THIS MEETING WILL BE WEBCAST ON THE CITY'S PUBLIC YOUTUBE SITE (CITYWATERLOO) AND MAY BE TELECAST ON PUBLIC TELEVISION

COUNCIL MEETING

Monday, April 25, 2022

10:00 AM

AGENDA

Mayor Jaworsky in the Chair

1. ROLL CALL

2. DISCLOSURE OF PECUNIARY INTEREST AND THE GENERAL NATURE THEREOF

3. CLOSED MEETING

Recommendation:

That Council hold a closed meeting for the purposes of considering the following subject matter:

a) litigation or potential litigation, including matters before administrative tribunals, affecting the municipality or local board (policy advice); and

b) a proposed or pending acquisition or disposition of land by the municipality or local board (potential acquisition/disposition of lands); and

c) advice that is subject to solicitor-client privilege, including communications necessary for that purpose (policy advice, potential acquisition/disposition of lands)

COUNCIL MEETING WILL RECESS AND RECONVENE AT 2:00 PM

4. ROLL CALL

5. TERRITORIAL ACKNOWLEDGEMENT

6. MOMENT OF REFLECTION

7. DISCLOSURE OF PECUNIARY INTEREST AND THE GENERAL NATURE THEREOF

8. APPROVAL OF MINUTES

That the previous meeting minutes be approved.

a) April 4, 2022 – Council Meeting **Page 8**

Recommendation:

That the minutes of the Council meeting held on April 4, 2022 be approved as printed.

9. PRESENTATION

a) Stewardship & Forestry Highlights for 2022
Tim Wolfe and Peggy Stevens

10. STAFF REPORTS

a) Title: **Green Building Policy Update for City-Owned Buildings** **Page 17**
Report No.: COM2022-013
Prepared By: Scott Prevost

Presentation: Scott Prevost

Correspondence: Sustainability Advisory Committee **Page 54**

Recommendations:

1. That Council approve report COM2022-013.

2. That Council approve the revisions to the Corporate Policy A-033 Green Building Policy for City-Owned Buildings as Appendix A.

3. That Council direct Facility Design and Management Services staff to prepare a steady stream of annual funding to support the Green Building Policy targets and that the funding be vetted through the City's Budget Committee for due consideration.

4. That Council direct Facility Design and Management Services staff to seek and explore a big picture vision that includes financial support from provincial and federal governments to support greenhouse gas reductions at existing facilities.

5. That Council direct Facility Design and Management Services staff to report back to Council annually with a summary of any proposed modifications to the Green Building Policy.

b) **Title:** **Waterloo Public Square Improvements** **Page 55**
Report No.: IPPW 2022-021
Prepared By: Emily Brown

Presentation: Emily Brown

Recommendations:

1. That Council approve Staff Report IPPW 2022-021.

2. That Council approve the detailed design of the Waterloo Public Square Water Feature as outlined in Staff Report IPPW 2022-021 and direct staff to proceed with tendering and construction in 2023.

3. That Council approve the movable Waterloo Public Square Shade Elements and direct staff to proceed with procurement and installation this year.

4. That Council approve the preferred concept for the permanent Waterloo Public Square Shade Structures as outlined in Staff Report IPPW 2022-021 and direct staff to proceed with detailed design and tendering for construction in 2023.

c) **Title:** **Award of Tender RFT22-03 Albert Street Watermain Replacement and Road Improvements (Columbia to Weber)** **Page 63**

Report No.: IPPW2022-020
Prepared By: Kyle Bossie

Recommendations:

1. The IPPW2022-020 be approved.

2. That Council authorizes the reallocation and transfer of $4,967,440 in capital funding to project account #210110 from various capital project accounts, as detailed in Table 2 of this report.

3. That Council approves the award of RFT22-03 - Albert Street Watermain Replacement and Road Improvements (Columbia to Weber) to 410754 Ontario Limited o/a Sousa Concrete for the submitted price of $5,327,099.00 plus unrecoverable HST in the amount of $93,756.94 for a total award value of $5,420,855.94.

4. That the Mayor and Clerk be authorized to sign the Agreement between The Corporation of the City of Waterloo and 410754 Ontario Limited o/a Sousa Concrete, and any other documents related to this project, subject to the satisfaction of the City's Director of Legal Services.

d) **Title:** **Award of RFT22-06 Bechtel Park Diamond Replacement** **Page 72**

Report No.: COM2022-015
Prepared By: Derek Brick

Recommendations:

1. That Council approve report COM2022-015.

2. That Council approve the reallocation and transfer of $450,000 in additional funding for the Bechtel Park Diamond replacement project #220033 from various capital project accounts, as detailed in Table 2 of this report.

3. That Council approve the award of RFT 22-06 – Bechtel Park Diamond Replacement to Twin-City Interloc Inc. for the submitted price of $1,097,855.00 plus unrecoverable HST in the amount of $19,322.25 for a total award value of $1,117,177.25

4. That the Mayor and Clerk be authorized to sign the agreement between the Corporation of the City of Waterloo and Twin-City Interloc Inc., and any other documents related to this project, subject to the satisfaction of the City's Solicitor.

e) **Title:** **Lot Maintenance By-law Amendments** **Page 80**
Report No.: COM2022-016
Prepared By: Grant Curlew

Presentation: Grant Curlew

Recommendations:

1. That Council approve report COM2022-016.

2. That Council amend By-law 2011-123 to include additional allowances for naturalized areas on private lots and increased grass height limits in an effort to support the native pollinator population.

f) **Title:** **Waterloo North Hydro Holdco Shareholder Nominations and Proxy** **Page 85**
Report No.: CORP2022-013
Prepared By: Julie Scott

Recommendations:

1. That Staff Report CORP2022-013 be approved.

2. That Council nominate the following Council and citizen representatives for appointment to the Waterloo North Hydro Holding Corporation Board of Directors until the board of the new corporate entity is formed.
   - Mayor of the City of Waterloo
   - Member of Council appointed finance liaison for the City of Waterloo
   - Steven McCartney
   - John Milloy
   - Janet Peddigrew
   - David Petras

3. That Council appoint Councillor Jeff Henry as proxy to vote for the Corporation of the City of Waterloo at the Annual Meeting of Shareholders of the Waterloo North Hydro Holding Corporation to be held on May 19, 2022 and at any adjournments thereof, revoking any proxy previously given and that the Mayor and Clerk be

authorized to sign the proxy resolution and any other related documents for such meeting.

4. That Council endorses the nomination of the following to the boards of the new corporate entity:
City of Waterloo MergeCo Holdco representatives
- David Petras
- Tim Martin (recommended to serve as Vice Chair)

5. That Council nominates the Mayor and the Councillor appointed as the finance liaison as the non-independent board representatives for the new corporate entity Holding Corporation Board of Directors and the Mayor for the new corporate entity Wires Company.

g) Title: **Ombuds Services** **Page 88**
Report No.: CORP2022-023
Prepared By: Julie Scott

Recommendations:

1. That Staff Report CORP2022-023 be approved.

2. That Council defer to the Ombudsman Ontario for Ombuds services.

h) Title: **Deeming By-law, High Noon Investment Corporation, for 40 Frobisher Drive and 40 Baffin Place** **Page 93**
Report No.: IPPW2022-030
Prepared By: Joel Cotter

Recommendations:

1. That Council approve report IPPW2022-030.

2. That Council approve High Noon Investment Corporation's request for a deeming by-law pursuant to subsection 50(4) of the Planning Act for the lands known municipally as 40 Frobisher Drive and 40 Baffin Place, to enable the consolidation of 35 Northland Road, 40 Frobisher Drive and 40 Baffin Place.

11. CONSIDERATION OF NOTICE OF MOTION GIVEN AT PREVIOUS MEETING

None

12. NOTICE OF MOTION

None

13. COMMUNICATIONS AND CORRESPONDENCE

None

14. UNFINISHED BUSINESS

None

15. QUESTIONS

16. NEW BUSINESS

a) **Corporate Accessibility & Inclusion Review Council Appointments Request** **Page 98**

Recommendation:

1. That Council appoint Councillor Hanmer and Councillor _____ to the Corporate Accessibility & Inclusion Review Team.

17. ENACTMENT OF BY-LAWS

Recommendation:

That the By-laws listed below be read a first, second and third time and finally passed, numbered sequentially commencing with By-law Number 2022-025 and that the Mayor and Clerk be authorized to sign them accordingly.

a) By-law Establishing Widening Wells Lane (B-15/21, May 18, 2021)

b) Deeming By-law - 40 Frobisher Drive and 40 Baffin Place (IPPW2022-030, April 25, 2022)

c) By-law to Authorize Vote By Mail on Demand (CORP2021-043, December 6, 2021)

d) By-law to confirm all actions and proceedings of Council, April 25, 2022

18. ADJOURNMENT

THIS MEETING WILL BE WEBCAST ON THE CITY'S PUBLIC YOUTUBE SITE (CITYWATERLOO) AND MAY BE TELECAST ON PUBLIC TELEVISION

COUNCIL MEETING

Monday, April 4, 2022

10:00 AM

MINUTES - DRAFT

Mayor Jaworsky in the Chair

1. ROLL CALL

At this time, Mayor Jaworsky requested a roll call of the members of Council present and responding.

PRESENT: Mayor Dave Jaworsky, Councillor Sandra Hanmer, Councillor Royce Bodaly, Councillor Angela Vieth, Councillor Diane Freeman, Councillor Jen Vasic, Councillor Jeff Henry, Councillor Tenille Bonoguore

2. DISCLOSURE OF PECUNIARY INTEREST AND THE GENERAL NATURE THEREOF

No disclosure of pecuniary interest was declared by any member of Council at this point in the meeting.

3. CLOSED MEETING

Moved by Councillor Hanmer, Seconded by Councillor Bodaly:

That Council hold a closed meeting for the purposes of considering the following subject matter:

a) personal matters about an identifiable individual, including municipal or local board employees (Covid-19 update); and

b) litigation or potential litigation, including matters before administrative tribunals, affecting the municipality or local board (OLT Appeal); and

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

d) labour relations or employee negotiations (Covid-19 update);

e) advice that is subject to solicitor-client privilege, including communications necessary for that purpose (procurement advice, OLT Appeal, potential acquisition/disposition of lands)

f) a position plan, procedure, criteria or instruction to be applied to any negotiations carried on or to be carried on by or on behalf of the municipality or local board (potential acquisition/disposition of lands)

Mayor Jaworsky requested a recorded vote.

Carried Unanimously
8 Voting in Favour
(MAYOR JAWORSKY)
(COUNCILLOR HANMER)
(COUNCILLOR BODALY)
(COUNCILLOR VIETH)
(COUNCILLOR FREEMAN)
(COUNCILLOR VASIC)
(COUNCILLOR HENRY)
(COUNCILLOR BONOGUORE)

Council meeting recessed: (Time: 10:01 a.m.)
Council meeting reconvened: (Time: 2:01 p.m.)

4. ROLL CALL

At this time, Mayor Jaworsky requested a roll call of the members of Council present and responding.

PRESENT: Mayor Dave Jaworsky, Councillor Sandra Hanmer, Councillor Royce Bodaly, Councillor Angela Vieth, Councillor Diane Freeman, Councillor Jen Vasic, Councillor Jeff Henry, Councillor Tenille Bonoguore

5. TERRITORIAL ACKNOWLEDGEMENT

Mayor Jaworsky opened the meeting with the following Territorial Acknowledgement:

We would like to begin by acknowledging that the land on which we are gathering from today is the land traditionally cared for by the Haudenosaunee, Anishnaabe and Neutral People. We also acknowledge the enduring presence and deep traditional knowledge and philosophies of the Indigenous People with whom we share their land today.

6. MOMENT OF REFLECTION

Mayor Jaworsky provided Council with a moment of reflection.

At the beginning of this Council meeting, we pause to think about the needs of our community. May we show wisdom and compassion in all our decisions.

7. DISCLOSURE OF PECUNIARY INTEREST AND THE GENERAL NATURE THEREOF

No disclosure of pecuniary interest was declared by any member of Council at this point in the meeting.

8. APPROVAL OF MINUTES

That the previous meeting minutes be approved.

a) March 7, 2022 – Council Meeting

Moved by Councillor Vieth, Seconded by Councillor Bodaly:

> That the minutes of the Council meeting held on March 7, 2022 be approved as printed.

Mayor Jaworsky requested a recorded vote.

Carried Unanimously
8 Voting in Favour
(MAYOR JAWORSKY)
(COUNCILLOR HANMER)
(COUNCILLOR BODALY)
(COUNCILLOR VIETH)
(COUNCILLOR FREEMAN)

(COUNCILLOR VASIC)
(COUNCILLOR HENRY)
(COUNCILLOR BONOGUORE)

9. DELEGATIONS

a) Communitech Annual Update

Chris Albinson, President and CEO, Communitech, gave a presentation updating Council on the highlights from 2021, as well as an overview of what Communitech is doing going forward. He then responded to questions of Council.

10. WORKSHOP

a) Fire Master Plan Workshop
Pomax Consulting Inc.

Sandy van Solm, Deputy Chief, Fire Services, introduced the consultants, Pomax Consulting Inc., for the update of the Fire Master Plan for the City of Waterloo.

Jon Hambides, Manager, Pomax Consulting Inc., provided an overview of the Fire Master Plan process and the progress to date.

Council then participated in a workshop to provide feedback on several questions provided to Council in advance. The feedback provided will be incorporated into a draft plan for consideration by Council. Council was asked three questions relating to different components of the intended Fire Master Plan.

1. Over the ten-year duration of the fire master plan, technology will be vital to fire service resource management, efficiency, and effectiveness. What primacy does council assign to fire information technology and its associated cost?

