, and pre-operating costs).

"**Stabilization**" means the date at which the Borrower is able to demonstrate to CMHC's reasonable satisfaction that the Project has achieved twelve (12) consecutive months of annualized residential effective gross income of no less than \$880,623.98.

"**Subsidiary**" means, at any time, with respect to any Person, any other Person, if at such time the first mentioned Person (a) owns, directly or indirectly, securities or other ownership interests in such other Person, having ordinary voting power to elect a majority of the board of directors or persons performing similar functions for such other Person, and (b) directly or indirectly, through the operation of any agreement or otherwise, the ability to elect or cause the election of a majority of the board of directors or other persons performing similar functions for such other Person or otherwise exercise control over the management and policies of such other Person, and in either case will include any other Person in like relationship to a Subsidiary of such first mentioned Person.

"**Term**" means, as applicable (A) with respect to a Repayable Loan, ten (10) years commencing on the date of the advance under this Agreement, provided that (i) if the advance is made on the 1st day of a month, the Term will commence on the 1st day of that month, and (ii) if the advance is made after the 1st day of a month, the Term will commence on the 1st day of the following month, and (B) with respect to a Forgivable Loan, a period commencing on the date of the advance under this Agreement, provided that (i) if such advance is made on the 1st day of a month, the Term will commence on that day, and (ii) if such advance is made after the 1st day of a month, the Term will commence on the 1st day of the following month, and the Forgivable Loan term will end on the date that is twenty (20) years after the date of the final advance under this Agreement, if such date is on the 1st day of a month, or the 1st day of the month following the date of the final advance under this Agreement, if the date of such final advance is not on the 1st day of a month. The Term may be extended at the sole discretion of CMHC on such terms as the parties may mutually agree at the time of extension.

CMHC will agree to extend the Term of the Repayable Loan under this Agreement for an additional ten (10) years (the "**Extension**"), provided that: (i) there is no Event of Default (or no event has occurred which constitutes, or which, with notice, lapse of time, or both, would constitute, an Event of Default) existing under the Loan Documents; and (ii) the representations and warranties made by the Borrower under this Agreement or any Loan Document are deemed to be repeated and remain true and correct, as of the date of the Extension. Any and all terms and conditions under the Loan Documents will continue to apply to the Extension with necessary modifications, including but not limited to the following terms:

- (i) CMHC shall apply a new Interest Rate for the Repayable Loan, in its sole and absolute discretion;
- (ii) CMHC may be required to amend the amortization schedule for the Repayable Loan, which will set out the blended interest and principal payment amounts; and
- (iii) the Term for the Repayable Loan will be extended for a ten (10) year period commencing no later than the end of the Term as defined herein.

The Borrower acknowledges that the Extension is offered as a one-time option for the Borrower's benefit, and the Borrower shall have thirty (30) days prior to the end of the Term of the Repayable Loan to notify CMHC in writing of its decision to decline the Extension. If the Borrower fails to notify CMHC within thirty (30) days of its election to decline the Extension, then the Extension is deemed accepted by the Borrower. In order to give effect to the Extension, the Parties agree to enter into an amending agreement to this Agreement, and any other documents as may be required by CMHC, which will form part of the entire Agreement between the Parties.

"Total Completion" means the date of the Independent Cost Consultant's Certificate of Total Completion.

"Viability Criteria" has the meaning set out in Section 8(b)(ix).

Schedule B Form of Drawdown Notice

TO: Canada Mortgage and Housing Corporation ("CMHC")

FROM: The Corporation of the City of Cornwall (the "**Borrower**")

DATE⁴:

- 1. This Drawdown Notice is delivered pursuant to the loan agreement made as of _______, 20____ between the Borrower, CMHC and any guarantors party thereto, as the same has been amended or modified to the date hereof (the "**Agreement**"). All terms used in this Drawdown Notice that are defined in the Agreement have the same meanings herein.
- 2. The Borrower hereby request the following Drawdown:
 - (a)
 Drawdown Date:

 (b)
 Repayable Loan Drawdown

 Amount:
 \$10,267,084.46
 - (c) Forgivable Loan Drawdown Amount:

\$2,750,000

- 3. All of the representations and warranties of the Borrower contained in the Agreement and the representations and warranties of the Borrower contained in the other Loan Documents are true and correct on and as of the date hereof as though made on and as of the date hereof, subject to changes thereto:
 - (a) given to CMHC by the Borrower and accepted in writing by CMHC; and
 - (b) expressly contemplated by the terms of the Agreement and disclosed to CMHC in writing.
- 4. All of the conditions precedent to the Drawdown requested hereby that have not been properly waived in writing by or on behalf of CMHC have been satisfied.
- 5. No default or Event of Default has occurred and is continuing or will have occurred and be continuing on the Drawdown Date, or will result from the Drawdown requested hereby.

⁴ This date must be at least ten (10) Business Days prior to the first Drawdown Date and at least ten (10) Business Days prior to any other proposed Drawdown Date.

THE CORPORATION OF THE CITY OF CORNWALL

By:	
	Authorized Signing Officer
Name:	
Address:	
Email:	
By:	
	Authorized Signing Officer
Name:	
Address:	
Email:	

[/][We] have the authority to bind the Borrower.

Schedule C Permitted Encumbrances

With respect to the Project Lands, the following:

General Encumbrances

- 1. Encumbrances for taxes, rates, assessments or other governmental charges or levies not yet due, or for which instalments have been paid based on reasonable estimates pending final assessments, or if due, the validity of which is being contested diligently and in good faith by appropriate proceedings by that Person, provided that, if the aggregate amount being contested is in excess of \$27,228, the Borrower shall have deposited with CMHC collateral satisfactory to CMHC to secure the payment of such taxes and assessments;
- 2. undetermined or inchoate encumbrances, liens, rights of distress and charges incidental to construction, maintenance or current operations that have not at such time been filed or exercised and of which CMHC has been given notice, or that relate to obligations not due or payable, or if due, the validity of which is being contested diligently and in good faith by appropriate proceedings by that Person;
- 3. reservations, limitations, provisos and conditions expressed in any original grant from the Crown or other grants of real or immovable property, or interests therein, that do not materially and adversely impair the use of the affected land for the development, execution of the Construction and operation of the Project;
- 4. permits, reservations, covenants, servitudes, right of access or user licenses, easements, rights of way and rights in the nature of easements (including licenses, easements, rights of way and rights in the nature of easements for railways, sidewalks, public ways, sewers, drains, gas and oil pipelines, steam and water mains or electric light and power, or telephone, telecommunication, television and telegraph conduits, poles, wires and cables) that do not materially and adversely impair the use of the affected land for the development, execution of the Construction and operation of the Project, or in respect of which satisfactory arrangements have been made for relocation so that such use will not be materially and adversely impaired;
- 5. title defects, irregularities or other matters relating to title that are of a minor nature and that do not materially and adversely impair the use of the affected land for the development, execution of the Construction and operation of the Project;
- 6. the right reserved to or vested in any Governmental Authority by the terms of any lease, licence, franchise, grant or permit acquired by that Person or by any statutory provision to terminate any such lease, licence, franchise, grant or permit, or to require annual or other payments as a condition to the continuance thereof;
- 7. the Encumbrance resulting from the deposit of cash or securities in connection with contracts, tenders or expropriation proceedings, or to secure workers' compensation, employment insurance, surety or appeal bonds, costs of litigation when required by law, liens and claims incidental to current construction, mechanics', warehousemen's, carriers' and other similar liens, and public, statutory and other like obligations incurred in the ordinary course of business;
- 8. security given to a public utility or any Governmental Authority when required by such utility or authority in connection with the operations of that Person in the ordinary course of its business;
- 9. the Encumbrance created by a judgment of a court of competent jurisdiction or Encumbrance (including claims pursuant to Construction Lien Laws or such equivalent legislation in any

jurisdiction and legal hypothecs in favour of the persons having taken part in the construction or renovation of an immovable pursuant to the *Civil Code of Québec* ("**Construction Claim Encumbrances**")) filed and/ or created against the Borrower, as long as the judgment is being contested diligently and in good faith by appropriate proceedings by the Borrower and does not result in an Event of Default, provided that if such judgment or Encumbrance is a Construction Claim Encumbrance or is in the aggregate greater than \$32,135.00, the Borrower shall have either (A) in the case of any such judgment or Encumbrance that is not a Construction Claim Encumbrance, if acceptable to CMHC, deposited with CMHC collateral satisfactory to CMHC to secure the payment of such judgment or the claims secured by such Encumbrance, or (B) in the case of any such judgment or Encumbrance that is a Construction Claim Encumbrance, posted a payment bond, or made payment into court, of such amount as is necessary to remove such Encumbrance;

- 10. encroachments by the Project or structures thereon over neighbouring lands (including public streets) and minor encroachments by neighbouring lands or structures thereon over the Project Lands, so long as, in the former case, there are written agreements permitting such encroachments and they have been complied with;
- 11. subdivision, development, servicing and site plan agreements, undertakings and agreements made pursuant to applicable planning and development legislation, entered into with or made in favour of any Governmental Authority, or public or private utility relating to the development, execution of the Construction and operation of the Project, provided that they have been complied with;
- 12. Leases relating to the Project Lands that have been entered into in accordance with this Agreement;
- 13. all municipal by-laws and regulations and other municipal land use instruments, including official plans, zoning and building by-laws, restrictive covenants and other land use limitations, public or private, and other restrictions as to the use of the Project Lands;
- 14. all instruments disclosed on the parcel register for the Project Lands attached hereto as Schedule D;
- 15. all filings and registrations disclosed on the PPSA registration against the Borrower, attached hereto as Schedule N; and
- 16. such other Encumbrances as are agreed to in writing by CMHC (not to be unreasonably withheld or delayed).

Schedule D Parcel Register for Project Lands

	Ontario	ServiceOr		TRY	60177-0112 (LT)	PAGE 1 OF 2 PREPARED FOR kyateman ON 2024/07/25 AT 10:31:15
PROPERTY DES	SCRIPTION:	PT LT 7 CON 1 CORN AS IN ST142382	WALL PT 1, 6 52R184	0 (PARTS 9 & 12 ON 52R8180, CLOS	ED BY BY-LAW NO. 2018/142, INS	IRUMENT ST101501); CORNWALL; SUBJECT TO AN EASEMENT
PROPERTY REN	MARKS:					
ESTATE/QUAL FEE SIMPLE LT CONVERSIO	<u>IFIER:</u> ON QUALIFIED		<u>RECENTLY:</u> FIRST CONVE	RSION FROM BOOK		PIN CREATION DATE: 2006/08/21
OWNERS' NAME	<u>IS</u>	CITY OF CORNWALL	<u>CAPACITY</u> <u>S</u>	HARE		
REG. NUM.	DATE	INSTRUMENT TYPE	AMOUNT	PARTIE	S FROM	PARTIES TO
** PRINTOUS	INCLUDES AL	L DOCUMENT TYPES AND	DELETED INSTRUMENT	5 SINCE 2006/08/18 **		
**SUBJECT,	ON FIRST REG	ISTRATION UNDER THE	LAND TITLES ACT, TO	- -		
**	SUBSECTION 4	4(1) OF THE LAND TIT.	LES ACT, EXCEPT PAR.	AGRAPH 11, PARAGRAPH 14, PROVINC	IAL SUCCESSION DUTIES *	
**	AND ESCHEATS	OR FORFEITURE TO TH	E CROWN.			
**	THE RIGHTS O	F ANY PERSON WHO WOU.	LD, BUT FOR THE LAN	D TITLES ACT, BE ENTITLED TO THE	LAND OR ANY PART OF	
**	IT THROUGH L	ENGTH OF ADVERSE POS.	SESSION, PRESCRIPTI	ON, MISDESCRIPTION OR BOUNDARIES	SETTLED BY	
**	CONVENTION.					
**	ANY LEASE TO	WHICH THE SUBSECTION	N 70(2) OF THE REGI	STRY ACT APPLIES.		
**DATE OF (ONVERSION TO	LAND TITLES: 2006/0	8/21 **			
\$73509	1970/10/27	TRANSFER		*** COMPLETELY DELETED ***		
RE	MARKS: SKETCH	ATTACHED				STORMONT, DUNDAS AND GLENGARRY COUNTY BOARD OF EDUCATION
52R1840	1982/01/06	PLAN REFERENCE				
S155286	1983/06/16	TRANSFER		*** COMPLETELY DELETED ***		STORMONT, DUNDAS AND GLENGARRY COUNTY BOARD OF EDUCATION
ST76713	2015/12/22	APL CH NAME OWNER		*** COMPLETELY DELETED *** STORMONT DUNDAS AND GLENGARRY C	COUNTY BOARD OF EDUCATION	UPPER CANADA DISTRICT SCHOOL BOARD
ST76757	2015/12/23	TRANSFER		*** COMPLETELY DELETED *** UPPER CANADA DISTRICT SCHOOL BC	DARD	THE CORPORATION OF THE CITY OF CORNWALL
RE	MARKS: PLANNI	NG ACT STATEMENTS.				