Council provided the following feedback:

- Things that shorten time windows (for response) are valuable
- Is IT unique to fire, or is it shared across other departments? Is this something we pool with other jurisdictions?
- Technology should be implemented on a Return on Investment perspective
- Important to integrate with other First Responders
- Data collected should inform future decisions as it relates to Fire Services to better allocate resources

2. What roles should the fire service address in the municipality? For example, prevention (inspection and enforcement), public education, fire response, medical response, others.

Council provided the following feedback:

- Fire suppression is the most important role of Fire Services
- Education and fire prevention are very important. Council asked how we increase the conversation around prevention and public education. How do we focus education on what's most effective?
- Medical response seen as important, but also as an EMS response, rather than Fire Services

3. What are the highest priority questions council expects the 10-year fire master plan to answer?

Council provided the following feedback:

- How can we mitigate climate change? How will the fire department challenge the status quo of climate change and intensification?
- What equipment and training do we need as we build higher? What is the timing on that training? How do we position resources to address this?
- Is there flexibility in the budget?
- What are the leading practices in fire response, and what do we have to do to get there?
- What impact do the location of the fire houses and the neighbouring municipalities have on response times?
- How does the Fire Master Plan integrate with other recent plans, such as the Transportation Master Plan, TransformWR Plan, the Official Plan, etc.?
- How does it justify the increasing amount of funding?

11. STAFF REPORTS

a) Title: Fire Master Plan Update 2022
Report No.: COM2022-010
Prepared By: Richard Hepditch

Moved by Councillor Henry, Seconded by Councillor Hanmer:

1. That Council receive report COM2022-010 as information.

Mayor Jaworsky requested a recorded vote.

Carried Unanimously
8 Voting in Favour
(MAYOR JAWORSKY)
(COUNCILLOR HANMER)
(COUNCILLOR BODALY)
(COUNCILLOR VIETH)

(COUNCILLOR FREEMAN)
(COUNCILLOR VASIC)
(COUNCILLOR HENRY)
(COUNCILLOR BONOGUORE)

b) Title: Affordable Housing Strategy: Discussion Paper and Recommendations
Report No.: IPPW2022-009
Prepared By: Michelle Lee

Michelle Lee gave a presentation on the Affordable Housing Strategy, exploring some of the key factors surrounding affordability, and offered the proposed targets for the next 10 years. She outlined the projected goals of the Affordable Housing Strategy, as well as the next steps for the final report. She then responded to questions of Council.

Moved by Councillor Henry, Seconded by Councillor Bodaly:

1. That staff report IPPW2022-009 be approved.

2. That staff be directed to prepare a final Affordable Housing Strategy for Council's consideration.

3. That the principles, goals, targets and recommendations set out in Appendix A of IPPW2022-009 form the initial framework for the Affordable Housing Strategy.

Mayor Jaworsky requested a recorded vote.

Carried Unanimously
8 Voting in Favour
(MAYOR JAWORSKY)
(COUNCILLOR HANMER)
(COUNCILLOR BODALY)
(COUNCILLOR VIETH)
(COUNCILLOR FREEMAN)
(COUNCILLOR VASIC)
(COUNCILLOR HENRY)
(COUNCILLOR BONOGUORE)

c) Title: Award of Tender RFT21-21 Brighton Street Reconstruction
Report No.: IPPW2022-011
Prepared By: Mike Lupsa

Moved by Councillor Henry, Seconded by Councillor Bonoguore:

1. That IPPW2022-011 be approved.

2. That Council approves the transfer of $420,000 in surplus capital funding from the Roosevelt Avenue road reconstruction project (#190040) to the Brighton Street road reconstruction project (#210103).

3. That Council approves the award of RFT21-21 – Brighton Street Reconstruction to 410754 Ontario Limited o/a Sousa Concrete for the submitted price of $1,240,645.00 plus unrecoverable HST in the amount of $21,835.35 for a total award value of $1,262,480.35.

4. That the Mayor and Clerk be authorized to sign the Agreement between The Corporation of the City of Waterloo and 410754 Ontario Limited o/a Sousa Concrete, and any other documents related to this project, subject to the satisfaction of the City's Director of Legal Services.

Mayor Jaworsky requested a recorded vote.

Carried Unanimously
8 Voting in Favour
(MAYOR JAWORSKY)
(COUNCILLOR HANMER)
(COUNCILLOR BODALY)
(COUNCILLOR VIETH)
(COUNCILLOR FREEMAN)
(COUNCILLOR VASIC)
(COUNCILLOR HENRY)
(COUNCILLOR BONOGUORE)

d) Title: Culture Plan Implementation Report Card 2021
Report No.: CAO2022-003
Prepared By: Andrea Hallam

Moved by Councillor Vasic, Seconded by Councillor Henry:

1. That Council approve report CAO2022-003.

2. That Council continue to champion local cultural development.

Mayor Jaworsky requested a recorded vote.

Carried Unanimously
8 Voting in Favour
(MAYOR JAWORSKY)

(COUNCILLOR HANMER)
(COUNCILLOR BODALY)
(COUNCILLOR VIETH)
(COUNCILLOR FREEMAN)
(COUNCILLOR VASIC)
(COUNCILLOR HENRY)
(COUNCILLOR BONOGUORE)

12. NEW BUSINESS

Councillor Vasic wanted to inform Council and viewers about an Art Walk taking place at Moses Springer on May 1st.

13. ENACTMENT OF BY-LAWS

Moved by Councillor Hanmer, Seconded by Councillor Bonoguore:

That the By-laws listed below be read a first, second and third time and finally passed, numbered sequentially commencing with By-law Number 2022-017 and that the Mayor and Clerk be authorized to sign them accordingly.

a) By-law 2022-017 By-law to confirm all actions and proceedings of Council, April 4, 2022

Mayor Jaworsky requested a recorded vote.

Carried Unanimously
8 Voting in Favour
(MAYOR JAWORSKY)
(COUNCILLOR HANMER)
(COUNCILLOR BODALY)
(COUNCILLOR VIETH)
(COUNCILLOR FREEMAN)
(COUNCILLOR VASIC)
(COUNCILLOR HENRY)
(COUNCILLOR BONOGUORE)

14. ADJOURNMENT

Moved by Councillor Henry, seconded by Councillor Freeman:

That the meeting adjourn. (Time: 4:47 p.m.)

Mayor Jaworsky requested a recorded vote.

Carried Unanimously
8 Voting in Favour
(MAYOR JAWORSKY)
(COUNCILLOR HANMER)
(COUNCILLOR BODALY)
(COUNCILLOR VIETH)
(COUNCILLOR FREEMAN)
(COUNCILLOR VASIC)
(COUNCILLOR HENRY)
(COUNCILLOR BONOGUORE)

READ AND APPROVED, April 25, 2022

_____
Mayor

_____
City Clerk

STAFF REPORT
Facility Design & Management Services

Title:	Green Building Policy Update for City-Owned Buildings
Report Number:	COM2022-013
Author:	Scott Prevost, Energy Program Manager
Meeting Type:	Council Meeting
Council/Committee Date:	April 25, 2022
File:	NA
Attachments:	Policy A-033
Ward No.:	All

Recommendations:

1. That Council approve report COM2022-013.

2. That Council approve the revisions to the Corporate Policy A-033 Green Building Policy for City-Owned Buildings as Appendix A.

3. That Council direct Facility Design and Management Services staff to prepare a steady stream of annual funding to support the Green Building Policy targets and that the funding be vetted through the City's Budget Committee for due consideration.

4. That Council direct Facility Design and Management Services staff to seek and explore a big picture vision that includes financial support from provincial and federal governments to support greenhouse gas reductions at existing facilities.

5. That Council direct Facility Design and Management Services staff to report back to Council annually with a summary of any proposed modifications to the Green Building Policy.

A. Executive Summary

City of Waterloo Council continually takes action to reduce Greenhouse Gas (GHG) emissions at a community and corporate scale. With respect to City-owned buildings, the first Green Building Policy was endorsed in 2008 and has been updated to reflect Council's direction to a more environmentally sustainable and low carbon future.

In September of 2018, Council endorsed CORP2018-067 Green Building Policy for City-Owned Buildings (referred to simply as Green Building Policy). This policy adopted the GHG emission reduction target recommended by ClimateActionWR (IPPW2018-021):

- 80% reduction in community GHG emissions by 2050 relative to 2010 levels

Since then Council declared a climate emergency in November 2019, due consideration has been given to GHG reduction initiatives.

In September of 2021, Council endorsed COM2021-027, which adopted the new GHG emission reduction targets for City-owned buildings and laid out building retrofit measures in scenarios that have the potential to achieve those GHG emissions reduction at City-Owned facilities, as categorized by archetype. COM2021-027 also recommended revising the Green Building Policy for City-Owned Buildings to reflect these new targets and the increased urgency for GHG emission reductions. This updated policy has taken Council's endorsement and direction and incorporates low/zero carbon processes for new construction, retrofits, and on-going building maintenance/operation.

The New Building Construction and Expansion section provides a framework for building zero carbon ready buildings from initial construction, thus avoiding costly overhauls that would otherwise be required later in the building's life.

The Existing Building Major Retrofits section addresses the City's existing building portfolio. CORP2021-027 addresses measures and scenarios that provide a possible pathway to 80% GHG reduction. These principles and ideas have been incorporated into this section, as well as commonly accepted industry practices.

The Building Operation, Maintenance, and Renewals section addresses on-going and routine maintenance, operation, and equipment renewal (replacement) in the City's buildings.

This policy applies broadly to all City-owned buildings, with specific and outlined exceptions for heritage buildings, buildings under 100 square metres, and unoccupied or storage buildings. The intent and lens of the Policy will be applied to all projects directly and indirectly impacting energy performance and GHG emissions.

The City's Sustainable Advisory Committee was involved in the review process of this Policy and provided valuable and relevant insight. The Sustainable Advisory Committee endorses this Policy.

B. Financial Implications

There is a significant gap between funding allocated in the 2020-2022 Approved Capital Budget ($2.1 M) and 2023-2029 Forecast ($2.1 M) and total funding required ($36.5 M – $45.7M) to achieve the projected GHG requirements. There would also be a cost premium on new builds to achieve zero carbon in the range of 8% to 10%; although this

premium may drop as markets become more familiar with zero carbon ready building and economies of scale are achieved by the construction industry.

Chart 1 – 2020-2022 Approved Capital Budget and Forecast

		'000s											
REF	Project Description	Source of Financing	Funded in 2020	Funded in 2021	Funded in 2022	2023	2024	2025	2026	2027	2028	2029	Total
271	Green Building Policy Implementation	CRF	892	530	440			200	600	500	700		3,861
271	Green Building Policy Implementation	CIRRF			225	150							375
	TOTAL		892	530	665	150		200	600	500	700		4,236

Of that funding, $330,000 was transferred to the East Side Branch Library project for GHG/energy improvements including an improved building envelope performance, a low carbon Variable Refrigerant Flow (VRF) heating/cooling system, and a solar wall, and $215,000 was transferred to the Waterloo Memorial Recreation Complex for GHG/energy improvements including improved building envelope, low carbon fan coil heating/cooling system, and solar photovoltaic panel installation. The 2022 funding has been released as per report COM2020-018. The current budget available after expenses and encumbrances is $1,336,844.

The City will incorporate and prioritize these funding needs into future budget cycles for future council decision making and will pursue all applicable Provincial and Federal grant opportunities that arise for this purpose. In December 2021, Council approved the establishment of a Green Initiatives program within the Capital Reserve Fund. Staff are developing a more fulsome reserve policy in 2022 in collaboration with the Environmental Sustainability Team and in conjunction with the development of the Corporate Climate Action Plan for Council's consideration in late 2022. Identifying annual and sustainable funds for the Green Initiatives program will be an important piece in addressing the financial gap noted above.

C. Technology Implications

Implementing GHG reduction measures and Building Automation Systems may require the use/installation of additional building and environmental equipment and sensor technology to support the new building mechanical/electrical systems, as well as monitor, record, and log data to justify/show GHG and energy savings through projects implemented under this Policy including public display systems showcasing real time and historical energy use and GHG savings.

D. Link to Strategic Plan

(Strategic Objectives: Equity, Inclusion and a Sense of Belonging; Sustainability and the Environment; Safe, Sustainable Transportation; Healthy Community & Resilient Neighbourhoods; Infrastructure Renewal; Economic Growth & Development)

(Guiding Principles: Equity and Inclusion; Sustainability; Fiscal Responsibility; Healthy and Safe Workplace; Effective Engagement; Personal Leadership; Service Excellence)

Sustainability and the Environment: The proposed policy will reduce GHG emissions at City-owned facilities and assist in meeting the GHG emission reduction targets set for City-owned buildings of 50% by 2030 and 80% by 2050.

E. Previous Reports on this Topic

IPPW2018-021 – Community Scope Greenhouse Gas Emissions Reduction
CORP2018-067 - Green Building Policy for City-Owned Buildings
COM2020-018 - Green Building Policy Implementation - Funding Release
CAO2021-011 – TransformWR
COM2021-027 - Corporate Greenhouse Gas and Energy Roadmap – Phase I

Green Building Policy Update for City-Owned Buildings
COM2022-013

Background

City of Waterloo Council continually takes action to reduce Greenhouse Gas (GHG) emissions at a community and corporate scale. With respect to City-owned buildings, the first Green Building Policy was endorsed in 2008 and has been updated to reflect Council's direction to a more environmentally sustainable and low carbon future.