52R8180

ST101501

2018/10/22 PLAN REFERENCE

2018/12/18 BYLAW PUB HGHWY

PARCEL REGISTER (ABBREVIATED) FOR PROPERTY IDENTIFIER

CERT/ CHKD

С

С

С

NOTE: ADJOINING PROPERTIES SHOULD BE INVESTIGATED TO ASCERTAIN DESCRIPTIVE INCONS **949**NCIES, IF ANY, WITH DESCRIPTION REPRESENTED FOR THIS PROPERTY. NOTE: ENSURE THAT YOUR PRINTOUT STATES THE TOTAL NUMBER OF PAGES AND THAT YOU HAVE PICKED THEM ALL UP.

THE CORPORATION OF THE CITY OF CORNWALL



LAND REGISTRY PARCEL REGISTER (ABBREVIATED) FOR PROPERTY IDENTIFIER

PAGE 2 OF 2 PREPARED FOR kyateman ON 2024/07/25 AT 10:31:15

OFFICE #52

60177-0112 (LT)

\star certified in accordance with the land titles act \star subject to reservations in crown grant \star

REG. NUM.	DATE	INSTRUMENT TYPE	AMOUNT	PARTIES FROM	PARTIES TO	CERT/ CHKD
REI	Marks: a by-l	AW TO DEDICATE PART	9 AND PART 12, ON RE.	FERENCE PLAN 52R8180, IN THE CITY OF CORNWALL AS PUBLIC HIGHWA	Y AND NAME IT NINTH STREET EAST	
AN	d mcconnell A	VENUE, RESPECTIVELY				
ST119748	2021/01/26	TRANSFER	\$1 7	THE CORPORATION OF THE CITY OF CORNWALL	CORNWALL AND AREA HOUSING CORPORATION / LA SOCIETE DE LOGEMENT DE CORNWALL ET LA REGION	С
ST120686	2021/02/26	CHARGE	0	*** COMPLETELY DELETED *** CORNWALL AND AREA HOUSING CORPORATION / LA SOCIETE DE LOGEMENT DE CORNWALL ET LA REGION	THE CORPORATION OF THE CITY OF CORNWALL	
ST121201	2021/03/19	CHARGE	0	*** COMPLETELY DELETED *** CORNWALL AND AREA HOUSING CORPORATION / LA SOCIETE DE LOGEMENT DE CORNWALL ET LA REGION	THE CORPORATION OF THE CITY OF CORNWALL	
ST132423	2022/03/01	DISCH OF CHARGE		*** COMPLETELY DELETED *** THE CORPORATION OF THE CITY OF CORNWALL		
REI	MARKS: ST1206	86.				
ST132424	2022/03/01	DISCH OF CHARGE		*** COMPLETELY DELETED *** THE CORPORATION OF THE CITY OF CORNWALL		
REI	MARKS: ST1212	01.				
ST135288	2022/05/30	TRANSFER		CORNWALL AND AREA HOUSING CORPORATION / LA SOCIETE DE LOGEMENT DE CORNWALL ET LA REGION	THE CORPORATION OF THE CITY OF CORNWALL	С
ST142382	2023/03/03	TRANSFER EASEMENT	\$2 7	THE CORPORATION OF THE CITY OF CORNWALL	ROGERS COMMUNICATIONS CANADA INC.	С

Schedule E Legal Description of Project Lands

550 9th Street East, Cornwall, Ontario K6H 2V7 Canada

PIN 60177-0112 (LT)

PT LT 7 CON 1 CORNWALL PT 1, 6 52R1840 (PARTS 9 & 12 ON 52R8180, CLOSED BY BY-LAW NO. 2018/142, INSTRUMENT ST101501); CORNWALL; SUBJECT TO AN EASEMENT AS IN ST142382

Schedule F Project Budget

2		Total
3	Project Parameters	
4	Number of Residential Units	77
5	Total Gross Floor Area (sq. ft.)	50,541.10
6	Residential/Non-Residential split	91.16/8.84
7		
8	Project Budget (pro-rated by sq. ft.)	
9	Land Cost	\$1,393,000.00
10	Hard Costs	\$16,938,707.00
11	Soft Costs	\$1,305,150.00
12	Financing costs	\$196,350.00
13	HST (Net of rebate)	\$337,200.00
14	Contingency	\$642,693.00
15	+	
16	Total Budget (Uses) (A)	\$20,813,100.00

Schedule G Project Consultant's Certificate

TO: Canada Mortgage and Housing Corporation ("CMHC")	Borrower: The Corporation of the City of Cornwall
ADVANCE NO:	PROJECT: 550 9th Street East, Cornwall, Ontario K6H 2V7
CERTIFICATE DATE:	COMPLETION DATE:

Based on my/our professional experience and qualifications and after making such reasonable enquiries as I/we have deemed necessary in the circumstances, I/we hereby certify to CMHC as follows:

- 1. I/we have periodically inspected execution of the Construction since the commencement of execution of the Construction and last inspected the Project on ______ (the "Inspection Date").
- 2. All required permits, licenses and other authorizations have been obtained and are being maintained.
- 3. Execution of the Construction and development of the Project up to and including the Inspection Date has been performed in a good and workmanlike manner. [Subject to Note 1 below]
- 4. Execution of the Construction and development of the Project up to and including the Inspection Date has been performed substantially in accordance with (i) the plans and specifications, (ii) all applicable building codes, municipal bylaws and regulations, (iii) all required permits, licenses and other authorizations and (iv) all Applicable Laws, including, for the avoidance of doubt, Environmental Laws. [Subject to Note 1 below.]
- 5. In my/our opinion, as of the date hereof, the figures set forth below accurately reflect the Project costs or work completed on the Project and the costs of the remaining work required to complete the Project, on the basis of an allocation of costs 91.16% for residential and 8.84% for non-residential components, in accordance with the plans and specifications. A report setting out in greater detail those elements comprising the figures set out below is attached hereto and forms part of this Certificate.

(a)	Project costs of work completed to date:	\$
(b)	Project costs of remaining work:	\$
(c)	Estimated total Project costs (a+b):	\$
(d)	Original estimate of total Project costs:	\$
(e)	Amount of additional costs, if any (c-d):	\$

- 6. In my/our opinion, as of the date hereof, the remaining contingency reserve of \$_____ contained in 5(b) above is adequate given the current state of work in place and contracts entered into to complete the Project.
- 7. In my/our opinion, as of the date hereof, the estimated date of completion of the Project is ______. Reasons for delay, if applicable, are outlined in the attached Exhibit.

This certificate is given in connection with the above-referenced advance under your credit agreement with the Borrower dated _____ and you may rely upon it in making such advance.

Dated at _____⁵, ____⁶, this ____ day of _____, 20___.

<u>Note 1</u>: Cost consultants are not qualified to confirm that construction work has been completed in accordance with plans and specifications or applicable laws. In this regard, you will find in our report a certificate provided by the Project's architect to confirm that the Project is being constructed in accordance with the approved plans and specifications and all applicable laws on which we have relied. Also enclosed are inspection reports/certificates from all other design consultants including but not limited to structural engineer, mechanical and electrical engineering, and shoring consultants, on which we have relied.

⁵ Insert City

⁶ Insert Province

⁷ Insert Consultant's Name

Schedule H Project Status Certificate

TO: Canada Mortgage and Housing Corporation ("CMHC")	Borrower: (the "Borrower")
PROJECT: 550 9th Street East, Cornwall, Ontario K6H 2V7 (the " Project ")	COMPLETION DATE: ("Completion Date")

I, ______, the _____8 of Borrower, hereby certify as of _____8

- 1. I am familiar with and have examined the provisions of the loan agreement made as of ______, 20____ between the Borrower, as borrower, and CMHC, as lender, as amended to the date hereof (the "Agreement") and have made reasonable investigations of corporate records and inquiries of other officers and senior personnel of Borrower. Terms defined in the Agreement have the same meanings when used in this certificate.
- 2. The representations and warranties contained in the Agreement are true and accurate in all material respects as of the date hereof.
- 3. No event has occurred which constitutes, or which, with notice, lapse of time, or both, would constitute, an Event of Default.
- 4. The Project has not been damaged by fire or other casualty and no part of the Project Lands has been expropriated and no proceedings therefor are pending.
- 5. The requirements of any applicable real property lien legislation, including (i) Construction Lien Laws (including that Borrower has made all required Holdbacks with respect to the work completed to date), and (ii) applicable legislation relating to Taxes, are being met and nothing has occurred subsequent to the date of the Agreement which has resulted or may result in the creation of any Encumbrance upon the Project Lands or any part thereof or which has or may substantially and adversely impair the ability of Borrower to make all payments of principal and interest under the Agreement or which has or may substantially and adversely impair the obligations of Borrower under the Agreement or any security interests given in connection therewith.
- 6. Based on an agreed upon land value of \$_____, Borrower has invested in the Project Lands and Project, as at the date hereof, \$_____ of its own capital.
- 7. Any and all funds received from CMHC previously as advances under the Agreement have been expended or are being held in trust solely for the purpose for which they were advanced; no item of construction costs previously certified to CMHC with a request for advance remains unpaid as of the date hereof; further, there are no trade or supplier disputes.
- 8. The summary of Hard Costs and Soft Costs incurred on the Project to date on a line by line basis (including a listing of accounts payable, Holdbacks, and an HST/GST reconciliation and a review of cancelled cheques since the prior Drawdown), on the basis of an allocation of costs 91.16%

⁸ Insert title

for residential and 8.84% for non-residential components, and identifying whether such costs have been incurred in accordance with the Project Budget or are Cost Overruns, attached hereto as Exhibit A, is true and accurate in all material respects.

- 9. Any Cost Overruns that have been incurred on the Project have been funded in their entirety by the Borrower.
- 10. All of the statements contained in this certificate are true, complete and accurate in all material respects as of the date hereof.

Dated this _____ day of _____, 20____.

Per: _____

Name: ______ Title: _____

Exhibit A

Summary of Hard Costs and Soft Costs

Schedule I Minimum Insurance Requirements and Conditions

- 1. <u>Insurance During Construction</u> From the date hereof until Total Completion of the Project, the Borrower shall maintain or cause to be maintained with insurance companies acceptable to CMHC:
- all risks builder's (including coverage against the perils of earthquake, flood, testing and commissioning Hard and Soft Costs) coverage written on the latest edition of the CCDC approved form for the full replacement cost of the Project, excluding land costs. Such insurance shall:
 - a. include a soft cost endorsement in an amount of not less than 25% of total Soft Costs;
 - b. name the Borrower as zeroth named insured thereunder and name all others required to be named under any of the Material Project Documents, including architects, engineers, consultants, contractors, sub-contractors and trades of every tier as additional insureds;
 - c. name CMHC as mortgagee and zeroth loss payee and have attached the standard Insurance Bureau of Canada mortgage clause;
 - d. boiler and machinery insurance shall have limits of not less than the replacement value of the equipment forming part of the work. The insurance coverage shall not be less than the insurance provided by a comprehensive boiler and machinery policy;
 - e. contain a waiver by the insurer or insurers of all rights of subrogation or indemnity or any other claim to which such insurer or insurers might otherwise be entitled against CMHC; and
 - f. otherwise be in such form as CMHC shall require or as required under any of the Material Project Documents;
- (ii) wrap-up liability insurance written on the latest edition of the CCDC approved form with a minimum combined single limit of liability of not less than \$5,000,000 per occurrence. Such insurance shall:
 - a. name the Borrower as first named insured and CMHC as an additional insured and name all others required to be named under any of the Material Project Documents, including architects, engineers, consultants, contractors, sub-contractors and trades of every tier as additional insureds;
 - b. contain a waiver by the insurer of all rights of subrogation or indemnity or any other claim to which the insurer might otherwise be entitled against CMHC and others to whom the Borrower granted such waivers under any of the Material Project Documents;
 - c. contain a cross-liability clause and a severability of interests clause; and
 - d. otherwise be in such form as CMHC shall require or as required under any of the Material Project Documents.

(iii) <u>Commercial Automobile Insurance</u>

Commercial Automobile Insurance with limits of not less than \$5,000,000 combined single limit per accident for bodily injury (including death), statutory accident benefits and property damage per occurrence.

(iv) <u>Worker's Compensation</u>

Worker's compensation coverage for all employees engaged in the Project in accordance with the statutory requirement of the province or territory in which the Project is located.

(v) <u>Contractor's Environmental Liability Insurance</u>

Contractor's environmental liability insurance with a limit of not less than \$5,000,000 inclusive, providing coverage for, but not limited to bodily injury (including death) and property damage arising out of pollution conditions caused while working at the sites of other, sudden and gradual pollution, on-site and off-site clean-up costs and completed operations. CMHC is to be added as an additional insured and policy shall contain a cross liability clause. If the policy is written on a claims-made basis, coverage must be in place for a period of at least 24 months after the completion or termination of the agreement.

(vi) <u>Contractor's Equipment Insurance</u>

Contractor's equipment insurance coverage covering equipment used by the Borrower for the performance of the work, coverage is to be on a replacement cost basis or shall be in a from acceptable to CMHC.

(vii) Errors and Omissions Professional Liability Insurance

Errors and omissions liability (also known as Professional Liability) insurance and maintain it in force throughout the duration of the agreement, in an amount usual for a contract of this nature but for not less than \$2,000,000 per loss and in the annual aggregate, inclusive of defence costs; if the policy is written on a claims made basis, coverage must be in place for a period of at least 24 months after the completion or termination of the agreement.

2. Operating Insurance Provided that the Project is in operations, commencing on the effective date of the Loan Agreement and the Operating Agreement, and continuing after Total Completion of the Project has been achieved, so long as the Borrower has an ownership interest in same and so long as any amounts are due under the Loan Agreement or the Operating Agreement is in force, the Borrower shall, in relation to the Project, maintain or cause to be maintained all risks insurance on a 100% replacement cost basis, mechanical breakdown, business interruption 12 month indemnity period, general liability insurance and such other insurance in form and in such amounts and with such deductibles as are customary in the case of owners of projects similar to the Project and in any event as are acceptable to CMHC. So long as any amounts are due under the Loan Agreement, CMHC shall be named as zeroth mortgagee and zeroth loss payee and additional insured, as applicable, under such policies.

3. Other Conditions

- (i) All insurance required to be maintained by the Borrower in sections 1 and 2 above shall provide that no cancellation or termination thereof, for any reason whatsoever, shall take effect unless the insurer concerned has given CMHC not less than 30 days prior written notice of such proposed action.
- (ii) The Borrower shall provide written notice to CMHC forthwith upon learning that an insurer described in this schedule intends to cancel, or intends to make or has made a material change to, any insurance referred to in this schedule.
- (iii) The Borrower will provide, at CMHC's request, detailed certificates of insurance or a certified copy of the insurance policy for all policies required hereunder to be purchased and maintained by the Borrower in a form acceptable to CMHC.

- (iv) It shall be the sole responsibility of the Borrower to decide whether or not any other insurance coverage, in addition to the insurance requirements stipulated herein, is necessary for its own protection or to fulfill its obligations.
- (v) CMHC shall be entitled to require the Borrower to maintain coverage of such other risks and perils as CMHC may from time to time consider advisable or desirable and in respect of which insurance coverage may be available.
- 4. <u>Proceeds of Insurance</u> With regard to the insurance described in Sections 1 or 2 above, the following shall apply:
 - (i) So long as no default or Event of Default has occurred and is continuing, the proceeds of all such insurance (other than workers' compensation insurance, errors and omissions insurance and third party liability insurance which may be remitted to the Borrower without condition or further action by CMHC) shall be dealt with as follows:
 - (A) If the total amount of such proceeds equals or exceeds \$500,000, they shall be payable directly into an escrow account of CMHC as designated by CMHC to be disbursed by CMHC on a monthly basis against receipts payable in not more than 30 days for expenses incurred in repairing the damage or destruction or replacing property in respect of which the insurance is payable and otherwise in accordance with the customary disbursement procedures utilized by CMHC in such case, for release by CMHC to the Borrower to be applied by the Borrower in repairing the damage or destruction or replacing property in respect of which the insurance is payable of the Borrower in repairing the damage or destruction or replacing property in respect of which the insurance is payable upon receipt of:
 - a certificate of an officer of the Borrower stating that the proceeds of such insurance together with other funds held or arranged by the Borrower are sufficient to fully repair, rebuild or replace the damage or destruction in respect of which the insurance proceeds are payable;
 - (2) a letter of undertaking of the Borrower to fully repair, rebuild and replace the damage or destruction in respect of which the insurance proceeds are payable; and
 - (3) evidence satisfactory to CMHC that the proceeds of insurance together with the other funds held or arranged by the Borrower will be sufficient to repair, replace or rebuild the damage or destruction in respect of which the insurance proceeds are payable.
 - (B) The proceeds of any business interruption insurance shall be payable to the Borrower to be applied on account of ongoing obligations of the Borrower hereunder or in respect of the Project as the same fall due from time to time.
 - (C) If the total amount of such proceeds is less than \$500,000, they shall be released to the Borrower subject to delivery of the documents set out in paragraph (A) above.
 - (ii) If an Event of Default has occurred and is continuing:
 - (A) The proceeds of all insurance other than workers' compensation insurance, errors and omissions insurance and third party liability insurance shall be payable to CMHC to be applied by it, at its option, in reduction of the amounts outstanding hereunder or released by CMHC to the Borrower upon receipt of:

- an officer's certificate of the Borrower stating that the proceeds of such insurance together with other funds held or arranged by the Borrower are sufficient to fully repair, rebuild or replace the damage or destruction in respect of which the insurance proceeds are payable;
- (2) a letter of undertaking of the Borrower to fully repair, rebuild and replace the damage or destruction in respect of which the insurance proceeds are payable; and
- (3) evidence satisfactory to CMHC that the proceeds of insurance together with the other funds held or arranged by the Borrower will be sufficient to repair, replace or rebuild the damage or destruction in respect of which the insurance proceeds are payable.
- (B) The proceeds of any business interruption insurance shall be payable to CMHC, to be applied on account of ongoing obligations of the Borrower hereunder or in respect of the Project as the same fall due from time to time and, to the extent of any surplus, firstly to arrears of such payments and thereafter, if CMHC has opted to release proceeds of insurance to the Borrower pursuant to and in accordance with paragraph (A) above, then the balance of the proceeds of business interruption insurance shall be payable to the Borrower, failing which the balance, if any, remaining after application of such proceeds as aforesaid shall be paid to CMHC as partial prepayment of the Loan.

Schedule J Environmental Disclosures

1. Phase 1 Assessment Report No. 23C010 dated January 30, 2023 and prepared by St. Lawrence Testing & Inspection Co. Ltd.

Schedule K Debenture

[See attached]

Schedule L Disclosure of Legal Proceedings re Assets and Property which may Result in a Material Adverse Change

- 1. Email from Borden Ladner Gervais LLP ("**BLG**") to CMHC and Fasken Martineau DuMoulin LLP ("**Fasken**") dated June 6, 2024, enclosing the following documents:
 - (i) Litigation search report for the Borrower dated May 24, 2024; and
 - (ii) The Borrower's internal claims.
- 2. Email from BLG to CMHC and Fasken dated June 18, 2024, summarizing the following litigation matters:
 - (i) *Trillium Distribution Cornwall Inv v. Corporation of the City of Cornwall* (Court File No. 14-122);
 - (ii) Rothmar Holdings Inc. et at v. Corporation of the City of Cornwall et al (Court File No. CV-23-00092707); and
 - (iii) Rothmar Holdings Inc. v. Corporation of the City of Cornwall et al (Court. File Nos. CV-22-00089534; CV-22-00089493; CV-22-00089436; CV-22-00088548).

Schedule M Disclosure of Legal Proceedings, Judgments and Writs re Aboriginal Rights, Treaty Rights or the Duty to Consult

Nil.

Schedule N PPSA Registration against the Borrower

[See attached.]

Note: All pages have been returned.

Type of Search	Business Debt	or									
Search Conducted On	CORPORATIO	N OF THE C	CITY OF COF	NWALL							
File Currency	24JUL 2024		1						1		
	File Number Family of Page of Expiry Date Pages							Status			
	699060798	1	4	1	15	19AUG	2024				
FORM 1C FINANCING	STATEMEN	C / CLAIM	FOR LIEN								
File Number	Caution Filing	Page of	Total Pages	Motor Vel Schedule		Regist	ration Nu	mber	Registered Under	Registration Period	
699060798								077 0967	P PPSA	5	
	-	-		-					:		
Individual Debtor	Date of Birth		First Given	Name			Initial		Surname		
Business Debtor	Business Del	otor Name							Ontario Cor Number	poration	
	CORPORATIO	N OF THE C	CITY OF COF	NWALL							
	Address					City		Province	Postal Code		
	1246 ONTARIO	O STREET				CORNWA	L	ON	K6H 4C8		
Individual Debtor	Date of Birth		First Given Name				Initial		Surname		
Business Debtor										Ontario Corporation Number	
	Address					0:4		Drovince	Destal Cada		
	Address				City			Province	Postal Code		
Secured Party	Secured Part	/ Lion Cla	imant								
Secured raity	DELL FINANCI										
	Address				City			Province	Postal Code		
	155 GORDON	BAKER RD	STE 501		NORTH YORK			ON	M2H 3N5		
			METTONO								
Collateral Classification	Consumer Goods	Inventory	Equipment	Accounts	Other	Motor Includ	Vehicle ed	Amount	Date of Maturity or	No Fixed Maturity Date	
			х		х					Х	
Motor Vehicle	Year	Make				Model			V.I.N.		
Description											
		1				1			1		
General Collateral	General Colla	teral Desc	ription								
Description	ALL DELL AND			EQUIPMEN	NT AND F	PERIPHE	RALS				
	WHEREVER L	-					-	R BY SEC	URED		
	PARTY OR IN										

Registering Agent	Registering Agent			
	REGISTRY = RECOVERY INC.			
	Address	City	Province	Postal Code
	1551 THE QUEENSWAY	TORONTO	ON	M8Z 1T5

Type of Search	Business Debt	or									
Search Conducted On											
File Currency	24JUL 2024										
	File Number	Family	of Families	Page	of Pages	Expiry	Date		Status		
	699060798	1	4	2	15	19AUG	3 2024				
FORM 1C FINANCING	STATEMEN		FOR LIEN	1	1						
File Number	Caution Filing	1	Total Pages	Motor Ve Schedule		Regist	tration Nu	mber	Registered Under	Registration Period	
699060798		02	005			201408	319 1436 8	077 0967			
In dividual Dabten	Defe of Dirth		First Oires	Mana			1		0		
Individual Debtor	Date of Birth		First Given	Name			Initial		Surname		
Business Debtor	Business Deb	otor Name							Ontario Cor Number	poration	
				0.1		D					
	Address					City		Province	Postal Code		
							<u> </u>		ļ		
Individual Debtor	Date of Birth		First Given	Name			Initial		Surname		
Business Debtor	Business Deb	otor Name							Ontario Corporation Number		
	Address						City		Province	Postal Code	
Secured Party	Secured Party	y / Lien Cla	imant								
	Address						City		Province	Postal Code	
							,				
Collateral Classification	Consumer Goods	Inventory	Equipment	Accounts	Other	Motor Includ	Vehicle ed	Amount	Date of Maturity or	No Fixed Maturity Date	
Motor Vehicle	Year	Make				Model			V.I.N.		
Description											
General Collateral Description	General Colla TO SECURED 51105033 TOG	PARTY PUF	RSUANT TO).		
	REPLACEMEN										
Registering Agent	Registering A	Agent									
									-		
	Address						City		Province	Postal Code	