In September of 2018, Council endorsed CORP2018-067 Green Building Policy for City-Owned Buildings (referred to simply as Green Building Policy). This policy adopted the Greenhouse Gas (GHG) emission reduction target recommend by ClimateActionWR (IPPW2018-021)

- 80% reduction in community GHG emissions by 2050, relative to 2010 levels

and applied it to City-owned buildings. Since the creation of the City of Waterloo (City) Green Building Policy, there has been an increased need for stronger and more targeted measures to reduce GHG emissions, specifically with Council's endorsement of ClimateActionWR's updated strategy TransformWR (CAO-2021-011) that recommended:

- 50% reduction in community scope GHG emissions by 2030, relative to 2010 levels
- 80% reduction in community scope GHG emissions by 2050, relative to 2010 levels

Since then Council declared a climate emergency in November 2019, due consideration has been given to GHG reduction initiatives.

In September of 2021, Council endorsed COM2021-027, which adopted the new GHG emission reduction targets for City-owned buildings and laid out building retrofit measures in scenarios that have the potential to achieve those GHG emissions reduction at City-Owned facilities, as categorized by archetype. COM2021-027 also recommended revising the Green Building Policy for City-Owned Buildings to reflect these new targets and the increased urgency for GHG emission reductions.

Policy Overview

The Green Building Policy was updated to support and achieve the City's mission to reduce GHG emissions are City-owned buildings in accordance with the same GHG emission reduction targets adopted at a community level through TransformWR.

This updated Green Building Policy has taken Council's endorsement and direction for zero/low carbon buildings and aligns with industry standards including:

- Zero carbon building standards, including Canadian Green Building Council Zero Carbon Building Design Standard.
- Canadian Green Building Council Zero Carbon Building Performance Standard.
- City of Toronto's Green Building Standard.
- The City of Waterloo CORP2021-027 report.

The updated Green Building Policy is divided into three (3) main components:

1. New Building Construction and Expansion (updated from previous policy)
2. Existing Building Major Retrofit (updated from previous policy)
3. Building Operation, Maintenance and Renewals (new to this policy)

These sections include provisions for building performance targets, building design and construction process, oversight of projects to ensure performance, study requirements to meet funding criteria, prescriptive measures for equipment replacement, etc. all aimed at producing zero carbon ready or low carbon operating buildings. They also incorporate building life cycles experienced by City buildings.

Policy Scope

This Policy focuses on GHG reduction measures in building construction, retrofits, operation, maintenance, and renewals specifically. Policy scope specific to building types and/or system is defined under each Policy section, as the sections target different life cycles of buildings. The three (3) sections combined are intended to capture the experienced life cycle of the buildings:

1. Construction of the building (occurs once when at the start of building life)
2. Retrofits (occurs periodically when major infrastructure needs replaced)

3. Operation, maintenance, and renewals (on-going, day-to-day life of the building, planned/unplanned equipment renewals)

All City-owned buildings are included in this Policy, with specific exemptions for new builds less than 100 square metres, heritage designated buildings, and storage or unoccupied buildings.

All construction, retrofits, system upgrades/replacement, and equipment replacements that have an energy impact are within scope of this policy. Achieving the GHG emission reduction targets will require applying the intent and lens of the Policy to projects impacting energy use and GHG emissions.

New Building Construction and Expansion

This section applies to all new building construction and expansion over 100 square metres (1,076 square feet). Storage and unoccupied buildings are excluded, however performance metrics are still provided to ensure these building types do not contribute disproportionately to GHG emissions. The purpose of this section is to ensure new construction is built zero carbon ready, and provide a framework to ensure projects achieve this.

Zero carbon ready buildings are highly energy efficient buildings that include well insulated and tight building enclosures, energy efficient mechanical systems (such as Heating Ventilation and Air Conditioning (HVAC)), and the ability to convert to zero carbon or net zero carbon buildings primarily through the addition of renewable energy generation (solar photovoltaic arrays) or purchase of Renewable Energy Credits (RECs). Buildings using electric based heating systems will inherently be low carbon, however the electricity provided to Ontario's electricity grid does have carbon content due to electricity generated from natural gas fired generating stations. To be zero carbon or net zero carbon, buildings must either produce as much electricity as they consume or purchase RECs to offset the outstanding carbon emissions associated with the building.

Currently, Ontario's electricity grid is relatively "carbon free" as approximately 60% of electricity is produced through nuclear fired generating stations, 20% is produced through hydro-electric generating stations, 10% is produced through natural gas fired generating stations, and the remaining 10% is a combination of renewables, imports, and micro-generation (or demand response).

The framework for New Building Construction and Expansion takes into account the City's existing building portfolio when constructing new buildings. New construction that is highly energy efficient and utilizes electric based systems will inherently be very low carbon. Solar photovoltaic panels (or RECs) to completely offset remaining carbon will be expensive, in terms of dollars spent per tonne of GHG emission reduced (this was also shown in COM2021-027). Those dollars could be better spent at existing facilities or taking other measures that are more impactful in reducing GHG emissions.

At the same time, new buildings must be zero carbon ready as GHG emission reduction targets are relative to an absolute level in 2010. New building construction or expansion will add to the absolute emissions, meaning the gap between 2010 levels and current levels will increase. This places additional burden on existing buildings to reduce their GHG emissions, which is more costly.

Existing Building Major Retrofits

This section applies to major retrofits of existing buildings, where entire building systems are replaced, including building enclosure (walls, windows, and roof) and mechanical/electrical systems. This section incorporates principles from COM2021-027. Retrofits aimed at significantly reducing energy consumption and GHG emissions are referred to as “deep energy retrofits”.

For the City’s purposes, these deep energy retrofits are more likely to occur at a system level, than a building level, as a major overhaul of an entire building is capital intensive. By targeting both building and system levels, the City can ensure buildings are transformed to low carbon operation over time, when a whole building retrofit is not possible.

Energy and GHG targets for deep energy retrofits may be slightly different than those for new buildings. Existing buildings present additional challenges, such as the logistical challenge of taking an entire building offline all at once, or section by section, to re-roof the entire building or reclad (install a new exterior wall). Mechanical system replacements typically occur utilizing the same infrastructure (except for when additional electrical infrastructure is required) such as ducting or hydronic piping. All the pieces of mechanical equipment may, for example, require replacement at the same time to take advantage of a centralized higher efficiency system. This type of scenario corresponds to a deep energy retrofit that can achieve these significant gains (one-for-one low carbon replacements are discussed in the Building Maintenance and Operations section).

Building Operation, Maintenance, and Renewals

This section addresses existing buildings, but from an operation, maintenance and renewal (replacement) perspective. It provides a prescriptive framework to allow continuously moving to low carbon building.

Operation relates to on-going operation of the building through controls, schedules, set points, and procedures. Optimizing and improving operation will lead to energy and GHG reductions.

Maintenance relates to improvements through repairs or (minor) rebuilds. Items such as Light Emitting Diode (LED) lamp replacements and ensuring HVAC cooling equipment has proper refrigerant charge.

Renewals relates to replacement or total overhaul of equipment or system components. This involves end of life or schedule replacement of HVAC units, pumps, fans, boilers, and others.

Low carbon solutions for traditionally natural gas fired equipment (but not limited to natural gas) would be addressed through operation, maintenance, and renewals including equipment such as:

- Furnace replacement
- Rooftop Unit (RTU) replacement
- Natural gas fired heaters
- Domestic water heaters
- Lighting systems
- Chilled water (cooling) systems
- Hot water heating systems
- Refrigeration plants (ice making plants in arenas)
- Building Automation Systems (BAS)

Policy revisions are likely to target Building Operation, Maintenance and Renewals as industry and technology evolves and lessons are learned through implementation of this Policy. By including BAS systems in this Policy, the City can ensure buildings are operating according to current needs and temperatures, controls, and set points do not causes excessive or unnecessary operation and consumption of energy, leading to GHG emissions.

Future Policy Revisions

Revisions to the Policy will be summarized and provided to Council in the annual Green Building Policy report.

Closing

The updated Green Building Policy aims at providing a framework for new building construction and expansion to achieve zero carbon ready operation and a framework for existing buildings project execution and targets when undergoing deep energy retrofits. The Building Maintenance and Operation provides a framework and prescriptive policy to cover routine operation and ensure it is energy efficient and low carbon.

CORPORATE POLICY

Policy Title:	**Green Building Policy for City-Owned Buildings**
Policy Category:	**Administration Policy**
Policy No.:	A-033
Department:	Community Services
Approval Date:	September 24, 2018
Revision Date:	April 25, 2022
Author:	Scott Prevost, Energy Program Manager, Facility Design and Management Services
Attachments:	None
Related Documents/Legislation:	CORP2018-067, COM2021-027
Key Word(s):	Green Building, Greenhouse Gas, Carbon, Energy Efficiency, Sustainability

POLICY STATEMENT:

The City of Waterloo is committed to reducing Greenhouse Gas (GHG) emissions associated with all City-owned buildings. Reducing building GHG emissions provides significant environmental benefits at a local and global level, as well as social and financial benefits.

The City of Waterloo has committed to reducing community GHG emissions 50% by 2030 and 80% by 2050 relative to 2010 absolute emission levels. These reduction targets have also been set for City-owned buildings. This Policy has been updated to incorporate building principles to aid in achieving these goals.

The Policy is divided into three (3) sections that cover the life cycle of buildings as experienced by the City including:

- New Building Construction and Expansion
- Existing Building Major Retrofits
- Building Operation, Maintenance, and Renewals

PURPOSE:

Mandatory Policy, *Municipal Act*: No
Policy Administration Team, Review Date: February 28, 2022
Corporate Management Team, Review Date: March 30, 2022

The City of Waterloo's Green Building Policy (GBP) for Corporately Owned Buildings provides a framework for new building construction and expansion, existing building major retrofits, and building maintenance of existing (and new) corporately owned buildings to achieve low carbon or zero carbon (ready) operation. In May of 2021, City of Waterloo Council endorsed TransformWR, a framework for reducing community GHG emissions (relative to 2010 levels) by the following:

- 50% reduction by 2030.
- 80% reduction by 2050.

With endorsement from Council, City staff have adopted these same targets for corporately owned buildings.
The Green Building Policy was developed to support meeting these targets at corporately owned buildings.

Looking within the City's operations as a municipality, corporately owned buildings make-up approximately 70% of total corporate City of Waterloo GHG emissions. These emissions represent the largest opportunity for GHG emissions reductions within City operations. The GBP provides a framework to guide 1) new building construction and expansion, 2) existing building major retrofits, and 3) existing building maintenance to achieve these GHG emissions.

These three (3) aspects encompass typical operations/phases City buildings experience and by addressing them, the City can incorporate GHG reductions into planning, design, construction, and operation of buildings.

DEFINITIONS:

"Building Performance" refers to the qualitative or comparative evaluation of the building's total energy use intensity, thermal demand intensity, greenhouse gas intensity, and/or water efficiency.

"Carbon Dioxide Equivalent (CO_2e)" is a term used to define greenhouse gases that have different global warming potentials to a standard unit of global warming impact, in units of carbon dioxide equivalent.

"Dedicated Outdoor Air System (DOAS)" is HVAC equipment that supplies 100% outdoor air to the served spaces only (no return air is mixed into the supply air).

"Electrification" refers to replacing natural gas fuelled heating systems to electrically powered systems.

"Embodied Carbon" is the carbon dioxide equivalent emissions associated with the building construction including manufacturing, transportation, installation, maintenance, and disposal of building materials.

"Global Warming Potential (GWP)" is a measure of how much energy the emission of one (1) tonne of gas will absorb over a period of time, relative to how much energy the emission of one (1) tonne of carbon dioxide will absorb over the same period of time. The higher the global warming potential, the more heat the gas will trap within the earths' atmosphere.

"Greenhouse Gas (GHG)" are gases that trap heat in the atmosphere. Gases other than carbon dioxide can be categorized as greenhouse gases, including methane, refrigerants, nitrous oxides, and others.

"Greenhouse Gas Intensity (GHGI)" is defined as the annual Scope 1 and Scope 2 emissions in units of kilograms per carbon dioxide equivalent (kg/CO2e) emitted from the building per unit building gross area.

"Gross Area" of a building is defined as the sum of every building floor area above grade.

"Heat Recovery Ventilator (HRV)" is HVAC equipment that transfers energy from the exhaust air stream to the ventilation (outdoor) air stream thus recovering energy that would otherwise be directly exhausted and lost to the ambient.

"Like-for-similar" refers to replacing existing equipment with a modern equivalent or accepted alternative that serves the same purpose and function, using the same sources of energy, delivery methods, etc.

"Renewable Energy Credit (REC)" is a certificate associated with the production of a unit of energy from a renewable generation source, such as solar photovoltaic electricity or wind power that entitles the certificate holder to claim an equal amount of energy (consumed by the holder) was generated by renewable sources.

"Representative Concentration Pathway (RCP)" is a trajectory scenario of greenhouse gas concentrations in the earth's atmosphere. Different scenarios are used to model different levels of possible global emissions that would lead to different (increased) greenhouse gas concentrations as a way to model future climate.

"Scope 1 Emissions" are direct greenhouse gas emissions from the building, such as natural gas combustion in building equipment for heating.

"Scope 2 Emissions" are indirect emissions from the generation of purchased energy that is consumed onsite, such as importing electricity from the grid that was generated at a natural gas powered generating station.

"Scope 3 Emissions" are all indirect emissions, not captured in Scope 2, resulting from upstream and downstream activities.

"Thermal Energy Demand Intensity (TEDI)" is defined as the annual heating energy, from all heating sources, delivered to the building per unit building gross area.

"Total Energy Use Intensity (TEUI or EUI)" is defined as the annual amount of energy, from all energy sources, delivers to the buildings per unit building gross area.

"Zero Carbon Building (ZCB)" is a highly energy efficient building that produces onsite, or procures, carbon-free renewable energy or high-quality carbon offsets in an amount sufficient to offset the annual carbon emissions associated with building materials and operations (Zero Carbon Building Design Standard Version 2, Canadian Green Building Council).
"Zero carbon ready" refers to a building that is highly energy efficient with the goal or intent of becoming a zero carbon building at some point in the future, typically through the addition of renewable energy generation, such as solar photovoltaic panels or solar thermal heating, and/or the purchase of renewable energy credits or carbon offsets. Zero carbon ready buildings do not require overhauls to their building enclosure, mechanical, or electrical systems to become zero carbon.

SCOPE:

This policy applies to all City staff, consultants, contractors, vendors, and any parties involved in the design, construction, or servicing of all City owned buildings.

This policy includes three (3) sections:

1. NEW BUILDING CONSTRUCTION AND EXPANSION.

2. EXISTING BUILDING MAJOR RETROFITS.

3. BUILDING OPERATION, MAINTENANCE, AND RENEWALS

Within those sections, targets and thresholds for GHG emissions, embodied carbon, energy efficiency, renewable energy generation, water conservation/efficiency, and electric vehicle infrastructure are provided.

Where not specifically falling under the GBP, the lens and intent of the GBP will be applied to all building work and projects.

POLICY COMMUNICATION:

This Policy will be posted on the City's website and intranet. City staff will be advised of the new Policy via distribution to the Leadership Team.
POLICY:

The City of Waterloo Green Building Policy for City-Owned Buildings is a divided into three (3) categories, representing cycles experienced by City buildings. A framework is

provided within each category to provide direction and targets for City staff to adhere to and meet when constructing, retrofitting, or maintaining buildings.

This policy is design to align with published zero carbon building standards, including (but not limited to):

- Canadian Green Building Council's (CaGBC) Zero Carbon Building Design Standard Version 2.
- CaGBC's Zero Carbon Building Performance Standard Version 2.
- Published municipal green building policies/standards, such as City of Toronto's Green Building Standard.
- City of Waterloo's Corporate Greenhouse Gas and Energy Roadmap – Phase 1 (COM2021-027).

NEW BUILDING CONSTRUCTION AND EXPANSION

1. Purpose

    1.1. The purpose of the NEW BUILDING CONSTRUTION AND EXPANSION section is to provide a framework to build zero carbon ready buildings from initial construction.

2. Application

    2.1. Applies to all corporately owned new buildings or expansions (excluding storage and non-occupied buildings) greater than or equal to 100 square meters (1,076 square feet) in gross building area, excluding storage or unoccupied buildings except where specifically indicated.

    2.2. New buildings or expansions with gross building area less than 100 square meters or classified as storage or non-occupied shall have electric space and water heating where heating is required.

    2.3. Storage and unoccupied buildings shall have electric space and water heating (electrification).

3. Zero carbon ready building process

    3.1. New building construction or expansion shall be executed according to the following process:

        3.1.1. Zero carbon ready feasibility study (complexity will vary based on building complexity).

        3.1.2. Selection of zero carbon ready pathway.

        3.1.3. Building engineering and architectural design.

        3.1.4. Construction.

        3.1.5. Commissioning.

        3.1.6. Measurement and verification.

    3.2. A zero carbon ready feasibility study shall be completed according to the requirements set out in this Policy.

    3.3. The zero carbon ready feasibility study may occur after an initial needs assessment or building feasibility study, that determines the general shape, size, and operation of the building, or during/be part of schematic design phase to inform design. The zero carbon ready design may evolve during the design, based on project constraints or performance and proper measures will be in place to identify and rectify unforeseen developments.

3.4. Results of the zero carbon ready may be presented to Council for direction on how to proceed with a zero carbon ready building design approach. Different building GHG scenarios with associated costs shall be included to allow Council to make an informed decision. Council may or may not be engaged for medium or small value projects, or projects that follow a previously demonstrated approach.

3.5. When a direction is received from Council, that direction shall guide the design of the building systems to achieve the desired GHG emissions levels and energy performance.

3.6. An integrated design approach incorporating all designers and stakeholders shall be utilized.

3.7. An energy modelling consultant shall be retained to ensure the design process reflects the performance desired from the carbon study. Deviation from the GHG emissions targets, demonstrated through energy modelling, shall be addressed at that time.

3.8. A carbon/energy consultant may be retained to provide carbon expertise during the project and ensure the project mandates are met with respect to GHG emission reductions and energy conservation.

3.9. A building science consultant may be retained.

3.10. The roles of the energy modelling consultant, carbon/energy consultant, and building science consultant shall be further defined depending on and for each project. For larger projects, it is expected the consulting roles for energy modeller, carbon/energy consultant, and building science consultant will be retained.

3.11. An independent Commissioning (Cx) Provider and Building Envelope Commissioning (BECx) shall be retained by the City to commission the building.

3.12. Post project Measurement and Verification (M&V) shall be completed according to the requirements set out in this Policy.

4. Energy and GHG incentives

4.1. The City will apply for all available energy incentives including electricity, natural gas (if applicable), renewable energy generation, and water.

4.1.1. There has been historically limited opportunity for substantial energy based incentives through existing on-going programs (such as SaveOnEnergy and Enbridge administered programs).

4.2. Contractors performing work for the City shall provide documentation to support the incentive applications including quotes, invoices, and specification sheets.

5. Greenhouse gas and energy requirements

5.1. New building construction or expansion shall be required to meet one of the following:

5.1.1. Canadian Green Building Council Zero Carbon Building Design Standard Version 2.

- Registration and certification shall be not an absolute requirement.

5.1.2. Building energy/GHG performance as defined in Table 1 with the intent of being zero carbon ready:

Table 1: Building performance requirements

Building type	**EUI (kWh/m^2/year)**	**TEDI (kWh/m^2/year)**
Arenas, Recreation	Case-by-case	Case-by-case
Fire station	75	25
Library	75	25
Office	75	25
Unoccupied/storage	50	15

5.1.3. New arena and recreation facilities may vary considerably with respect to function, space, size, systems, and other factors. Targets will be set on a case-by-case basis, based on current (at that time) standards, technology, industry accepted metrics, and the City's own past experiences.

5.1.4. Greenhouse Gas Intensity (GHGI) metrics are intentionally omitted to reflect the anticipated zero carbon ready building efficiency approach of 1) Efficient building enclosure and mechanical/electrical systems 2) Renewable energy generation to the extent possible 3) Renewable Energy Credit (REC) or carbon offsets (which are not required). Remaining building carbon emissions will be due to grid electricity (and embodied carbon).

5.1.5. Multi-use buildings shall meet the requirements set out in Table 1 for the applicable areas.

5.2. Space and water heating systems shall be electrically powered/fueled.

5.2.1. Natural gas shall not be permitted for general commercial space and water heating.

5.3. Natural gas shall be permitted for process systems (kitchen range for example), excluding water heating for ice resurfacing.

5.4. Scope 1 and Scope 2 emissions shall be included when calculating building performance requirements in Table 1.

6. Renewable energy

6.1. Renewable energy generation systems that will be considered include:

6.1.1. Solar Photovoltaic (PV).

6.1.2. Solar thermal air heating.

6.1.3. Solar thermal water heating.

6.1.4. Wind.

6.2. Buildings shall be built “solar ready” following principles from:

6.2.1. Solar Ready Buildings Planning Guide (Technical Report NRLE/TP-7A2-46078) published by National Renewable Energy Laboratory (NREL).

6.2.2. Design processes shall allow the building to readily accept the required solar PV array in the future, which includes:

- Proper structural support of roof areas designated to support solar.
- Required electrical conduit and infrastructure including panels, meters, controls, and transformers required to be compatible with the solar PV array.

6.3. Solar PV array size should supply at least 20% of total building electricity needs or cover at least 75% of suitable roof area.

6.3.1. In addition, optimum solar PV array size will also be determined through:

- Estimated total building electricity use.
- Suitable roof and parking lot area to install an array.
- Available grants and solar PV incentive programs, including net metering.

- Life Cycle Assessment (LCA) showing that the installation meets current City financial goals and requirements for GHG reduction targets/projects.

6.3.2. When building/site conditions and budget permit, virtual net metering will be considered (if a virtual net metering program exists).

7. Renewable energy credits and carbon offsets

7.1. The City shall not be required to purchase Renewable Energy Credits (RECs) or carbon offsets to offset GHG emissions unless specifically directed to do so.

7.1.1. Funds that would have been used to purchase RECs could potentially be used at existing City-owned buildings to directly reduce GHG emissions and energy requirements, while also reducing utility costs and addressing infrastructure requirements.

7.1.2. Installing solar PV arrays provides an on City buildings/property provides an alternative to purchasing RECs that also yields a positive Return on Investment (ROI). GHG reductions through solar PV depend on the carbon intensity of the Ontario electricity grid.

8. Zero carbon ready feasibility study

8.1. A zero carbon ready feasibility study shall be undertaken as per the process outlined in this Section.

8.2. Specific terms of reference for the study shall be developed and issued at that time that account for building type and function. Study complexity will vary according to building complexity.

8.3. The study shall evaluate multiple measures and scenarios to achieve a zero carbon ready building design and operation.

8.4. Measures shall include active, passive, renewable energy generation, and on-going building operations.

8.5. A building energy model shall be created to model building performance. Acceptable energy modelling software and standards shall be defined in the terms of reference. Energy modelling will consider electricity carbon emission factors depending on time of day (marginal emission factors).

8.6. Energy model may consider additional parametric weather files based on projected Representative Concentration Pathway (RCP) scenarios.

8.7. A LCA shall be included to account for all costs including capital, operation, maintenance, utility, and operational carbon (from energy use). A separate LCA scenario will account for embodied carbon/GHG emissions.

8.8. A table summarizing different zero carbon ready design scenarios shall be included.

8.9. The study shall be completed within a time frame that is acceptable to inform building design.

9. Energy modelling

9.1. The City shall an independent energy modeler to simulate building performance, which may include additional parametric weather files based on different RCP scenarios.

9.2. Energy models will generally align with:

9.2.1. Schematic design phase.

9.2.2. Detailed design phase.

9.2.3. Changes from detailed design during construction or shop drawing review that could have positive or negative impacts.

9.2.4. As-built construction.

9.3. Deviation (poor performance) from the intended building performance shall be addressed and rectified at that time.

10. Embodied carbon

10.1. An embodied carbon reduction of at least 20% compared to a baseline building will be investigated.

10.2. A separate LCA will include embodied carbon of the construction project including manufacturing, transport, use, and end-of-life building materials, in addition to the operational carbon.

10.3. Embodied carbon assessment shall meet at a minimum the requirements outlined in the current version of CaGBC Zero Carbon Building Design Standard, including a LCA from a suitable software that demonstrates all life cycle components have been accounted for in the LCA.

10.4. The City shall not be required to purchase RECs or carbon offsets to offset embodied carbon if the 20% reduction is not met.

10.5. If/when virtual net metering is available, the City may utilize virtual net metering as identified in this Policy.

11. Commissioning

11.1. An independent Cx Provider and BECx Provider shall be retained by the City to provide services during the design, construction, and post construction phases.

11.2. Cx and BECx will align with the latest versions of industry Cx and BECx standards, that may include standards from American Society of Heating Refrigeration and Air-Conditioning Engineers (ASHRAE), Canadian Standards Association (CSA), American Society for Testing and Materials (ASTM), North American Industry Classification System (NIBS), etc.

11.3. Building airtightness performance will be dependent on building type and size, but will target air leakage rates of 1 L/s/m2 at 75 Kilopascal (kPa) or better.

12. Measurement and verification

12.1. All new occupied building construction and expansion, excluding storage, shall be provided with a Building Automation System covering, at the least, Heating Ventilation and Air Conditioning (HVAC) systems, lighting, refrigeration, equipment, pool equipment, and any other major systems the building may be equipped with.

12.2. The Energy Management System (EMS) shall be integrated with the BAS or a stand-alone EMS utilized by the City.

12.3. The EMS should provide measurement points that are capable of estimating Thermal Energy Demand Intensity (TEDI).

12.4. One (1) year post construction M&V reporting shall:

12.4.1. Report on Energy Use Intensity (EUI).

12.4.2. Report on TEDU to the extent possible.

12.4.3. Report on Greenhouse Gas Intensity (GHGI).

12.4.4. Report on performance of major HVAC and electrical systems.

12.4.5. Provide a snapshot of the current BAS scheduling and control set points.

12.4.6. Provide a course of action (and explanation) to improve building performance if EUI is worse than modelled and cannot be reasonably explained. Corrective action may include:

- Reconducting building airtightness test.
- Reprogram or modify BAS settings.

- Recommission certain aspects of the building.

12.4.7. Report on water use.

12.5. M&V reporting will generally align with (including the above):

12.5.1. ASHRAE Guideline 14

12.5.2. Most appropriate International Performance Measurement and Verification Protocol (IPMVP) Option

12.6. If zero carbon certification is required, it must be directed at the onset of the project. The project would then follow the current version of CaGBC ZCB-Design during design and CaGBC Zero Carbon Building - Performance (ZCB-Performance) will be followed.

13. Water conservation

13.1. Water and plumbing will be designed to minimize water consumption on-site and water run-off from the building footprint.

13.2. A green roof should be considered, secondary to solar PV installations, on available space.

14. Electric vehicle infrastructure

14.1. When new parking lots are constructed as part of the building construction or expansion, a certain percentage of parking spaces shall be constructed as "Electric Vehicle (EV) ready". EV ready is generally defined as:

14.1.1. Ensuring propelectrical infrastructure is provided for future use.

14.1.2. Underground conduits are run to future spots to avoid excavation in the future.

14.1.3. Proper wire is installed in conduit.

14.1.4. Communication is available to connect EV chargers to controls systems.

14.1.5. Electrical panels and transformers do not require replacement or modifications to accommodate EV chargers.

14.2. The percentage of “EV ready” parking spaces will be determined at the time in coordination with broader City policy

EXISTING BUILDING MAJOR RETROFITS

1. Purpose

    1.1. The purpose of the EXISTING BUILDING MAJOR RETROFITS section is to provide a framework to convert existing buildings and/or building systems to energy efficient low carbon replacements aligning with required major overhauls/rehabilitation of infrastructure, inline with meeting City-owned building GHG emission reduction targets.