Type of Search	Business Debt	or								
Search Conducted On	CORPORATIO	N OF THE C	CITY OF COF	RNWALL						
File Currency	24JUL 2024									
	File Number	Family	of Families	Page	of Pages	Expiry Date			Status	
	699060798	1	4	3	15	19AUG	2024			
FORM 1C FINANCING	STATEMEN	/ CLAIM	FOR LIEN							
File Number	Caution Filing	Page of	Total Pages	Motor Ve Schedule		Regist	ration Nu	mber	Registered Under	Registration Period
699060798		03	005			201408	319 1436 8	077 0967		
Individual Debtor	Date of Birth		First Given	Name			Initial		Surname	
Business Debtor	Business Deb	otor Name							Ontario Cor Number	poration
	Address					City		Province	Postal Code	
Individual Debtor	Data of Dirth		Firef Civer	Nama			Initial		C	
Individual Deptor	Date of Birth		First Given	Name			Initial		Surname	
Business Debtor	Business Deb	otor Name		Ontario Corporation Number						
	Address						City		Province	Postal Code
Secured Party	Secured Party	/ / Lien Cla	imant							
	Address						City		Province	Postal Code
	Address							FIOVINCE	F UStal Code	
Collateral Classification	Consumer Goods	Inventory	Equipment	Accounts	Other	Motor Includ	Vehicle ed	Amount	Date of Maturity or	No Fixed Maturity Dat
Motor Vehicle Description	Year	Make				Model			V.I.N.	
Description										
General Collateral	General Colla									
Description	AFFIXED TO, C									
	THEREOF TOO PROCEEDS, C									
Registering Agent	Registering A									
	Address						City		Province	Postal Code

Type of Search	Business Debt	or											
Search Conducted On	CORPORATIO	N OF THE C	CITY OF COF	RNWALL									
File Currency	24JUL 2024												
	File Number	Family	of Families	Page	of Pages	Expiry	Date		Status				
	699060798	1	4	4	15	19AUG	2024						
FORM 1C FINANCING	STATEMEN	Γ/ CLAIM	FOR LIEN										
File Number	Caution Filing	Page of	Total Pages	Motor Ve Schedule		Regist	ration Nu	nber	Registered Under	Registration Period			
699060798		04	005			201408	319 1436 8	077 0967					
			1										
Individual Debtor	Date of Birth		First Given	Name			Initial		Surname				
Business Debtor	Business Deb	otor Name							Ontario Co Number	poration			
						Italliool							
	Address						City		Province	Postal Code			
	!						-						
Individual Debtor	Date of Birth		First Given	Name			Initial		Surname				
Business Debtor	Business Deb	otor Name					Ontario Con	poration					
	Number												
	Address					City		Province	Postal Code				
	Address						City		FIOVINCE	Fostal Code			
Secured Party	Secured Party	y / Lien Cla	imant										
	Address						City		Province	Postal Code			
Collateral Classification	Consumer Goods	Inventory	Equipment	Accounts	Other	Motor Includ	Vehicle ed	Amount	Date of Maturity or	No Fixed Maturity Dat			
Motor Vehicle	Year	Make				Model			V.I.N.				
Description													
General Collateral	Conoral Calls	toral Dec-	rintion										
Description	General Colla ARISING FROM												
	ANY OF THE A												
	INDIRECTLY, F							OR ANY					
Registering Agent	Registering A	Agent											
			City			i							
	Address						City		Province	Postal Code			

Type of Search	Business Debtor									
Search Conducted On	CORPORATION OF THE CITY OF CORNWALL									
File Currency	24JUL 2024									
	File Number	Family	of Families	Page	of Pages	Expiry Date 19AUG 2024		Status		
	699060798	1	4	5	15					
FORM 1C FINANCING STATEMENT / CLAIM FOR LIEN										
File Number	Caution Filing	Page of	Total Pages	Motor Ve Schedule			Registration Number		Registered Under	Registration Period
699060798		05	005			201408	0140819 1436 8077 0967			
	Date of Birth First Given Name					1.10.1			0	
Individual Debtor	Date of Birth		First Given Name			Initial		Surname		
Business Debtor	Business Debtor Name								Ontario Corporation Number	
	Address					City		Province	Postal Code	
Individual Debtor	Date of Birth First Given Name				Initial		Surname			
Individual Deptor	Date of Birth		First Given Name				Initial		Sumane	
Business Debtor	Business Debtor Name								Ontario Cor Number	poration
										-
	Address						City		Province	Postal Code
Secured Party Secured Party / Lien Claimant										
	Address						City		Province	Postal Code
	-									•
Collateral Classification	Consumer Goods	Inventory	Equipment	Accounts	Other	Motor Includ	Vehicle ed	Amount	Date of Maturity or	No Fixed Maturity Date
N	Mala					Maria I				
Motor Vehicle Description	Year	Make			Model			V.I.N.		
General Collateral	General Collateral Description									
Description	PROCEEDS THEREOF.									
Registering Agent	Registering Agent									
	Address City								Province	Postal Code
	4001635					City		FIOVINCE	r ustar coue	
<u></u>										

Type of Search Search Conducted On	Business Del CORPORATI		CITY OF CO	DRNWALL							
File Currency	24JUL 2024										
	File	Family	of	Page		of Pa	ges				
	Number		Families								
	699060798	1	4	6		15					
FORM 2C FINANCI	NG CHANGE	STATEM	IENT / CHA	NGE STATEMEN	T						
	Caution Filing	Page of	Total Pages	Motor Vehicle Sc Attached	hedule					Register	ed Under
		01	001			20190	0731 1434	8077 528	31	P PPSA	
				1							
Record Referenced	File Numbe	r	Page Amended	No Specific Page Amended	Chan	ge Red	quired		Renewal Years	Correct F	Period
	699060798		Amenueu	Amenueu	B RE		1		5		
	033000730				DIL		L		5		
Reference Debtor/ Transferor	First Given	Name			Initial		Surname)			
	Business D	abtor Nom	•								
	CORPORATI										
	CORPORATI			JRINVALL							
Other Change	Other Chan	ge									
Decen / Decerintien	Decen / De	o o vinélo n									
Reason / Description	Reason / De	escription									
Debtor/ Transferee	Date of Birt	h	First Giver	Namo			Initial		Surname		
Deptor/ Transferee	Date of Birth	[]	FIrst Giver	IName			mua		Sumame		
	Business D	ebtor Nam	e							Ontario Corporat Number	ion
	Address						City			Province	Postal
											Code
Assignor Name	Assignor Na	ame									
Secured Party	Secured par	rty, lien cla	imant, assi	gnee							
	Address						City			Province	
											Code
Opliatonal	0	1	F	A	044	84-4-		A	Data of	M = 4 · · · · ¹ 4 · ·	N
Collateral Classification	Consumer Goods	Inventory	Equipment	Accounts	Other	Inclu	r Vehicle ded	Amount		Maturity or	No Fixed Maturity Date
Motor Vehicle	Year	Make				Mode	el			V.I.N.	
Description											
General Collateral	General Col	lateral Des	scription								
Description											
				973							
Registering Agent				ty/ Lien Claimant							
	REGISTRY =	RECOVER	Y INC.								

	Address	City	Province	Postal Code
	1551 THE QUEENSWAY	TORONTO	ON	M8Z 1T5

END OF FAMILY

Turne of Coareb	Business Debt	<u></u>								
Type of Search										
Search Conducted On		NOFTHEC		INVVALL						
File Currency	24JUL 2024	F	. 6	D	. 6	F	Data		01-1	
	File Number		of Families	Page	of Pages	Expiry			Status	
	756665442	2	4	7	15	180CT	2024			
FORM 1C FINANCING	STATEMEN	Γ / CLAIM	FOR LIEN							
File Number	Caution Filing	Page of	Total Pages	Motor Ve Schedule		Regist	ration Nur	nber	Registered Under	Registration Period
756665442		01	003			201910)18 1500 8(077 9300	P PPSA	5
Individual Debtor	Date of Birth		First Given	Name			Initial		Surname	
Business Debtor	Business Deb	otor Name							Ontario Co Number	rporation
	CORPORATIO	N OF THE C	CITY OF COF	RNWALL						
	Address						City		Province	Postal Code
	360 PITT ST.						CORNWAL	L	ON	K6H 5S7
							:		:	
Individual Debtor	Date of Birth		First Given	Name			Initial		Surname	
Business Debtor	Business Deb	otor Name					1		Ontario Con Number	rporation
	Address						City		Province	Postal Code
	Address						Oity		TTOVINCE	i ostal oode
							1			
Secured Party	Secured Party	-	imant							
	RCAP LEASING	G INC.								
	Address						City		Province	Postal Code
	5575 NORTH \$	SERVICE RI	D, STE 300				BURLINGT	ON	ON	L7L 6M1
Collateral Classification	Consumer Goods	Inventory	Equipment	Accounts	Other	Motor Includ	Vehicle ed	Amount	Date of Maturity or	No Fixed Maturity Date
			Х	Х	Х					Х
									1	
Motor Vehicle	Year	Make				Model			V.I.N.	
Description										
		1				1			1	
General Collateral	General Colla	ateral Desc	ription							
Description	ALL RETAIL EC			TO TIME LE	EASED B	Y THE SI	ECURED			
	PARTY TO TH									
	AGREEMENTS								١	
Registering Agent	Registering A	aont								
Registering Agent	REGISTRY = F	-	INC							
	Address	LOUVERI	INC.				City		Province	Postal Code
							TORONTO	\ \	ON	M8Z 1T5
	1551 THE QUE	LINGVAT					IURUNIC	,	UN	CII ZOIVI

Type of Search	Business Debt	or									
Search Conducted On	CORPORATIO	N OF THE C	CITY OF COF	RNWALL							
File Currency	24JUL 2024										
-	File Number	Family	of Families	Page	of Pages	Expiry	Date		Status		
	756665442	2	4	8	15	180CT	2024				
FORM 1C FINANCING	STATEMEN	/ CLAIM	FOR LIEN								
File Number	Caution Filing	Page of	Total Pages	Motor Ve Schedule		Regist	ration Nu	mber	Registered Under	Registration Period	
756665442		02	003			201910	18 1500 8	077 9300			
Individual Debtor	Date of Birth		First Given	Namo			Initial		Surname		
	Date of Birth			intanic			IIIItiai		oumanic		
Business Debtor	Business Deb	otor Name							Ontario Cor Number	poration	
	Address						City		Province	Postal Code	
Individual Debtor	Date of Birth		First Given	Namo			Initial		Surname		
	Dute of Birth			interne			Inntial		oumanie		
Business Debtor	Business Deb								Ontario Corporation Number		
	Address						City		Province	Postal Code	
Secured Party	Secured Party	y / Lien Cla	imant								
							0.1		D		
	Address						City		Province	Postal Code	
Collateral Classification	Consumer Goods	Inventory	Equipment	Accounts	Other	Motor Includ	Vehicle ed	Amount	Date of Maturity or	No Fixed Maturity Dat	
Motor Vehicle Description	Year	Make				Model			V.I.N.		
General Collateral Description	General Colla THE SECURE			TOR FROM	TIME TO	D TIME AI	ND ANY PF	ROCEEDS			
	THEREOF, TO ATTACHMENT		ITH ALL REP	LACEMEN	T PARTS	, ACCES	SORIES AN	ND			
Registering Agent	Registering A	gent									
	Address						City		Province	Postal Code	
										1	