2. Application

    2.1. Applies to all Deep Energy Retrofits (DERs) of corporately owned buildings, excluding storage or unoccupied buildings.

        2.1.1. DER refers to a holistic retrofit of a building or building system(s) with the intent of achieving significant GHG emission and energy use reductions.

        2.1.2. DER projects are generally aligned with large capital replacement projects.

        2.1.3. DER is categorized as a non-routine replacement/upgrade of an entire building or building system(s).

    2.2. Storage and unoccupied buildings shall have electric space and water heating (electrification).

3. Heritage buildings

    3.1. Heritage building exterior building enclosure or interior systems may or may not be altered at the direction of the heritage committee in accordance with heritage status.

    3.2. When exterior building enclosure systems cannot be substantially altered, retrofits of heritage buildings will focus on:

        3.2.1. Retrofits of interior perimeter wall and roof systems.

        3.2.2. Mechanical and electrical systems.

        3.2.3. Controls.

        3.2.4. Renewable energy generation.

        3.2.5. Building airtightness.

        3.2.6. Energy efficient cladding, windows, roofing that replicates existing heritage properties (where possible).

4. Deep energy retrofit process

    4.1. A DER study, as defined in this Policy, will be undertaken prior to a DER project of sufficient size, complexity, and scope.

        4.1.1. DER study requirements will also depend on internal City capacity and successfully implemented projects of similar size, complexity, and scope.

    4.2. The results of the DER study may be presented to Council for endorsement of a specific pathway to achieve deep GHG and energy savings or zero/low carbon operation of the building.

    4.3. The endorsed pathway from the DER shall be used to inform design.

    4.4. An energy modelling consultant may be retained to ensure the building redesign reflects the desired performance from the DER.

    4.5. An energy/carbon consultant may be retained to ensure the GHG emissions reduction are met.

    4.6. A building science consultant may be retained for major building enclosure upgrades.

    4.7. The City shall retain an independent Cx Provider for the project.

    4.8. Post DER project M&V shall be undertaken according to this Policy.

5. Energy and GHG incentives

    5.1. The city will apply for all available energy and GHG incentives including electricity, natural gas (if applicable), renewable energy generation, and water.

    5.2. Contractors performing work for the City shall provide documentation to support the incentive applications including quotes, invoices, specification sheets, and proof of disposal.

6. Greenhouse gas and energy requirements

    6.1. DER projects will generally target the following energy and GHG performance improvements:

        6.1.1. 50% - 70% reduction in building EUI.

        6.1.2. For projects involving building enclosures, a 25% - 50% reduction in TEDI.

        6.1.3. 80% reduction in GHGI.

6.2. In subsequent Policy updates, absolute targets for EUI and TEDI for existing buildings will be provided to account for differing building construction, vintages, and to ensure GHG emission reduction targets are met. For example:

6.2.1. The City has five (5) arena/recreation buildings, however only two (2) resemble similar construction and function while the remainder differ considerably. Therefore, individual metrics will be set for arena and recreation facilities (along with the other facilities).

7. Deep energy retrofit feasibility study

7.1. A specific scope of work shall be developed for the DER study at the time of the project.

7.2. DER projects will target absolute EUI and TEDI values specific to the building. This will result in a range of percent improvements in building performance, depending on how efficient the building performance was initially.

7.3. For large holistic projects, the DER study shall conform to, at a minimum, Federation of Canadian Municipalities' (FCM's) GHG Reduction Pathway Feasibility Study Guidance Document.

7.3.1. Study requirements may be altered to conform to existing incentive programs available.

7.4. Multiple scenarios/pathways shall be assessed to achieve the targeted GHG emissions reduction.

7.5. A LCA shall be included to account for all costs including capital, operation, maintenance, utility, and operational carbon (from energy use). A separate LCA scenario will account for embodied carbon/GHG emissions.

7.6. Regardless of the scope of the DER construction project, the DER study will evaluate all building systems for future planning.

7.7. Study shall be detailed enough to inform engineering and architectural design.

7.8. Whole building energy modelling software shall be used to simulate building performance. Energy modelling will consider electricity carbon emission factors depending on time of day (marginal emission factors).

7.9. Multiple parametric weather files based on different RCP scenarios may be assessed.

7.10. Schematic level design and Class C or better cost estimating shall be included.

7.11. Study shall propose an appropriate M&V plan at a high level.

8. Lighting

8.1. Applies to interior and exterior lighting in a DER project.

8.2. All lighting will be converted to Light Emitting Diode (LED) lighting.

8.3. Fixture replacement and/or fixture layout redesign shall be considered in addition to LED lamp replacements.

8.4. All lighting products shall be:

8.4.1. Energy Star Certified and include the product identification number; or

8.4.2. Design Lighting Consortium (DLC) qualified and include the product identification number.

9. Renewable energy

9.1. Renewable energy generation systems to be considered include:

9.1.1. Solar PV.

9.1.2. Solar thermal air heating.

9.1.3. Solar thermal water heating.

9.1.4. Wind power.

9.2. When the existing building roof is structurally adequate, solar PV arrays will be considered to cover at least 75% of the building's suitable roof area or 20% of building electricity use.

9.2.1. When the existing building roof is not structurally adequate, it will be determined at that time if increasing structural load capacity is financially feasible or appropriate to allow solar PV array installation.

9.3. Optimum solar PV array size will be determined through:

9.3.1. Estimated total building electricity use.

9.3.2. Suitable roof and parking lot area to install an array.

9.3.3. Available grants and solar PV incentive programs, including net metering.

9.3.4. LCA showing the installation meets current City financial goals and requirements for GHG reduction targets/projects (which would include costing for structural modification if required).

9.4. LCA should be performed on renewable energy or include renewable energy as part of the overall project to determine the most effective way forward.

9.5. When building/site conditions and budget permit, virtual net metering will be considered (if a virtual net metering program exists).

10. Renewable energy credits and carbon offsets

10.1. The City shall not be required to purchase RECs or carbon offsets when undertaking a DER construction project, unless:

10.1.1. It is mandated by Council.

10.1.2. The project requires CaGBC Zero Carbon Building – Performance (ZCB-Performance) certification.

11. Energy modelling

11.1. Building energy modelling shall be carried throughout the duration of the DER project.

11.2. In addition to the DER study, energy modelling will be conducted at:

11.2.1. Detailed design phase.

11.2.2. Changes from detailed design during construction or shop drawing review that could have positive or negative impacts.

11.2.3. As-built construction.

11.3. Deviation (poor performance) from the intended building performance shall be addressed and rectified at that time.

12. Commissioning and building enclosure airtightness

12.1. An independent Cx Provider shall be retained by the City to provide services during the design, construction, and post construction phases.

12.2. If the DER project involved significant building enclosure retrofits or modifications, an independent BECx Provider shall be retained by the City to provider services during the design, construction, and post construction phases.

12.3. Cx and BECx will align with the latest versions of industry Cx and BECx standards that may include standards from ASHRAE, CSA, ASTM, NIBS, etc.

13. Measurement and verification

    13.1. Whole building M&V shall be reported after one year of operation using:

        13.1.1. ASHRAE Guideline 14 – Measurement of energy, demand, and water savings.

        13.1.2. Most appropriate IPMVP option.

    13.2. One (1) year post construction M&V reporting shall:

        13.2.1. Report on EUI.

        13.2.2. Report on TEDI (to the extent possible).

        13.2.3. Report on GHGI.

        13.2.4. Report on performance of major HVAC and electrical systems.

        13.2.5. Include recommended actions in the event the building is not performing as expected.

    13.3. If zero carbon certification is required post DER, then the current version of CaGBC Zero Carbon Building Performance Standard shall be followed.

14. Water conservation

    14.1. When water and plumbing systems are in scope, water and plumbing shall be designed to minimize water consumption on-site using best practices.

    14.2. The DER should consider a green roof secondary to solar PV if applicable.

15. Electric vehicle infrastructure

    15.1. When new parking lots are constructed, or existing parking lots are excavated, a certain percentage of parking spaces should be provided as “EV ready”. EV ready is generally defined as:

        15.1.1. Ensuring proper electrical infrastructure is provided for future use.

        15.1.2. Underground conduits are run to future spots to avoid excavation in the future.

        15.1.3. Proper wire is installed in conduit.

        15.1.4. Communication is available to connect EV chargers to controls systems.

        15.1.5. Electrical panels and transformers do not require replacement or modifications to accommodate EV chargers.

15.2. The percentage of “EV ready” parking spaces will be determined at the time in coordination with broader City policy.

BUILDING OPERATION, MAINTENANCE AND RENEWALS

1. Purpose

    1.1. The purpose of the BUILDING OPERATION, MAINTEANCE, and AND RENEWAL section is to provide a prescriptive approach to ensure routine building maintenance, equipment replacement, and building operations are energy efficiency and low carbon, in line with meeting City-owned building GHG emission reduction targets.

        1.1.1. Operation relates to on-going operation of the building through controls, schedules, set points, and procedures. Optimizing and improving operation will lead to energy and GHG reductions.

        1.1.2. Maintenance relates to improvements through repairs or (minor) rebuilds. Items such as Light Emitting Diode (LED) lamp replacements and ensuring HVAC cooling equipment has proper refrigerant charge.

        1.1.3. Renewals relates to replacement or total overhaul of equipment or system components. This involves end of life or schedule replacement of HVAC units, pumps, fans, boilers, and others.

2. Application

    2.1. Applies to building energy systems and equipment under normal operation and equipment replaced on a routine end of life or planned replacement basis.

    2.2. In general, replacement equipment shall meet or exceed energy requirements set out in ASHRAE 189.1 – Standard for the design of high performance green buildings.

3. Planning

    3.1. FDMS staff shall develop a plan to convert natural gas fueled heating equipment and systems to electric powered based on replacement schedules.

    3.2. Plan should include:

        3.2.1. Identifying where engineering designs will be required and preparing those to be in place or completed in the event of unplanned failure.

        3.2.2. Addressing electrical infrastructure capacity issues.

3.2.3. Pathway to convert to electric power in the event converting to electric power is not feasible in the replacement time frame or at the existing building.

3.3. Solar PV strategy

3.3.1. FDMS staff shall develop a solar PV strategy including identifying and prioritizing roof areas suitable for solar PV arrays, identifying and assessing any other City owned areas suitable for solar PV arrays, total solar PV generation potential, and cost-benefit analysis projections to aid in decisions of when, where, and the magnitude of solar PV to add to a project.

4. Energy incentives

4.1. The City will apply for all available energy incentives including electricity, natural gas (if applicable), renewable energy generation, and water.

4.2. Contractors performing work for the City shall provide documentation to support the incentive applications including quotes, invoices, specification sheets, and proof of disposal.

5. New technologies

5.1. The City will strive to identify, assess, and pilot out new and emerging technologies that have significant GHG reduction potential or offer significant benefit to the building's energy and/or infrastructure performance. Pilots will be carried out on a case-by-case basis.

5.2. Successfully demonstrated and proven technologies can be incorporated into new building construction and expansion, existing building major retrofits, or building operation, maintenance, and renewals.

6. Building equipment and system types

6.1. Heating, ventilation, and air conditioning

6.1.1. Dedicated Outdoor Air Systems (DOAS)

- When replacing DOAS units, also referred to as make-up air units, heat pump operation shall be the primary mode of heating with natural gas fired heating provided as back-up or auxiliary heat only.

- Solar thermal air heating systems (referred to as solar walls) will be considered to provide renewable heating energy to DOAS units.

6.1.2. Furnaces

- Applies to all residential and light commercial style forced air natural gas fired furnaces.
- Furnaces shall be replaced with Air Source Heat Pumps (ASHPs) with electric resistive heat.
- Heat pumps providing outdoor air ventilation shall be equipped with Energy Recovery Ventilators (ERVs) or Heat Recovery Ventilators (HRVs) as applicable.
- When the building served by the furnace is connected to the City's BAS, new furnaces shall be connected to the BAS.

6.1.3. Infrared heaters

- Applies to all natural gas fired infrared tube heaters.
- Where the electrical infrastructure capacity exists, natural gas fired infrared tube heaters with a heat output equal to or less than 20 kilowatts (kW) shall be converted to electrical infrared heaters. Where multiple heaters serve an area and the combined output is greater than 20 kW, an assessment will be made on a case-by-case basis.
- Natural gas fired infrared tube heaters serving arena (ice rink) stands shall be converted to electrical infrared heaters, regardless of heating output capacity.

6.1.4. Rooftop units/air handling units – Built up

- Applies to all built up, constant volume or variable volume, hydronic or natural gas heat/electric or hydronic cool Air Handling Units (AHUs).
- Built up replacements will consider:
    - Converting constant volume units to variable volume, which may include adding Variable Frequency Drives (VFDs), pressure transmitters, and modulating dampers.
    - Conversion of hydronic heating coils to water-to-air heat pump heating coils.
    - When AHU heating coils are natural gas fired, and the building is served by a hydronic heating system, it will be investigated if the hydronic heating system can be

connected to a water-to-air heat pump heating coil to serve the AHU heating loads.

- Incorporating energy or heat recovery.

6.1.5. Rooftop units/air handling units – Packaged

- Applies to all commercial packaged, constant or variable volume, gas heat/electric cool Rooftop Units (RTUs).
- RTUs shall be replaced with ASHPs with electric auxiliary heat as back-up.
- Incorporating energy recovery in the RTU will be considered on a case by case basis according to the amount of ventilation air and operating schedule of the RTU.
- Where existing electrical infrastructure is insufficient and cost prohibitive to upgrade, the unit will be replaced like-for-similar in accordance to this Policy.

6.1.6. Unit heaters

- Applies to all natural gas fired unit heaters with heating output equal to or less than 20 kW.
- Natural gas fired unit heaters shall be replaced with electric resistive unit heaters, electric infrared heaters, or ductless split ASHP systems.

6.2. Cooling plants

6.2.1. Chilled water plants

- Applies to chilled water plants, including both air cooled and water cooled plants.
- Primary only chilled water systems will have a plan to convert to variable flow where possible
- Control valves will be converted from three-way valves to two-way valves as part of the plan.
  - Chilled water pumps shall be retrofitted with Variable Frequency Drives (VFDs).
- Floating head pressure on condensers will be implemented where possible.

- Chilled water supply temperatures will be reset based on outdoor conditions and building load.
- Chiller plant optimization may be investigated for chiller plants of sufficient size.
- Where simultaneous heating and cooling is required, heat recovery chillers will be investigated for planned replacement. Heat recovery chillers will be prioritized over free cooling chillers.

6.2.2. Refrigeration plants

- Applies to all refrigeration plants serving ice rinks and arenas, excluding the mobile refrigeration plant serving the outdoor rink in Uptown Waterloo.
- Total refrigeration plant optimization will be investigated.
- Evaporative condensers shall be retrofitted with floating head pressure controls and evaporative condenser fans shall be retrofitted with VFDs.
- Refrigeration plans shall incorporate heat recovery from the high pressure refrigerant discharge.
- Heat recovery heat exchangers shall be sized to incorporate heat recovery for future uses including domestic water preheating, ice resurfacing water preheating, building heating loops, geothermal fields (if applicable), and snow melt pits.

6.2.3. Heating plants

- Applies to all natural gas fired boilers serving building space heating and/or connected to domestic water heating systems.
- The following will be considered when replacing natural gas fired boilers with electrically powered systems:
    - Heat output requirements.
    - Existing building electrical infrastructure capacity.
    - Changes to utility classification should an electric boiler be installed.
    - Timing of potential DER projects to the building.

- Natural gas boilers will be considered for replacement with or supplemented by air-to-water heat pumps, Ground Source Heat Pumps (GSHPs), or electric resistive heating where permissible.

6.2.4. Lighting

- Applies to exterior wall packs. Exterior pole lighting, and interior lamps.
- Exterior wall packs shall be replaced with LED equivalent.
- Exterior pole mount lighting shall be replaced with Led equivalent.
- Exterior lighting shall be controlled through a programmable timer reset based on season or through photocells.
- Interior bulbs, including incandescent, Compact Fluorescent Light (CFL), and pressure sodium, shall be replaced with LED equivalents.
- Interior fluorescent lamps (T8) shall be replaced with T8 LED tubes.
- Light fixtures, when replaced, shall be replaced with LED fixtures.
- Lighting controls shall be converted over to controls required by the current version of ASHRAE 189.1 as an on-going process.

6.2.5. Service water heating

- Domestic water heating
    - Residential style natural gas fired service water heaters shall be replaced with either a combination heat pump/electric resistive service or electric resistive service water heater.
    - Commercial style natural gas fired service water heater shall be replaced with either:
    - Combination air or water source heat pump with electric resistive.
    - Electric resistive.

Like-for-similar if electrical infrastructure cannot supply an electric powered service water heater. In this event, a design will be undertaken to convert to electric service water heating.

- Ice resurfacing water heating
    - Applies to water heaters providing hot water for ice resurfacing purposes.
    - Water heaters shall be replaced with condensing natural gas fired water heaters when unplanned failure occurs.
    - Make-up water to water heaters shall, at the least, be pre-heated through desuperheater heat exchangers in the refrigeration plant.
    - Water heating systems will be assessed to be connected to the refrigeration plant heat recovery system through water-to-water source heat pumps as means to electrically heat ice resurfacing water.

6.3. Building automation systems

6.3.1. Applies to all buildings and systems controlled by a centrally accessible Building Automation System (BAS).

6.3.2. BAS controls, scheduling, and set points shall be determined by building, zone, and system type, and reviewed on an annual basis.

6.3.3. Each BAS will have in place:

- Default schedules for zones controlled by the BAS.
- Default control set points, such as temperature and relative humidity, for zones controlled by the BAS.
- List of operators with privileges

6.3.4. A process will be established to identify and address changes to defaults BAS controls, set points, and schedules. Any operational changes will be reviewed with a plan in place to revise the default setting or revert back to the existing default setting.

6.3.5. Recommissioning projects should include addressing BAS to improve building performance through identifying faulty controls, or controls that are not operating as intended or applicable, and by improved and updated sequences and set points.

POLICY UPDATES

Revisions to the Policy will be summarized and provided to Council in the annual Green Building Policy report.

COMPLIANCE:

In cases of policy violation, the City may investigate and determine appropriate corrective action.

April 12, 2022

Dave Jaworsky
Mayor of Waterloo
Corporation of the City of Waterloo
Waterloo ON N2J 4A8

RE: Supporting and Endorsing the Draft Green Building Policy (A-33)

Dear Mayor Jaworsky and Members of Council,

On behalf of the Sustainability Advisory Committee of the City of Waterloo, we are writing to express our appreciation for the work that Facility Design and Management Services has done in updating the City's Green Building Policy (A-33). This policy reflects the urgent need to reduce greenhouse gas emissions while maintaining a balance with the technical and economic realities that new construction, building retrofits, and improved operations of existing buildings will face.

We support this plan wholeheartedly and appreciate that staff reached out to the Sustainability Advisory Committee for comment. We trust that this policy will guide the City in reaching their goals in helping Ontario and Canada in this time of a global climate emergency, and encourage Council to adopt the policy and to support and mobilize resources for its implementation.

If you have any questions or require additional information, please contact me.

Sincerely,

M. Thijssen

Mat Thijssen
Chair, Sustainability Advisory Committee

STAFF REPORT
Engineering Services

Title:	Waterloo Public Square Improvements
Report Number:	IPPW 2022-021
Author:	Emily Brown, Public Realm Specialist
Council Date:	April 25, 2022
File:	210105 / 150006
Attachments:	N/A
Ward No.:	Ward 7 – Uptown

Recommendations:

1. That Council approve Staff Report IPPW 2022-021.

2. That Council approve the detailed design of the Waterloo Public Square Water Feature as outlined in Staff Report IPPW 2022-021 and direct staff to proceed with tendering and construction in 2023.

3. That Council approve the movable Waterloo Public Square Shade Elements and direct staff to proceed with procurement and installation this year.

4. That Council approve the preferred concept for the permanent Waterloo Public Square Shade Structures as outlined in Staff Report IPPW 2022-021 and direct staff to proceed with detailed design and tendering for construction in 2023.

A. Executive Summary

The purpose of this report is to provide Council with an update on improvements for the Waterloo Public Square (The Square), including the proposed water feature, movable, and permanent shade structures.

Water Feature:

The Square's design was approved by Council on July 2007 via staff report DS-07-25 and construction was completed in May 2009.The water feature and its proposed location was part of The Square's design. However, the water feature was omitted from construction due to budget constraints and the unknown impacts of the Region's LRT construction to The Square at the time. To minimize future disturbance and restoration

works to The Square, structural and servicing components of the water feature were installed in anticipation of the future water feature construction.

Crystal Fountains Inc. was retained in 2020 to complete the detailed architectural design of the water feature, and WalterFedy Inc. was retained in 2021 to complete the detailed structural, mechanical, electrical, and civil engineering design.

Staff have engaged adjacent businesses and property managers and they are supportive of the project. Staff will continue to work with these establishments to ensure that impacts to business operations and pedestrian access are minimized during construction.

Shade Structures:

In accordance with the Uptown Public Realm Strategy Implementation, which was approved by Council via staff report IPPW2019-054, staff retained a consultant team, led by SHIFT Landscape Architecture to conduct the Laurel Greenway Feasibility Study. The first phase of the study was completed in January 2021 and explored opportunities to introduce a shade feature/structure to The Square. Based on the public feedback, a design concept was developed for a series of shade features. The project team explored permanent and movable shade elements that would provide shade and activate the central, open portion of The Square while respecting the numerous physical and programming constraints of the space. In a discussion led by SHIFT Landscape Architecture, representatives from Engineering Services, Parks Forestry & Cemetery Services, Facility Design & Management Services, and Arts & Culture teams reviewed several design alternatives and proposed elements. The preferred conceptual design and location of the permanent shade structures takes into account public feedback as well as physical, operational, programming and GRCA floodplain constraints. Public users and the Uptown BIA support the immediate implementation of shade structures in The Square.

B. Financial Implications

Future completion of the public square water feature was approved through the 2020-2022 capital budget. The consultant's Opinion of Probable Cost estimate of $1,200,000 is also in line with available funding for the feature. A $500,000 developer contribution to the water feature is included in the budget and allows a significant leverage of public funds.

Via staff report IPPW2019-054 – Uptown Public Realm Strategy Implementation, Council approved the funding release to enable various initiatives through the uptown, one being to evaluate alternatives and related costs for a shade structure. A portion of the 2019 funding release for the Uptown Public Realm Strategy Implementation has been set aside for a shade structure in the public square. The proposed cost estimate of $360,000 for the permanent shade structures and $160,000 for movable elements, as detailed in this report, is in line with available funding for this component.

Staff note the current unknowns relating to cost estimating, such as supply chain issues, inflation, fuel prices, and pandemic-related impacts can impact the final tender pricing. Staff will review budgets in the event tender pricing comes in higher than estimates.

C. Technology Implications

There are no technology implications with respect to this report.

D. Link to Strategic Plan

(Strategic Objectives: Equity, Inclusion and a Sense of Belonging; Sustainability and the Environment; Safe, Sustainable Transportation; Healthy Community & Resilient Neighbourhoods; Infrastructure Renewal; Economic Growth & Development)

(Guiding Principles: Equity and Inclusion; Sustainability; Fiscal Responsibility; Healthy and Safe Workplace; Effective Engagement; Personal Leadership; Service Excellence)

Equity, Inclusion, and a Sense of Belonging:

- Additional shade within the Waterloo Public Square will encourage use of the space, especially by children, elders, and those sensitive to heat or sun.

Healthy Community & Resilient Neighbourhoods:

- Supports community well-being through enhanced opportunities for a variety of uses within The Square.
- Fosters a strong sense of place and identity through the development of high-quality built form.
- Create and maintain safe, accessible, and vibrant public spaces that encourage diverse use.

E. Previous Reports on this Topic

IPPW 2019-054 – Uptown Public Realm Strategy Implementation
IPPW 2019-014 – Uptown Public Realm Strategy: Final Report
IPPW 2018-018 – Waterloo Uptown Public Realm Strategy: Background Report

DS 08-05.1 – Uptown Waterloo Public Square Tender Award
DS 07-25 – Uptown Waterloo Public Square – Final Design
DS 07-08.1 – Uptown Waterloo Public Square – Concept Plan
DS 06-56.1 – Uptown Waterloo Public Square Study-Final Report
DS 05-11 – Waterloo Public Square – Endorsement of the Conceptual Plan

Waterloo Public Square Improvements
IPPW 2022-021

1. Background

Council endorsed the Waterloo Public Square (The Square) design in 2007, which included the water feature design and location. Construction of the water feature was delayed due to budget constraints and future construction of the LRT. LRT construction was completed in 2019, and subsequently the Completion of the Public Square – Water Feature project was approved through the 2020-2022 capital budget. Additionally, the provision of shade to The Square was identified as part of the Uptown Public Realm Strategy (UPRS) and Laurel Greenway Feasibility Study. The water feature and shade structures will improve the overall experience of The Square, fostering a healthy community and strengthening the sense of place in Uptown Waterloo.

Water Feature:

The Square's design was approved by Council on July 2007 via staff report DS-07-25 and construction was completed in May 2009.The water feature and its proposed location was part of The Square's original design. However, the water feature was omitted from construction due to budget constraints and the unknown impacts of the Region's LRT construction to The Square at the time. To minimize future disturbance and restoration works to The Square, structural and servicing components of the water feature were installed in anticipation of the future water feature construction.

The water feature and associated design elements date back to a sequence of public engagement events that culminated with a public workshop held in May 2006 where ideas were presented to the public for inclusion in the space. Crystal Fountains Inc. was retained in 2020 to complete the detailed architectural design of the water feature, and WalterFedy Inc. was retained in 2021 to complete the detailed structural, mechanical, electrical, and civil engineering design.

Staff have engaged impacted businesses and property managers and they are supportive of the project. Staff will continue to work with these establishments to ensure that impacts to business operations and pedestrian access are minimized during construction.

The developer of the Barrel Yards, Silver Lake Developments Inc., has committed to donate $500,000 to help fund the water feature project. This developer contribution significantly leverages the available City funding to enhance the design, construction and quality of the water feature.

If approved by Council, the project team will proceed to tender the project on a timeline to enable Spring 2023 construction.

Shade Structures:

On March 4th, 2019, Council approved the UPRS Report (IPPW 2019-014), to guide future public realm improvements in Uptown Waterloo. The report proposes the following five urban systems concepts:

- Breathe: Parks + Open Space
- Move: Connectivity
- Frame: Urban Form
- Celebrate Heritage
- Inspire: Public Art + Culture

To help establish a starting point for implementation, the Strategy identified three priority initiatives that brought together many of the action items identified. These priority initiatives envision the following:

- The Laurel Greenway
- Civic Common
- Willis Way

Based on a review of the UPRS report, and in consultation with the staff steering committee, Uptown Vision Committee, and the BIA, the shade structure in The Square was noted as a high priority initiative that could proceed as part of the Laurel Greenway Feasibility Study or as a stand-alone project.