Type of Search	Business Debt	or								
Search Conducted On	CORPORATIO	N OF THE C	CITY OF COF	RNWALL						
File Currency	24JUL 2024									
	File Number	Family	of Families	Page	of Pages	Expiry	Date		Status	
	756665442	2	4	9	15	180CT	2024			
FORM 1C FINANCING	STATEMEN		FOR LIEN							
File Number	Caution Filing	Page of	Total Pages	Motor Ve Schedule		Regist	ration Nun	nber	Registered Under	Registration Period
756665442		03	003			201910	018 1500 80	077 9300		
									-	
Individual Debtor	Date of Birth		First Given	Name			Initial		Surname	
Business Debtor	Business Deb	tor Name							Ontario Cor	noration
Dusiliess Debtor	Dusiliess Der								Number	poration
	Address						City		Province	Postal Code
									•	
Individual Debtor	Date of Birth		First Given	Name			Initial		Surname	
Business Debtor	Business Deb	tor Name							Ontario Cor	noration
	Duomeoo Dex	siness Deptor Name							Number	poration
	Address						City		Province	Postal Code
Convert Douty	Cooursed Dort	/ Lion Cla	imont							
Secured Party	Secured Party	/ Lien Gia	Innanii							
	Address						City		Province	Postal Code
									1	1
Collateral Classification	Consumer Goods	Inventory	Equipment	Accounts	Other	Motor Includ	Vehicle ed	Amount	Date of Maturity or	No Fixed Maturity Date
	1								1	
Motor Vehicle Description	Year	Make				Model			V.I.N.	
Description										
General Collateral	General Colla	toral Desc	rintion							
Description	Centeral Cond		inption							
Registering Agent	Registering A	gent								
	Address						City		Province	Postal Code

END OF FAMILY

Type of Search	Business Debt	or								
Search Conducted On										
				INVVALL						
File Currency	24JUL 2024	E a secile a	- 6	Demo	- 6	E	Dete		Otatura	
	File Number		of Families	Page	of Pages	Expiry			Status	
	759695967	3	4	10	15	29JAN	2025			
FORM 1C FINANCING	STATEMEN	T / CLAIM	FOR LIEN							
File Number	Caution Filing	Page of	Total Pages	Motor Ve Schedule		Regist	ration Nun	nber	Registered Under	Registration Period
759695967		01	003			202002	29 1632 80	077 4740	P PPSA	5
Individual Debtor	Date of Birth		First Given	Name			Initial		Surname	
	Butto of Birth			manie			Inneren		oumanie	
Business Debtor	Business Deb	otor Name							Ontario Cor Number	poration
	CORPORATIO	N OF THE C	CITY OF COF	RNWALL						
	Address						City		Province	Postal Code
	1225 ONTARIO) ST.					CORNWAL	L	ON	K6H 4E1
									ļ	1
Individual Debtor	Date of Birth		First Given	Name			Initial		Surname	
Business Debtor	Business Deb	otor Name							Ontario Con Number	poration
	Address						0:44		Drevines	Destal Cada
	Address						City		Province	Postal Code
Secured Party	Secured Party	v / Lien Cla	imant							
	RCAP LEASING	-								
	Address						City		Province	Postal Code
	5575 NORTH \$	SERVICE RI	D. STE 300				BURLINGT	ON	ON	L7L 6M1
		0202	,				201121101		0.1	
Collateral Classification	Consumer Goods	Inventory	Equipment	Accounts	Other	Motor Includ	Vehicle ed	Amount	Date of Maturity or	No Fixed Maturity Date
			Х	Х	Х					Х
	-									
Motor Vehicle	Year	Make				Model			V.I.N.	
Description										
General Collateral	General Colla	ateral Desc	ription							
Description	ALL WIRELES			ROM TIME	TO TIME	LEASED	BY THE			
	SECURED PAR	RTY TO THE	E DEBTOR A	S DESCRIE	BED ON L	EASES,	CONDITION	IAL		
	SALESAGREE									
Pogistoring Acost	Pogiotoring	\aont								
Registering Agent	Registering A	-	INC							
		COVERY	INC.				City		Drouinss	Destal Carls
	Address						City	<u>`</u>	Province	Postal Code
	1551 THE QUE	ENSVAY					TORONTC)	ON	M8Z 1T5

Type of Search	Business Debt	or								
Search Conducted On	CORPORATIO	N OF THE C	ITY OF COR	NWALL						
File Currency	24JUL 2024	1								
	File Number	Family	of Families	Page	of Pages	Expiry	Date		Status	
	759695967	3	4	11	15	29JAN	2025			
FORM 1C FINANCING	STATEMEN		FOR LIEN							
File Number	Caution Filing	Page of	Total Pages	Motor Ve Schedule		Regist	ration Nur	nber	Registered Under	Registration Period
759695967		02	003			202007	129 1632 80	077 4740		
Individual Debtor	Date of Birth		First Given	Namo			Initial		Surname	
	Date of Birth			Nume			IIIItiai		ourname	
Business Debtor	Business Deb	otor Name							Ontario Cor Number	poration
	A.1.1						0.1		D	Destal Osta
	Address						City		Province	Postal Code
Individual Debtor	Date of Birth		First Given	Name			Initial		Surname	
Business Debtor	Business Deb	otor Name							Ontario Cor Number	poration
	Address						City		Province	Postal Code
	Address						Oity		TTOVINCE	
							1		1	1
Secured Party	Secured Party	/ Lien Cla	imant							
										1
	Address						City		Province	Postal Code
Collateral Classification	Consumer Goods	Inventory	Equipment	Accounts	Other	Motor Includ	Vehicle ed	Amount	Date of Maturity or	No Fixed Maturity Date
Matan Mahiala	Maran.	Mala				Madal			V/ I NI	
Motor Vehicle Description	Year	Make				Model			V.I.N.	
		1							1	
General Collateral	General Colla	teral Desc	ription							
Description	BETWEEN THE	E SECURED	PARTY AND	D THE DEB	TOR FRC	M TIME	TO TIME A	ND ANY		
	PROCEEDS TH		OGETHER W	ITH ALL RE	PLACEM	ENT PA	RTS, ACCE	SSORIES		
	AND ATTACHN	IENTS.								
Pogistoring Acont	Pogistoring A	aont								
Registering Agent	Registering A	gent								
	Address						City		Province	Postal Code
							-			
	•									

Sarch Conducted On Pile Currency CORPORATION OF THE CITY OF CORNWALL Page Page Page Page Page Page Page Page	Type of Search	Business Debt	or								
File Number Family of Pamily Pami		CORPORATIO	N OF THE C	CITY OF COF	RNWALL						
PagesFinal linePagesFORM 1C FINANCING STATEMENT / CLAIM FOR LIENNotor VehicleRegistration NumberRegisteredRegist	File Currency	24JUL 2024									
T59895967 3 4 12 15 29JAN 2025 FORM 1C FINANCIONG STATEMENT / CLAIM FOR LIEN Registration Number Registration Number Registration Number Registration Park Registration Number <		File Number	Family		Page		Expiry	Date		Status	
File Number Caution Filing Page of File Number Registration Number Registration Particle Schedule Registration Number Registration Particle Partial Partia Partia Partia Partial Partial Partia Partial Partial Partial P		759695967	3	4	12	1	29JAN	2025			
Filing Pages Schedule Under Period 759695967 0.3 003 20200129 1632 8077 4740 Onterio Period Individual Debtor Date of Birth First Given Name Initial Surname Business Debtor Business Debtor Name City Province Postal Code Individual Debtor Date of Birth First Given Name Initial Surname Address City Province Postal Code Individual Debtor Date of Birth First Given Name Initial Surname Business Debtor Business Debtor Name Initial Surname Business Debtor Business Debtor Name Initial Surname Business Debtor Business Debtor Name City Province Postal Code Secured Party Secured Party / Lien Claimant City Province Postal Code Collateral Consumer Inventory Equipment Accounts Other Motor Vehicle Amount Date of Maturity Date Motor Vehicle Consumer Inventory Equipment Accounts Other Motor Vehicle Amount Date of Maturity Date General Collateral Collateral Description Secured Collateral Description Secured Collateral Descriptio	FORM 1C FINANCING	STATEMEN	/ CLAIM	FOR LIEN							
Individual Debtor Date of Birth First Given Name Initial Surname Ontario Corporation Number Ontario Co	File Number		Page of				Regist	tration Nun	nber		
Business Debtor Name Business Debtor Name Address Address City Province Postal Code Address Business Debtor Name B	759695967		03	003			20200	129 1632 80	077 4740		
Business Debtor Name Business Debtor Name Address Address City Province Postal Code Address Business Debtor Name B		1		1							
Address City Province Postal Code Individual Debtor Date of Birth First Given Name Initial Surname Business Debtor Business Debtor Name Initial Surname Ontario Corporation Business Debtor Business Debtor Name City Province Postal Code Business Debtor Business Debtor Name City Province Postal Code Address City Province Postal Code Secured Party Secured Party / Lien Claimant City Province Postal Code Secured Party Secured Party / Lien Claimant City Province Postal Code Classification Consumer Inventory Equipment Accounts Other Model Amount Date of Maturity Date Goods Inventory Equipment Accounts Other Model V.I.N. VI.N. Secured Collateral Description General Collateral Description General Collateral Description VI.N. VI.N. Registering Agent Registering Agent Secure Vice Vice Vice Vice Vice Vice Vice Vic	Individual Debtor	Date of Birth		First Given	Name			Initial		Surname	
Address City Province Postal Code Individual Debtor Date of Birth First Given Name Initial Surname Business Debtor Business Debtor Name Initial Surname Ontario Corporation Address	D. J. S. D. M.	D. J. J. D. J	NI								
Individual Debtor Date of Birth First Given Name Individual Debtor Business Debtor Name Business Debtor Name Business Debtor Name First Given Name Individual Debtor Business Debtor Name First Given Name First Give	Business Debtor	Business Det	otor Name								poration
Individual Debtor Date of Birth First Given Name Individual Debtor Business Debtor Name Business Debtor Name Business Debtor Name First Given Name Individual Debtor Business Debtor Name First Given Name First Give		Address						City		Drovince	Destal Cada
Business Debtor Business Debtor Name Ontario Corporation Number Address City Province Postal Code Address City Province Postal Code Secured Party Secured Party / Lien Claimant City Province Postal Code Address City Province Postal Code Address City Province Postal Code Collateral Classification Consumer Inventory Equipment Accounts Other Motor Vehicle Amount Maturity No Fixed Maturity Date Obscription Year Make Make Model V.I.N. General Collateral Collateral Description General Collateral Description Secure Sec		Address						City		Province	Postal Code
Business Debtor Business Debtor Name Ontario Corporation Number Address City Province Postal Code Address City Province Postal Code Secured Party Secured Party / Lien Claimant City Province Postal Code Address City Province Postal Code Address City Province Postal Code Collateral Classification Consumer Inventory Equipment Accounts Other Motor Vehicle Amount Maturity No Fixed Maturity Date Obscription Year Make Make Model V.I.N. General Collateral Collateral Description General Collateral Description Secure Sec											
Business Debtor Business Debtor Name Ontario Corporation Number Address City Province Postal Code Address City Province Postal Code Secured Party Secured Party / Lien Claimant City Province Postal Code Address City Province Postal Code Address City Province Postal Code Collateral Classification Consumer Inventory Equipment Accounts Other Motor Vehicle Amount Maturity No Fixed Maturity Date Obscription Year Make Make Model V.I.N. General Collateral Collateral Description General Collateral Description Secure Sec	Individual Debtor	Date of Birth		First Given	Name			Initial		Surname	
Number Number Address City Province Postal Code Secured Party Secured Party / Lien Claimant City Province Postal Code Address City Province Postal Code Postal Code Address City Province Postal Code Postal Code Address City Province Postal Code Postal Code Collateral Consumer Inventory Equipment Accounts Other Motor Vehicle Amount Date of Maturity No Fixed Motor Vehicle Consumer Make Included Included<											
Secured Party Secured Party / Lien Claimant City Province Postal Code Address City Province Postal Code Collateral Classification Consumer Inventory Equipment Accounts Other Motor Vehicle Amount Date of Maturity or No Fixed Motor Vehicle Consumer Inventory Equipment Accounts Other Motor Vehicle Amount Date of Maturity or No Fixed Motor Vehicle Year Make Make VI.N. VI.N. VI.N. General Collateral General Collateral Description General Collateral Description VI.N. VI.N. VI.N. Registering Agent Registering Agent Registering Agent VI.N. VI.N. VI.N.	Business Debtor	Business Deb	otor Name							Ontario Cor Number	poration
Secured Party Secured Party / Lien Claimant City Province Postal Code Address City Province Postal Code Collateral Classification Consumer Inventory Equipment Accounts Other Motor Vehicle Amount Date of Maturity or No Fixed Motor Vehicle Consumer Inventory Equipment Accounts Other Motor Vehicle Amount Date of Maturity or No Fixed Motor Vehicle Year Make Make VI.N. VI.N. VI.N. General Collateral General Collateral Description General Collateral Description VI.N. VI.N. VI.N. Registering Agent Registering Agent Registering Agent VI.N. VI.N. VI.N.										1	1
City Province Postal Code Address City Province Postal Code Collateral Consumer Inventory Equipment Accounts Other Motor Vehicle Amount Date of Maturity Date of Maturity Date Or No Fixed Collateral Consumer Inventory Equipment Accounts Other Motor Vehicle Amount Date of Maturity Date Maturity Date Or No Fixed Motor Vehicle Year Make Model V.I.N. Province Province Province No Fixed Description Year Make Model V.I.N. Province P		Address						City		Province	Postal Code
City Province Postal Code Address City Province Postal Code Collateral Consumer Inventory Equipment Accounts Other Motor Vehicle Amount Date of Maturity Date of Maturity Date Or No Fixed Collateral Consumer Inventory Equipment Accounts Other Motor Vehicle Amount Date of Maturity Date Maturity Date Or No Fixed Motor Vehicle Year Make Model V.I.N. Province Province Province No Fixed Description Year Make Model V.I.N. Province P											
City Province Postal Code Address City Province Postal Code Collateral Consumer Inventory Equipment Accounts Other Motor Vehicle Amount Date of Maturity Date of Maturity Date Or No Fixed Collateral Consumer Inventory Equipment Accounts Other Motor Vehicle Amount Date of Maturity Date Maturity Date Or No Fixed Motor Vehicle Year Make Model V.I.N. Province Province Province No Fixed Description Year Make Model V.I.N. Province P	On annual Danta	O a avera di D arte	. (] :== 0]=								
Collateral Classification Consumer Goods Inventory Equipment Equipment a Accounts a Other Included Motor Vehicle Included Amount Maturity a Date of Maturity are a No Fixed Maturity Date or Motor Vehicle Description Year Make Model V.I.N. General Collateral Description General Collateral Description General Collateral Description Image: Collateral Description Registering Agent Registering Agent Registering Agent Image: Collateral Description	Secured Party	Secured Party	/ Lien Cia	imant							
Collateral Classification Consumer Goods Inventory Equipment Equipment a Accounts a Other Included Motor Vehicle Included Amount Maturity a Date of Maturity are a No Fixed Maturity Date or Motor Vehicle Description Year Make Model V.I.N. General Collateral Description General Collateral Description General Collateral Description Image: Collateral Description Registering Agent Registering Agent Registering Agent Image: Collateral Description		Addross						City		Province	Postal Code
Classification Goods Included Maturity or Maturity Date Motor Vehicle Year Make Model V.I.N. Description Year Make Model V.I.N. General Collateral Description General Collateral Description General Collateral Description VIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII		Address						Oity		TTOVINCE	r ostar ooue
Classification Goods Included Maturity or Maturity Date Motor Vehicle Year Make Model V.I.N. Description Year Make Model V.I.N. General Collateral Description General Collateral Description General Collateral Description VIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII											
Description Image: Construction Image: Construction General Collateral Description General Collateral Description Image: Construction Registering Agent Registering Agent Registering Agent Image: Construction			Inventory	Equipment	Accounts	Other			Amount	Maturity	
Description Image: Construction Image: Construction General Collateral Description General Collateral Description Image: Construction Registering Agent Registering Agent Registering Agent Image: Construction											
Description Image: Construction Image: Construction General Collateral Description General Collateral Description Image: Construction Registering Agent Registering Agent Registering Agent Image: Construction											
General Collateral Description General Collateral Description Registering Agent Registering Agent		Year	Make				Model			V.I.N.	
Description Registering Agent Registering Agent	Description										
Description Registering Agent Registering Agent											
Description Registering Agent Registering Agent											
Registering Agent Registering Agent		General Colla	iteral Desc	ription							
	Decomption										
	Registering Agent	Registering A	aent								
Address City Province Postal Code											
		Address						City		Province	Postal Code

END OF FAMILY

Business Debte										
	N OF THE C	CITY OF COR	RNWALL							
		1	1					1		
File Number	Family	of Families	Page	of Pages	Expiry	Date		Status		
777972231	4	4	13	15	04NOV	2026				
STATEMENT	/ CLAIM	FOR LIEN								
Caution Filing	Page of	Total Pages			Regist	ration Nur	nber	Registered Under	Registration Period	
	01	003			202111	04 1937 15	531 9038	P PPSA	5	
Date of Birth		First Givon	Namo			Initial		Surnamo		
Date of Birth		i list olveli	Name			Inntial		ourname		
Business Deb	otor Name	1						Ontario Cor Number	poration	
CORPORATIO	N OF THE C	CITY OF COF	RNWALL							
Address						City		Province	Postal Code	
360 PITT STRE	EET					-	L	ON	K6J 3P9	
1								-!	_	
Date of Birth		First Given	Name			Initial		Surname		
Business Deb	lebtor Name							Ontario Corporation Number		
Address						City		Province	Postal Code	
Address						ony				
Secured Dert	/ Lion Cla	imont								
-										
		ID.				0:44		Drovince	Postal Code	
						-				
3450 SUPERIO	R COURT,	UNITI				OAKVILLE		UN	L6L 0C4	
Consumer Goods	Inventory	Equipment	Accounts	Other			Amount	Date of Maturity or	No Fixed Maturity Date	
		Х	Х	Х					Х	
Year	Make				Model			V.I.N.		
			EBTOR FI	NANCED	BY THE	SECURED	PARTY,			
WHEREVER S	ITUATED, C	ONSISTING	OF FIFTY-0	ONE (51)	KYOCEF	RA COPIER	S,			
TOGETHER W	ITH ALL PA	RTS AND AC	CESSORIE	S RELAT	FING THE	ERETO, ALI	_			
Registering A	Agent									
	-									
D+H LIMITED F	ARINERSE	11P								
D+H LIMITED P Address	PARINERSF	11P				City		Province	Postal Code	
	24JUL 2024 File Number 777972231 STATEMENT Caution Filing Date of Birth Business Det CORPORATIO Address 360 PITT STRI Date of Birth Business Det Address 360 PITT STRI Date of Birth Business Det Address 360 PITT STRI CORPORATIO Address 360 PITT STRI CORPORATIO Address 360 PITT STRI CORPORATIO Address 360 PITT STRI CORPORATIO Address 360 PITT STRI CORPORATIO Address 360 PITT STRI CORPORATIO Address CORPORATIO Address Address Address Consumer Goods Consumer Goods CONSUMER CONSUME	24JUL 2024 File Number Family 777972231 4 STATEMENT / CLAIM Page of Caution Page of Filing 01 Date of Birth 0 Business Debtor Name CORPORATION OF THE C Address 360 PITT STREET Date of Birth 0 Business Debtor Name 0 Address 0 Secured Party / Lien Cla 0 4 OFFICE AUTOMATION L Address 3450 SUPERIOR COURT, 0 Consumer Inventory Goods 0 Year Make All PERSONAL PROPER 0	24JUL 2024 File Number Family of Families 777972231 4 4 STATEMENT / CLAIM FOR LIEN Caution Page of Total Filing 01 003 Date of Birth First Given Business Debtor Name First Given CORPORATION OF THE CITY OF COF Address 360 PITT STREET First Given Date of Birth First Given Business Debtor Name First Given Business Debtor Name First Given Business Debtor Name First Given Secured Party / Lien Claimant 4 4 OFFICE AUTOMATION LTD. Address 3450 SUPERIOR COURT, UNIT 1 Address 3450 SUPERIOR COURT, UNIT 1 X Year Make General Collateral Description ALL PERSONAL PROPERTY OF THE D WHEREVER SITUATED, CONSISTING TOGETHER WITH ALL PARTS AND ACT	File NumberFamily Family Familiesof Families FamiliesPage7779722314413State of State NameCautionPage of PagesTotal Pages ScheduleDate of BirthO1003Business Debtor NameORTON OF THE CITY OF CORNWALLAddress360 PITT STREETFirst Given NameDate of BirthFirst Given NameBusiness Debtor NameBusiness Debtor NameBusiness Debtor NameBusiness Debtor NameSecured Party / Lien Claimant4 OFFICE AUTOMATION LTD.Address3450 SUPERIOR COURT, UNIT 1Consumer GoodsInventory EquipmentAccountsGeneral Collateral DescriptionALL PERSONAL PROPERTY OF THE DEBTOR FINVHEREVENTIATED, CONSISTING OF FIFTY-CIOGETHER WITH ALL PARTS AND ACCESSORIE	24JUL 2024 File Number Family of Families Page of Pages 777972231 4 4 13 15 STATEMENT / CLAIM FOR LIEN Otal Pages Motor Vehicle Schedule Caution Page of Filing Total Pages Motor Vehicle Schedule Date of Birth Page of First Given Name First Given Name Business Debtor Name First Given Name State of Birth First Given Name Date of Birth First Given Name Business Debtor Name Secured Party / Lien Claimant Address Inventory Equipment Accounts Secured Party / Lien Claimant Accounts Other Goods Inventory Equipment Accounts Other General Collateral Description X X X ALL PERSONAL PROPERTY OF THE DEBTOR FINANCED VHEREVER SITUATED, CONSISTING OF FIFTY-ONE (51	24JUL 2024 File Number Family of Page of Pages Expiry 777972231 4 4 13 15 04NOV Stratement of the strategy	24JUL 2024 Family of Families Page of Pages Expiry Date Pages 777972231 4 4 13 15 04NOV 2026 STATEMENT / CLAIM FOR LIEN Caution Page of Total Pages Motor Vehicle Schedule Registration Nur Page of Schedule Oli 003 20211104 1937 18 Date of Birth First Given Name Initial Business Debtor Name CORPORATION OF THE CITY OF CORNWALL Address City Business Debtor Name City Date of Birth First Given Name Initial Business Debtor Name City Secured Party / Lien Claimant 4 dorFiCE AUTOMATION LTD. Address City Secured Party / Lien Claimant 4 OFFICE AUTOMATION LTD. Address City 3450 SUPERIOR COURT, UNIT 1 OAKVILLE Model General Collateral Description ALL PERSONAL PROPERTY OF THE DEBTOR FINANCED BY THE SECURED Y	24JUL 2024 Family of second seco	24JUL 2024 Fine Number Families Page Pages Expiry Date Status 777972231 4 4 13 15 04NOV 2026 Status STATEMENT / CLAIM FOR LIEN Caution Page of Total Motor Vehicle Registration Number Registration Number Registration Number P PPSA Date of Birth First Given Name Initial Surname Business Debtor Name City Province City Province Gate of Birth First Given Name Initial Surname Business Debtor Name Initial Surname Gate of Birth First Given Name Initial Surname Address City Province Secured Party / Lien Claimant 4 OFFICE AUTOM	