The City has retained a consultant team led by SHIFT Landscape Architecture to complete the Laurel Greenway Feasibility Study. The first phase of the study was completed in January 2021 and included exploring opportunities to introduce a shade feature/structure to The Square. Based on feedback received during the public engagement process, and in consideration of technical and operational constraints, a design concept has been developed for a series of permanent four-season shade features, additional tree planting and seasonal, movable shade elements as shown in Figure 1 below. If approved by Council, the project team will proceed to detailed design and tender preparation.

Public and stakeholder consultations for the Laurel Greenway Feasibility Study, including the shade structure, were completed in January 2021 and August 2021. Project information and surveys were posted on the EngageWaterloo website for public input. The preferred conceptual design and location of the shade structure takes into account public feedback as well as physical, operational, programming and GRCA floodplain constraints. Geotechnical investigations, shade, and wind modeling will be completed as part of detailed design.

2. The Design

Water Feature:

The water feature will be located in front of the existing restaurant patio. The feature is a wall of water that falls into stepped pools and then recirculates to fall again. The feature is concrete, articulated on the surface for interest during winter and for the definition of the water movement (i.e., rills of water as opposed to a sheet of water), which will also provide soothing background noise. The water feature will have programmable lighting and a secure service room for maintenance and operations, such as opening and closing the fountain each year, water testing, filter replacements, cleaning, etc. The servicing components (pumps, filters, etc.) are housed in a room at the base of the water feature with a door on the north side of the room.

Shade Structures:

The permanent shade will include five permanent structures made of reclaimed wood and steel. The series of repeated shade elements is located at the southern edge of The Square to provide shade over the existing seating terraces. The elements are designed to minimize disruption to the function of the existing square, considering events, programming, and other uses. The structures are located outside of the GRCA regulated floodway, away from underground infrastructure including the ice rink refrigeration system, the Laurel Creek box culvert, and other existing infrastructure and shall be constructed on existing piers to reduce disturbance. The structures are not within LRT setbacks and will comply with crime prevention through environmental design (CPTED) principles, accessibility, and applicable safety standards.

The concept design and materials are based on public engagement feedback from January 2021. Additional public engagement was completed in August 2021, which will be incorporated into the detailed design. The most common public feedback includes a preference for smaller-sized shade elements throughout The Square, a multi-season feature that supports current uses, desire for integrating natural materials, consideration of lighting, and inclusion of trees and planting as a source of natural shade and to soften the extent of the concrete area.

The movable shade elements will be oversized fabric umbrellas with steel posts installed on concrete bases. The design of the bases allows for immediate relocation using compact equipment to rearrange the features as needed to accommodate events and programming as well as seasonal removal for offsite storage. The City's Arts & Culture team will communicate needs to the Parks Operations team, who will move the elements using existing compact equipment, allowing flexibility for programmed events and passive daily use, while maintaining the open central space for the well-loved winter ice rink.

Additional landscape improvements proposed within The Square include wood-top seating and tree planting within existing raised planters along the southern edge of The Square and along King Street. The addition of approximately 2-3 deciduous trees will

soften the space, provide natural shade in the summer months and allow sunlight access in the winter months. The additional tree along King Street will help frame the public square as well. The wood-top seating will provide softer materials and break up the concrete look of The Square while complementing the wood material of the shade structures.

3. Financial Implications

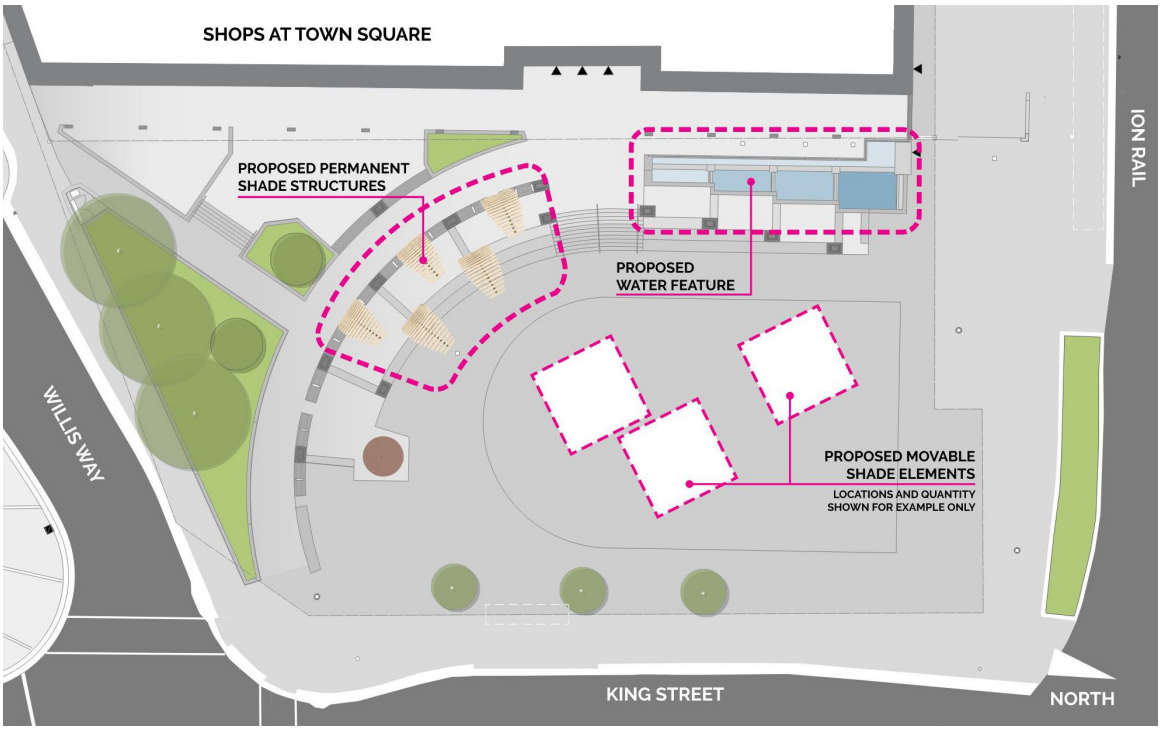
Completion of the public square water feature was approved through the 2020-2022 capital budget. The proposed cost estimate of $1,200,000 is also in line with available funding for the feature. A $500,000 developer contribution to the water feature is included in the budget and allows a significant leverage of public funds.

Through the 2020-2022 budget process, Council approved the water feature capital project to proceed, along with committing $12,000 of annual operating funding towards maintenance, commencing in 2022. This earmarked operational funding will be deferred to 2023 to align with the anticipated construction schedule. Any additional pressure recommended by the project Consultants and City operational staff will be added to the 2023 budget cycle for consideration during that review.

Via staff report IPPW2019-054 – Uptown Public Realm Strategy Implementation, Council approved the funding release to enable various initiatives through the uptown, one being to evaluate alternatives and related costs for a shade structure. A portion of the 2019 funding release for the Uptown Public Realm Strategy Implementation has been set aside for a shade structure in the public square. The proposed cost estimate of $360,000 for the permanent shade structures and $160,000 for movable elements, as detailed in this report, is in line with available funding for this component.

Figure 1: Key Plan

Figure 1 below shows the location of the proposed water feature, movable shade elements, and permanent shade structures within Waterloo Public Square.


SHOPS AT TOWN SQUARE
PROPOSED PERMANENT SHADE STRUCTURES
PROPOSED WATER FEATURE
PROPOSED MOVABLE SHADE ELEMENTS
LOCATIONS AND QUANTITY SHOWN FOR EXAMPLE ONLY
ION RAIL
WILLIS WAY
KING STREET
NORTH

STAFF REPORT
Engineering Services

Title:	**Award of Tender RFT22-03 Albert Street Watermain Replacement and Road Improvements (Columbia to Weber)**
Report Number:	IPPW2022-020
Author:	Kyle Bossie
Meeting Type:	Council Meeting
Council/Committee Date:	April 25, 2022
File:	210110
Attachments:	Attachment A – Project Limits
Ward No.:	Wards 3 and 6

Recommendations:

1. The IPPW2022-020 be approved.
2. That Council authorizes the reallocation and transfer of $4,967,440 in capital funding to project account #210110 from various capital project accounts, as detailed in Table 2 of this report.
3. That Council approves the award of RFT22-03 - Albert Street Watermain Replacement and Road Improvements (Columbia to Weber) to 410754 Ontario Limited o/a Sousa Concrete for the submitted price of $5,327,099.00 plus unrecoverable HST in the amount of $93,756.94 for a total award value of $5,420,855.94.
4. That the Mayor and Clerk be authorized to sign the Agreement between The Corporation of the City of Waterloo and 410754 Ontario Limited o/a Sousa Concrete, and any other documents related to this project, subject to the satisfaction of the City's Director of Legal Services.

A. Executive Summary

Approximately 1.7 km in length, the Albert Street Watermain Replacement and Road Improvements project is a major resurfacing and active transportation improvement project that demonstrates the City of Waterloo's commitment to address its infrastructure gap and improve access to multi-modal transportation. Along with asphalt resurfacing and installation of physically separated cycling facilities, 1.65 km of existing watermain in very

poor condition will be replaced and upsized to accommodate upcoming and future development in the area.

In accordance with the City's Purchasing By-Law 2019-026, construction tenders were solicited via RFT22-03. Tender bids were received from seven (7) qualified contractors. After reviewing the bids, it is recommended that the low bidder, 410754 Ontario Limited o/a Sousa Concrete be awarded the project. Upon award of RFT22-03, it is anticipated that construction will commence in May 2022, with a targeted completion by the end of fall 2022.

B. Financial Implications

As outlined in report IPPW2020-038, the preliminary estimate for the Albert St. project was approximately $2.3 million and was to be funded using existing 2020-2022 Approved Capital Budget sources, without the need to source additional funding from reserves. Through the subsequent design process, the project scope was expanded to include higher order active transportation elements and upsizing of the watermain to plan for future development needs. Geotechnical investigations also revealed the presence of environmentally impacted soil, which will need to be managed and/or disposed of appropriately.

Further, North American construction prices have increased dramatically recently, due to market volatility created by rising inflation and fuel costs, supply chain disruption and other COVID-19 related impacts, and the enactment of new provincial regulations for excess soil handling and disposal.

Though the project scope and costs have increased due to the above factors, the project can still move forward using several existing 2020-2022 approved capital budget sources (i.e. without any reserve draws), as detailed in Section 5 and summarized in Table 2 of this report. If approved, the revised project budget will total approximately $6.1 million and the tender can be awarded, allowing this important infrastructure initiative to be completed in 2022. Given the urgency of watermain repairs, the failing state of the surface of the road, and the benefits that will be realized by the installation of active transportation features, Staff believe that project still represents a prudent infrastructure investment despite the cost escalation being experienced in the civil construction industry.

C. Technology Implications

There are no technological implications with respect to this report.

D. Link to Strategic Plan

(Strategic Objectives: Equity, Inclusion and a Sense of Belonging; Sustainability and the Environment; Safe, Sustainable Transportation; Healthy Community & Resilient Neighbourhoods; Infrastructure Renewal; Economic Growth & Development)

(Guiding Principles: Equity and Inclusion; Sustainability; Fiscal Responsibility; Healthy and Safe Workplace; Effective Engagement; Personal Leadership; Service Excellence)

Safe, Sustainable Transportation – Improve all modes of transportation to make Waterloo more mobile, accessible and connected

Infrastructure Renewal – Plan, build and upgrade infrastructure to support growth and urban intensification

E. Previous Reports on this Topic

IPPW2020-038	Transportation Infrastructure Replacement and Rehabilitation Needs – 2020-2022 Implementation Plan

Award of Tender RFT22-03 Albert Street Watermain Replacement and Road Improvements (Columbia to Weber)
IPPW2022-020

Section 1 – Background

On June 22, 2020, Council approved staff report IPPW2020-038, which recommended implementation plan for the additional 2020–2022 Transportation Infrastructure Replacement and Rehabilitation Needs. The corresponding funding was approved by Council on budget day (February 10, 2020). Staff in Engineering Services, Transportation Services, Financial Planning and Asset Management worked together to develop a plan that balanced active transportation in the first two years (i.e. through prioritized resurfacing of several trails and walkways) with increased road resurfacing and advancement of two road reconstructions to 2022 (Brighton Street – Marshall to Noecker and Herbert Street – Union to Allen).

Council's approval of the additional funding also provided an opportunity to proceed with a major 1.7 km resurfacing and active transportation improvement project on Albert Street from Columbia Street to Weber Street. When IPPW2020-038 was prepared, the planned scope of work included road resurfacing, reducing the number of vehicle lanes to create space for a separated cycling facility, improving crossing opportunities, and like-for-like replacement of the watermain using the same size and location.

Section 2 – Watermain Replacement and Upsizing

The existing cast iron watermain was installed in the mid-1960s and ranges in size from a 150 mm to 300 mm diameter. This important infrastructure is in very poor condition resulting in 27 recorded watermain breaks occurring between Columbia Street and Longwood Drive since 2000. The most recent watermain break occurred on March 22, 2022 near Cardill Crescent. Over the years, local businesses have communicated their concerns to staff about the frequency of these watermain breaks.

Replacement of the existing watermain and associated services within the right-of-way will contribute towards the goal of closing the infrastructure gap. Over 1.65 km of watermain will be replaced as part of this project. To provide capacity for upcoming and future developments in the area, the existing main will be upsized and replaced in a new alignment along its entire length with a 300 mm diameter PVC watermain.

Section 3 – Active Transportation Improvements

When IPPW2020-038 was prepared, and based on the 2011 Transportation Master Plan (TMP), it was envisioned that Albert Street would undergo a road right-sizing in conjunction with its resurfacing, reducing vehicle lanes from four to two and adding visually separated cycling facilities (i.e. on-road painted bike lanes). However, when the 2020 TMP update was completed later that year, it recommended that Albert Street incorporate physically separated rather than visually separated cycling facilities. Accordingly, as the project design process began, an expert active transportation consultant (Alta Planning) was engaged to evaluate several separated cycling facility types based on the context of the street, connections to existing and planned cycling infrastructure, and the nature of work being undertaken for the watermain and road resurfacing.