Tune of Secret	Business Debt	or								
Type of Search Search Conducted On										
File Currency	24JUL 2024	IN OF THE C		ANN WALL						
File Currency	File Number	Family	of Families	Page	of Pages	Expiry	Date		Status	
	777972231	4	4	14	15	04NOV	2026			
FORM 1C FINANCING		C / CLAIM	FOR LIEN							
File Number	Caution Filing	1	Total Pages	Motor Ve Schedule		Regist	ration Nu	mber	Registered Under	Registration Period
777972231		02	003			202111	104 1937 1	531 9038		
Individual Debtor	Date of Birth		First Given	Nomo			Initial		Surname	
Individual Deptor	Date of Birth		First Given	Name			Initial		Surname	
Business Debtor	Business Deb	otor Name	1						Ontario Co Number	poration
	A. I. I						0.1		D	Destal Orali
	Address						City		Province	Postal Code
									<u> </u>	
Individual Debtor	Date of Birth		First Given	Name			Initial		Surname	
Business Debtor	Business Deb								Ontario Co Number	poration
	Address						City		Province	Postal Code
Secured Party	Secured Party	y / Lien Cla	imant							
	Address						City		Province	Postal Code
Collateral Classification	Consumer Goods	Inventory	Equipment	Accounts	Other	Motor Includ	Vehicle ed	Amount	Date of Maturity or	No Fixed Maturity Dat
Motor Vehicle Description	Year	Make				Model			V.I.N.	
Description										
General Collateral Description	General Colla ATTACHMENT REPLACEMEN	S, ACCESS	ORIES AND							
	ANY PART OF									
Registering Agent	Registering A	Agent								
	Address						City		Province	Postal Code

Type of Search	Business Debt	or								
Search Conducted On	CORPORATIO	N OF THE C	CITY OF COF	RNWALL						
File Currency	24JUL 2024	1		1						
	File Number	Family	of Families	Page	of Pages	Expiry	Date		Status	
	777972231	4	4	15	15	04NOV	2026			
FORM 1C FINANCING	STATEMEN	/ CLAIM	FOR LIEN							
File Number	Caution Filing	Page of	Total Pages	Motor Vel Schedule		Regist	ration Nu	mber	Registered Under	Registration Period
777972231		03	003			202111	04 1937 1	531 9038		
Individual Debtor	Date of Birth		First Given	Name			Initial		Surname	
Business Debtor	Business Deb	otor Name							Ontario Cor Number	rporation
	Address						City		Province	Postal Code
	Address						Oity		TTOVINCE	
	_!								!	_
Individual Debtor	Date of Birth		First Given	n Name			Initial		Surname	
Business Debtor	Business Deb	otor Name							Ontario Cor Number	rporation
	Address						City		Province	Postal Code
Secured Party	Secured Party	y / Lien Cla	imant				-		·	
	Address						City		Province	Postal Code
	-		I					-	-	
Collateral Classification	Consumer Goods	Inventory	Equipment	Accounts	Other	Motor Includ	Vehicle ed	Amount	Date of Maturity or	No Fixed Maturity Dat
Motor Vehicle	Year	Make				Model			V.I.N.	
Description General Collateral Description	General Colla THEREFROM.		ription							
Description General Collateral Description	THEREFROM.		ription							
Description General Collateral			ription							

This service is tested daily with McAfee SECURE[™] to ensure the security of the transaction and information.

At ServiceOntario, we respect your right to privacy and value the trust you place in us. <u>Read more about ServiceOntario's Privacy</u> <u>Statement.</u>

	ServiceOntario Contact Centre	
Web Page ID: WEnqResult	System Date: 25JUL2024	Last Modified: July 14, 2024
Privacy 团	Accessibility 🗗	<u>Contact us</u> 团
FAQ @	<u>Terms of Use</u> 亿	© Queen's Printer for Ontario 2015 🗗

OPERATING AGREEMENT

THIS AGREEMENT made as of the _____ day of _____, 20_____.

BETWEEN:

CANADA MORTGAGE AND HOUSING CORPORATION

(hereinafter referred to as "CMHC")

OF THE FIRST PART;

- and -

THE CORPORATION OF THE CITY OF CORNWALL

(hereinafter, referred to as the "Borrower")

OF THE SECOND PART.

WHEREAS pursuant to Section 95 of the National Housing Act (the "Act"), CMHC may make a loan to any person to assist with the payment of capital costs of housing projects and determine the terms and conditions on which it makes such loan;

AND WHEREAS the Borrower is an eligible loan borrower under the National Housing Coinvestment Fund (the "**Program**"), which is administered by CMHC as part of Canada's National Housing Strategy and the Borrower is taking one or more loans from CMHC under the Program to assist with the financing of the Construction of a mixed use apartment building with 24 affordable units and facilities ancillary thereto that the Borrower is undertaking on the lands and premises legally described in Schedule E of the hereinafter defined Loan Agreement (the "**Project Lands**") in Ontario (the "**Project**");

AND WHEREAS the Borrower is the registered owner of the freehold title in the Project Lands;

AND WHEREAS pursuant to the requirements of the Program, the Borrower has entered into a loan agreement with CMHC dated as of ______ (the "Loan Agreement");

AND WHEREAS it is a condition of the Loans that, *inter alia*, the Project be established, maintained and operated in compliance with the terms and conditions set forth herein and in the Loan Agreement, including certain affordability, energy efficiency and accessibility requirements;

AND WHEREAS the parties wish to enter into this Agreement regarding the operation of the Project by the Borrower;

NOW THEREFORE in consideration of the foregoing premises and other good and valuable consideration, the receipt and sufficiency of which are acknowledged, the parties agree as follows:

Article 1 Definitions, Interpretation and Common Terms

- 1.1 Except as otherwise set out herein, the terms defined in Schedule A of the Loan Agreement shall have the same meanings where used in this Agreement.
- 1.2 Except as otherwise set out herein, the Common Terms as set out in the Loan Agreement shall apply to this Agreement as if set out in full again here, with such changes as are appropriate to fit context.

Article 2 Confirmation of Recitals and Acknowledgement of Fundamental Purpose and Obligations

- 2.1 The parties hereby confirm and acknowledge that the statements contained in the foregoing recitals are true and complete in all respects.
- 2.2 The Borrower is entering into this Agreement and the Loan Agreement to establish, maintain and operate the Project as mixed use market and affordable housing which consists of a mixed use market and affordable housing project with 24 affordable units and facilities ancillary thereto for the Term of this Agreement and acknowledges that its fundamental purpose in doing so and in fully performing its obligations in compliance with the terms and conditions of this Agreement is to benefit the public interest by achieving long-term social outcomes which are of fundamental importance to the federal government of Canada and CMHC, including the following:
 - (a) the development of new mixed use market and affordable housing which consists of a mixed use market and affordable housing project with 24 affordable units and facilities ancillary thereto;
 - (b) the maintenance of the affordability of the housing within the Project; and
 - (c) the reduction of the energy consumption and greenhouse gas emissions of the housing within the Project; and
 - (d) the increased accessibility of Housing Units and common areas within the Project.

- 2.3 The Borrower acknowledges that the intention to bind the Project to the fundamental purpose referred to in Section 2.2 arises out of the extraordinary nature of the Loans made to the Borrower and other funding or support provided to the Borrower under the Co-investment Agreement(s) as part of the Program.
- 2.4 The Borrower further acknowledges that CMHC would not have provided the Loans had the Borrower not made a commitment to comply with the terms and conditions set forth herein for the duration of the Term.

Article 3 Term

3.1 This Agreement shall become effective on the date hereof and, unless terminated earlier in accordance with Section 8.1, shall continue in force until the date that is 20 years from the date first occupancy is permitted (the **"Term**").

Article 4 Representations And Warranties

4.1 The representations and warranties given by Borrower in Sections 12 (a) to (q), (s) to (w) of the Loan Agreement are hereby incorporated by reference, are true and correct as of the date hereof and will be deemed to be repeated on each date of delivery by the Borrower to CMHC of an annual program criteria compliance report pursuant to Section 13(c) of the Loan Agreement (incorporated by reference pursuant to Article 6 hereof) for the duration of the Term.

Article 5 Covenants Regarding The Project

5.1 The covenants applicable to the Borrower set forth in Sections 14(a)(i), 14(a)(iii) to (xiv), 14(a)(xvi), 14(a)(xvii) 14(a)(xix) to (xxi), 14(b), 14(c)(ii), and 14(c)(iii) to (v), 14(c)(vii) to (xii), 14(d)(i) to (xii) and 14(d)(xvi) to (xviii) of the Loan Agreement are hereby incorporated by reference and shall apply *mutatis mutandis* for the duration of the Term.

Article 6 Reporting Covenants

6.1 The reporting covenants set forth in Sections 13(c), 13(d), 13(e), and 13(f) of the Loan Agreement are hereby incorporated by reference and shall apply *mutatis mutandis* for the duration of the Term.

Article 7 Transfers

7.1 The parties hereto acknowledge that the Borrower may not make any Disposition, or permit any Disposition to be made, of the Project, the Project Lands or any part thereof or interest therein, during the term of the Loan Agreement other than in compliance with the Loan Agreement. Furthermore, during the Term of this Agreement, the Borrower shall not make any Disposition, or permit any Disposition to be made, of the Project, the Project Lands or any part thereof or interest therein without first obtaining from the party to whom a Disposition is made (a "**Transferee**") a written assumption agreement with CMHC (an "**Assumption Agreement**"), wherein such Transferee agrees with CMHC to be bound by Section 14(b) of the Loan Agreement (which is incorporated by reference herein pursuant to Section 5.1) and to be bound by such other terms, covenants and conditions as may be required by CMHC in its sole and absolute discretion, such

Assumption Agreement to be in form and substance acceptable to CMHC in its sole and absolute discretion.

7.2 The decision to release the Borrower from any obligations in connection with the Project, the Project Lands or any part thereof or interest therein in relation to any Disposition shall be in CMHC's sole and absolute discretion.

Article 8 Termination

- 8.1 Where CMHC is satisfied in its sole and absolute discretion that the Project will not be proceeding under the Program, this Agreement may be terminated by written notice to the Borrower.
- 8.2 Furthermore, CMHC may, in its sole and absolute discretion, terminate this Agreement for any other reason upon notice in writing to the Borrower of no less than two (2) weeks, during which time the Borrower may make representations on such matters and their effect on the eligibility of the Borrower to receive financial assistance or other benefits from CMHC. CMHC may require the Borrower to enter into an agreement requiring the Borrower to rectify any matter which CMHC deems necessary for the Borrower to maintain its eligibility for financial assistance under the Program or other benefits from CMHC.

Article 9 Indemnity

9.1 The indemnity provisions set forth in Section 17 and Section 19(a) of the Loan Agreement are hereby incorporated by reference and shall apply *mutatis mutandis* for the duration of the Term and shall survive and remain in full force and effect in accordance with their terms, notwithstanding (a) the termination of this Agreement; and/or (b) the termination of the Loan Agreement and/or the repayment, satisfaction or discharge of any obligations of the Borrower under the Loan Agreement or any other Loan Document.

Article 10 Remedies

- 10.1 The rights set out herein shall be without limitation, and shall be in addition to all other rights and remedies of CMHC otherwise available under any other provision of the Loan Documents, by operation of law, at equity or otherwise (including, without limitation, damages, disgorgement of profits and/or remedies of seizure, injunction and specific performance notwithstanding the termination of this Agreement), all of which are hereby expressly preserved, all of which rights shall be cumulative. Furthermore, the Borrower acknowledges and agrees that:
 - (a) in the event of default under this Agreement, CMHC, the Program, other affordable housing providers, the broader affordable housing sector and the public interest will sustain harm, the extent of which cannot be pre-determined or remedied through compensation; and
 - (b) all costs and expenses, including the fees of appraisers, advisors, consultants and lawyers, associated with enforcing CMHC's rights under the Loan Documents shall be at the cost of the Borrower.

[REMAINDER OF THIS PAGE LEFT INTENTIONALLY BLANK]

IN WITNESS WHEREOF the parties have executed this Agreement as of the date first above written.

CANADA MORTGAGE AND HOUSING CORPORATION

By:		
Name:		
Title:		
By:		
Name:		
Title:		
Address:	700 Montreal Road, Ottawa, ON K1A 0P7	
Email:	nhs-contracting@cmhc-schl.gc.ca	
We have authority to bind CMHC.		

THE CORPORATION OF THE CITY OF CORNWALL

By:	
-	Authorized Signing Officer
Name:	
Address:	
Email:	
By:	
	Authorized Signing Officer
Name:	
Address:	
Email:	

[*I*][*We*] have the authority to bind the Borrower.

(Signature Page to Operating Agreement)

CERTIFICATE OF THE CLERK

To: Borden Ladner Gervais LLP

And To: Canada Mortgage Housing Corporation ("CMHC")

IN THE MATTER OF an issue of a debenture of The Corporation of The City of Cornwall (the "**Municipality**") in the principal amount of \$13,017,084.46 (the "**Debenture**"), authorized by Debenture By-law ______ (the "**Debenture By-law**");

I, _____, Clerk of the Municipality, **DO HEREBY CERTIFY THAT**:

- 1. The Debenture By-law was finally passed and enacted by the Council of the Municipality on August _____, 2024 in full compliance with the *Municipal Act, 2001*, as amended (the "Act") at a duly called meeting at which a quorum was present. Forthwith after the passage of the Debenture By-law, the same was signed by the Mayor and the Clerk and sealed with the municipal seal of the Municipality.
- 2. With respect to the undertaking of the capital works described in the Debenture By-law (the "**Capital Works**"), before the Council of the Municipality exercised any of its powers in respect of the Capital Works, and before authorizing any additional cost amount and any additional debenture authority in respect thereof (if any), the Council of the Municipality had its Treasurer complete the required calculation set out in the relevant debt and financial obligation limits regulation (the "**Regulation**"). Accordingly, based on the Treasurer's calculation and determination under the Regulation, the Council of the Municipality authorized the Capital Works, each such additional cost amount and each such additional debenture authority (if any), without the approval of the Ontario Land Tribunal pursuant to the Regulation.
- 3. No application has been made or action brought to quash, set aside or declare invalid the Debenture By-law, nor has the same been in any way repealed, altered or amended, and the Debenture By-law is now in full force and effect.
- 4. All of the recitals contained in the Debenture By-law are true in substance and fact.
- 5. To the extent that the public notice provisions of the Act are applicable, the Debenture By-law has been enacted and passed by the Council of the Municipality in full compliance with the applicable public notice provisions of the Act.
- 6. The Debenture authorized to be issued by the Debenture By-law has not been previously issued.
- 7. The Municipality is not subject to any restructuring order under part V of the Act or other statutory authority. Accordingly, no approval of the Debenture By-law and/or of the issue of

the Debenture is required by any transition board or commission appointed in respect of the restructuring of the Municipality.

8. The Debenture By-law, the Loan Agreement, the Operating Agreement and the transactions contemplated thereby do not conflict with, or result in a breach or violation of any statutory provisions which apply to the Municipality or any agreement to which the Municipality is a party or under which the Municipality or any of its property is or may be bound, or, to the best of my knowledge, violate any order, award, judgment, determination, writ, injunction or decree applicable to the Municipality of any regulatory, administrative or other government or public body or authority, arbitrator or court.

DATED at The Corporation of The City of Cornwall as at the _____ day of August, 2024

[AFFIX SEAL]

_____, Clerk

CERTIFICATE OF THE TREASURER

To: Borden Ladner Gervais LLP

And To: Canada Mortgage Housing Corporation ("CMHC")

IN THE MATTER OF an issue of a debenture of The Corporation of The City of Cornwall (the "**Municipality**") in the principal amount of \$13,017,084.46, for Capital Works (as defined herein) of the Municipality authorized by Debenture By-law ______ (the "**Debenture By-law**");

This Certificate is issued pursuant to the loan agreement between CMHC and the Municipality effective August _____, 2024 (the "Loan Agreement").

I, _____, Treasurer of the Municipality, DO HEREBY CERTIFY THAT:

- 1. The Municipality has received from the Ministry of Municipal Affairs and Housing its annual debt and financial obligation limit for the relevant years.
- 2. With respect to the undertaking of the capital works described in the Debenture By-law (the "**Capital Works**"), before the Council of the Municipality authorized the Capital Works, and before authorizing any additional cost amount and any additional debenture authority in respect thereof (if any), the Treasurer calculated the updated relevant debt and financial obligation limit in accordance with the applicable debt and financial obligation limits regulation (the "**Regulation**"). The Treasurer thereafter determined that the estimated annual amount payable in respect of the Capital Works, each such additional cost amount and each such additional debenture authority (if any), would not cause the Municipality to reach or to exceed the relevant updated debt and financial obligation limit as at the date of the Capital Works, each such additional cost amount and each such additional cost amount and each such additional debenture authority (if any), without the approval of the Ontario Land Tribunal pursuant to the Regulation.
- 3. As at the date hereof, the Municipality has not reached or exceeded its updated annual debt and financial obligation limit.
- 4. In updating the relevant debt and financial obligation limit(s), the estimated annual amounts payable described in the Regulation were determined based on current interest rates and amortization periods which do not, in any case, exceed the lifetime of any of the purposes of the Municipality described in such section, all in accordance with generally accepted accounting principles for local governments as recommended, from time to time, by the relevant Public Sector Accounting Board.
- 5. The term within which the Debenture to be issued for the Municipality in respect of the Capital Works pursuant to the Debenture By-law is made payable does not exceed the lifetime of such Capital Works.

- 6. The principal amount now being financed through the issue of the Debenture pursuant to the Debenture By-law in respect of the Capital Works does not exceed the net cost of the Capital Works.
- 7. The money received by the Municipality from the Debenture issued pursuant to the Debenture By-law, including any premium, and any earnings derived from the investment of that money after providing for the expenses related to its issue, if any, shall be used to finance the Capital Works, or apportioned and applied to the Capital Works, as applicable, and to no other purpose except as permitted by the *Municipal Act*, 2001.
- 8. As of the date hereof, none of the events specified in Section 15 of the Loan Agreement have occurred or are continuing.
- 9. On or before August _____, 2024, I as Treasurer, signed the fully registered debenture numbered ______ in the principal amount of \$13,017,084.46 dated August _____, 2024, registered in the name of CMHC and authorized by the Debenture By-law (the "**Debenture**").
- 10. On or before August _____, 2024, the Debenture was signed by ______, Mayor of the Municipality at the date of the execution and issue of the Debenture, the Debenture was sealed with the seal of the Municipality, the Debenture is in all respects in accordance with the Debenture By-law and in issuing the Debenture the Municipality is not exceeding its borrowing powers.
- 11. The said ______ is the duly elected Mayor of the Municipality and that I am the duly appointed Treasurer of the Municipality and that we were severally authorized under the Debenture By-law to execute the Debenture in the manner aforesaid and that the Debenture is entitled to full faith and credence.
- 12. No litigation or proceedings of any nature are now pending or threatened, attacking or in any way attempting to restrain or enjoin the issue and delivery of the Debenture or in any manner questioning the proceedings and the authority under which the same is issued, or affecting the validity thereof, or contesting the title or official capacity of the said Mayor or myself as Treasurer of the Municipality, and no proceedings for the issuance of the Debenture or any part of it has been repealed, revoked or rescinded in whole or in part.
- 13. The representations and warranties of the Municipality set out in Section 12 of the Loan Agreement were true and correct as of the date of the request to issue the Debenture in respect of the Capital Works pursuant to the Debenture By-law and are true and correct as of the date hereof and the Municipality is not in material default of any of its obligations under such Loan Agreement.
- 14. As of the date hereof, the Municipality:
 - (i) has not committed any act of bankruptcy;

- (ii) is not insolvent, or has not proposed or given notice of its intention to propose, a compromise or arrangement to its creditors generally;
- (iii)has not had an application for a bankruptcy order, or application for the appointment of a receiver, trustee, inspector, monitor, or similar party filed against it;
- (iv)has not made a voluntary assignment in bankruptcy, taken any proceeding with respect to any stay, proposal, sale, compromise or arrangement, taken any proceeding or corporate action to have itself declared bankrupt, liquidated, dissolved or wound-up, taken any proceeding to have a receiver appointed of any part of its assets;
- (v) has not had the holder of any Encumbrance (as defined in the Loan Agreement) take possession of its property; or
- (vi)has not had an execution or distress become enforceable or become levied, or an enforcement of security or foreclosure, on any material portion of its assets and property.

DATED at The Corporation of The City of Cornwall as at the _____ day of August, 2024.

_____, Treasurer

[AFFIX SEAL]

I, _____, Clerk of the Municipality do hereby certify that the signature of

_____, Treasurer of the Municipality described above, is true and genuine.

[AFFIX SEAL]

_____, Clerk



The Corporation of the City of Cornwall Regular Meeting of Council Confirming By-law 2024-073

Department:	Corporate Services
Division:	Clerk's Division
By-law Number:	2024-073
Report Number	2024-67-CAO
Meeting Date:	July 9, 2024
Subject:	Confirming By-law 2024-073 for August 13, 2024

A By-law to adopt, ratify and confirm the proceedings of the Council of The Corporation of the City of Cornwall at its meetings held on Tuesday, August 13, 2024.

Whereas Section 5(1) of the Municipal Act, S.O. 2001, c.24 thereto provides that the powers of a municipal Corporation shall be exercised by its Council; and

Whereas Section 5(3) of the Municipal Act, S.O. 2001, c.24 and amendments thereto, provides that the powers of Council are to be exercised by By-law: and

Whereas in many cases action which is taken or authorized to be taken by Council does not lend itself to the passage of an individual By-law; and

Whereas Section 248 provides that if a council passes a comprehensive general by-law that consolidates and includes the provisions of any By-law previously passed by the Council; and it is deemed expedient that a By-law be passed to authorize the execution of agreements and other documents and that the proceedings of the Council of The Corporation of the City of Cornwall at this meeting be confirmed and adopted by By-law.

Now therefore be it resolved that the Council of The Corporation of the City of Cornwall enacts as follows:

1.(a) That the following Minutes of the Public Meetings of the Municipal Council of The Corporation of the City of Cornwall be and the same are hereby adopted:



(i) Regular Meeting of Council #2024-18 of July 9, 2024

(b) That the following Minutes of the In Camera Meetings pertaining to the security or part of the property of the Municipality or Local Board, personal matters about an identifiable individual, including municipal or Local Board employees, a proposed or pending acquisition or disposition of land by the Municipality or Local Board, labour relations or employee negotiations, litigation or potential litigation, including matters before administrative tribunals, affecting the Municipality or Local Board, advice that is subject to solicitor-client privilege, including communications necessary for the purpose, a matter in respect of which a Council, Board, Committee other body may hold a closed meeting under another Act, or for the purpose of educating or training the members and where no member discusses or otherwise deals with any matter in a way that materially advances the business or decision-making of the council, local board or committee, be and the same are hereby adopted:

(i) Regular In-Camera Committee of Council #2024-08 of June 25, 2024.

(c) That the actions of the Council at its meetings held on Tuesday, August 13, 2024, in respect of each recommendation contained in all reports of the regular and in-camera meetings and in respect of each motion, resolution and other action taken by the Council at its said meeting is, except where the prior approval of the Ontario Municipal Board or other authority is by law required, hereby adopted, ratified and confirmed as if all such proceedings were expressly embodied in the By-law;

(d) That the above-mentioned actions shall not include any actions required By-law to be taken by resolutions.

2. That where no By-law has been or is passed with respect to the taking of any action authorized in or by the above mentioned Minutes or with respect to the exercise of any powers by the Council in the above mentioned Minutes, then this By-law shall be deemed for all purposes to be the By-law required for approving and authorizing and taking of any action authorized therein or thereby, or required for the exercise of any powers therein by the Council.

3. The Mayor and proper officials of The Corporation of the City of Cornwall are hereby authorized and directed to do all things necessary to give effect to the above-mentioned actions and to obtain approvals where required.



4. Unless otherwise provided, the Mayor and Clerk are hereby authorized and directed to execute and the Clerk to affix the seal of The Corporation of the City of Cornwall to all documents necessary to give effect to the abovementioned actions.

5. It is declared that notwithstanding that any section or sections of this Bylaw or parts thereof, may be found by any court of law to be bad or illegal or beyond the power of the Council to enact, such section(s) or part(s) hereof shall be deemed to be severable and that all other sections or parts of this By-law are separate and independent therefrom and enacts as such.

Read, signed and sealed in open Council this 13th day of August 2024.

Manon L. Levesque City Clerk Justin Towndale Mayor