The review considered a bi-directional cycle lane, a bi-directional multi-use-path and unidirectional cycle lanes (i.e. on both sides of the street). Unidirectional cycle lanes were ultimately selected as the preferred approach since the integration with intersections would be less complex; it would be safer for crossing driveways; and, would provide simpler connections to other cycling facilities. As currently designed, physical separation for the cycling facilities will be achieved using poured curbs and flex-posts along with enhanced line painting and signage.

Other active transportation improvements will include median pedestrian islands for mid-block crossings, bicycle crossings at intersections and new transit stop integration techniques.

Section 4 – Procurement Process

RFT22-03 – Albert Street Watermain Replacement and Road Improvements was advertised on the City's 'Bids & Tenders' platform on March 7, 2022 and closed on March 22, 2022. Seven (7) compliant submissions were received and opened electronically by procurement staff. Table 1 below summarizes the Bid Results.

Table 1: Contractor Bid Evaluation Summary RFT22-03

Bidder	Bid Price	Non-recoverable HST (1.76%)	Total including non-recoverable HST
410754 Ontario Limited o/a Sousa Concrete	$5,327,099.00	$93,756.94	$5,420,855.94
E. & E. Seegmiller Limited	$5,380,927.00	$94,704.32	$5,475,631.32
Neptune Security Services Inc.	$5,574,783.50	$98,116.19	$5,672,899.69
Capital Paving Inc	$5,611,000.00	$98,753.60	$5,709,753.60
Steed and Evans Limited	$6,406,000.00	$112,745.60	$6,518,745.60
Sierra Infrastructure Inc.	$6,497,345.13	$114,353.27	$6,611,698.40
Oxford Civil Group Inc.	$7,124,574.92	$125,392.52	$7,249,967.44

Section 5 – Financial Implications

As outlined in report IPPW2020-038, the preliminary estimate for the Albert St. project was approximately $2.3 million and was to be funded using existing 2020-2022 Approved Capital Budget sources, without the need to source additional funding from reserves. Through the subsequent design process, the project scope was expanded to include higher order active transportation elements (unidirectional, separated cycle lanes instead of painted, on-road lanes, approximately $600,000) and re-routing and upsizing of the watermain to plan for future development needs (approximately $857,000). Geotechnical investigations also revealed the presence of environmentally impacted soil, which will need to be managed and/or disposed of appropriately.

Further, North American construction prices have increased dramatically recently, due to market volatility created by rising inflation and fuel costs, supply chain disruption and other COVID-19 related impacts, and the enactment of new provincial regulations for excess soil handling and disposal. Locally, the Conestoga Heavy Construction Association has also confirmed for staff that these types of increases are compounded by low inventories of critical materials such as PVC pipe used for sewers and watermains, and the availability of labour.

Though the project scope and costs have increased due to the above factors, based on the submitted low bid price, the project can still move forward in 2022 using several existing 2020-2022 approved capital budget sources (i.e. without any reserve draws). These include a number of previously planned project-to-project transfers from project accounts such as Trails and Bikeways Master Plan Implementation (#120092), Road Resurfacing – Various Locations (#120096), and Structurally Deficient Watermain Rehabilitation (#130044). Funds can also be sourced from surpluses available in substantially completed projects (e.g. Longfellow Drive (#202048) and Mackay Crescent (#202049) road reconstructions) and projects where funding will not be required in 2022 (e.g. Northfield Drive Multi-use Trail (#150058)). Finally, development charge sources can be used to fund the watermain upsizing (e.g. City Wide Development Driven Upgrades – Water (#202061)). Table 2 below presents the recommended funding plan via reallocations/transfers, enabling the project to move forward in 2022. The donor projects listed in Table 2 are suitable sources, based on similar scope elements; funding sources and amounts were allocated proportionately with as-tendered costs. Given the urgency of watermain repairs, the failing state of the surface of the road, and the benefits that will be realized by the installation of active transportation features, Staff believe that project still represents a prudent infrastructure investment despite the cost escalation being experienced in the civil construction industry.

Table 2: Recommended Funding Reallocation Requests

Transfer from Existing Capital Projects to Albert St. (#210110)		Amount (Net of Overhead)	Notes
120092	Trails and Bikeways Master Plan Implementation - City Wide	$ 316,000	Planned transfer for Albert Street.
120096	Resurfacing Roads - Various Locations	$ 1,089,600	Planned transfer for Albert Street.
130044	Structurally Deficient Watermain Rehab - City Wide	$ 1,257,960	Planned transfer for Albert Street.
140021	Beaver Creek Rd and Conservation Dr Reconstruction	$ 332,000	DC-WAT funds. Project will be re-estimated/re-budgeted in 2023.
150058	Northfield Dr Multi-use Trail - Bridge St to University Ave	$ 281,280	Not required; Northfield MUT funded by the Region.
190110	Lexington Watermain - Highway 85 Crossing	$ 930,000	Construction funds will be re-estimated/re-budgeted in 2023.
202048	Longfellow Dr - Shakespeare Dr to Westmount Rd - Reconstruction	$ 58,000	Project substantially completed; surplus funds available.
202049	MacKay Cr - Weber St to Alvin St - Reconstruction	$ 117,000	Project substantially completed; surplus funds available.
202061	City Wide Development Driven Upgrades - Water	$ 585,600	Funds are available; no other planned use in 2022.
Total funding to be transferred to Albert St. (#210110)		**$ 4,967,440**	

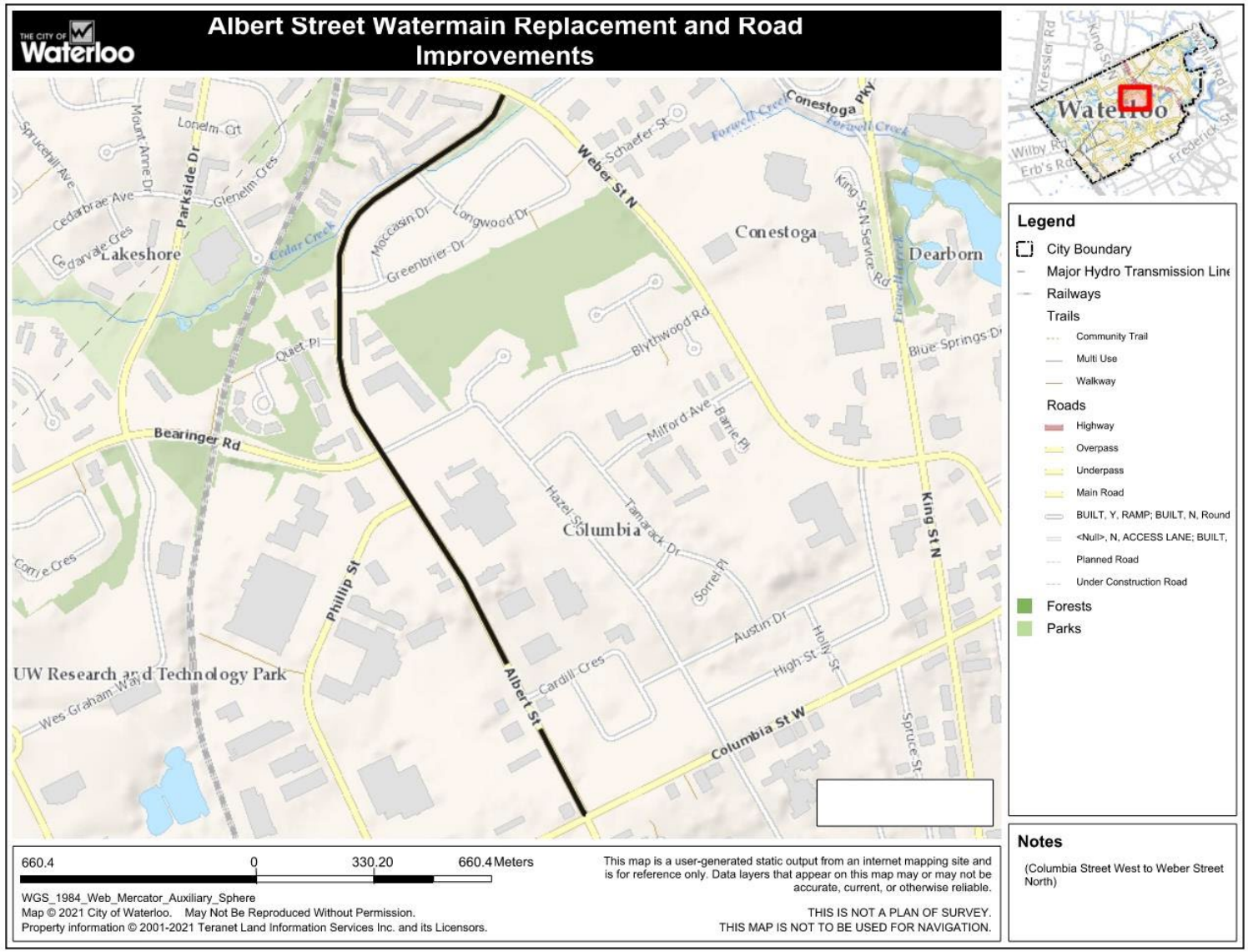
The approved 2021 capital budget provided $1,120,000 in funding (via the Road Resurfacing – Various Locations (#120096), and Structurally Deficient Watermain Rehabilitation (#130044) accounts, as outlined in IPPW2020-038), a portion of which was used to complete the design and tendering of the project. Combined with the additional $4,967,440 in funding transfers (per Table 2 above), the revised total project budget will be approximately $6.1 million and the tender can be awarded to the low bidder, Sousa Concrete. Table 3 below provides funding details to date and projected expenditures for the project.

Table 3: Funding Approvals to Date and Estimated Costs

Description	Report Number	Approval Date	$ Amount*
FUNDING:			
Funding – 2021	N/A – Routine	10-Feb-20	$1,120,000
Funding – 2022	IPPW2022-020	25-Apr-22	$4,967,440
Total Funding			**$6,087,440**
EXPENDITURES:			
Engineering design and various expenses incurred to date			$170,646
Projected:			
RFT22-03 (Albert St Watermain Replacement and Road Improvements)	IPPW2022-020	25-Apr-22	$5,420,856
Other projected costs (includes but not limited to): QA/QC testing, surface asphalt, contract admin, overhead, miscellaneous			$495,938
Total Projected Expenditures			**$5,916,794**
Total Expenditures			**$6,087,440**
BALANCE:			**$0**

* Note: non-recoverable portion of HST included

Appendix A Albert Street Watermain Replacement and Road Improvements Area Map



STAFF REPORT
Parks, Forestry and Cemetery Services

Title:	Award of RFT22-06 Bechtel Park Diamond Replacement
Report Number:	COM2022-015
Author:	Derek Brick, Landscape Technologist, Parkland, Capital Projects, and Stewardship
Council Date:	April 25, 2022
File:	220033
Attachments:	Bechtel Park Diamond Final Site Plan
Ward No.:	Ward 5

Recommendations:

1. That Council approve report COM2022-015.

2. That Council approve the reallocation and transfer of $450,000 in additional funding for the Bechtel Park Diamond replacement project #220033 from various capital project accounts, as detailed in Table 2 of this report.

3. That Council approve the award of RFT 22-06 – Bechtel Park Diamond Replacement to Twin-City Interloc Inc. for the submitted price of $1,097,855.00 plus unrecoverable HST in the amount of $19,322.25 for a total award value of $1,117,177.25

4. That the Mayor and Clerk be authorized to sign the agreement between the Corporation of the City of Waterloo and Twin-City Interloc Inc., and any other documents related to this project, subject to the satisfaction of the City's Solicitor.

A. Executive Summary

In accordance with the City's Purchasing By-Law 2019-026, tenders were solicited via RFT 22-06 for the Bechtel Park Diamond Replacement. Bids were received from four (4) qualified contractors. After reviewing the bids, it is recommended that the low bidder, Twin-City Interloc Inc. be awarded the project.

All four (4) received bids exceeded the original budget. The project team carefully reviewed the bids and identified numerous factors that may be contributing to the received prices and the resulting budget shortfall. These include the overall budget being identified

before the detail design was completed, the unexpected amount of earthworks required to fix incorrect diamond field drainage, inflation and other market forces (I.e. rising fuel costs, supply chain disruption and other COVID-19 related impacts). The project team identified the following options for council consideration:

1. Source additional funding to award RFT22-06 with the upset limit of $1,117,177 (including non-recoverable HST), including the provisional items and negotiate with Twin-City Interloc Inc. to reduce that figure further.
2. Cancel the tender; defer the works and source additional funding through the 2023 or 2024-2026 capital budget.

Option 2 is not recommended. Deferring the project would incur additional interim costs to restore items impacted by the project work already occurring on the associated stadium. Further, the market for this type of work has continued to increase in recent years and retendering in a few years is not expected to provide a better price. Finally, user groups have been waiting and advocating for the rehabilitation of this facility for many years and are anxious to see the works commence without further delay. The user groups have also already arranged for scheduling their 2022 games on other diamonds, expecting the Bechtel Park diamond to be out of commission until 2023.

Upon approval of this report and award of RFT 22-06, it is anticipated that construction will commence in spring 2022 and be substantially completed by October 31, 2022.

B. Financial Implications

As approved in the 2020-2022 capital budget (ref #241), $450,000 in routine funding from the Capital Infrastructure Reinvestment Reserve Fund (CIRRF) was released to fund the Bechtel Park Stadium Rehabilitation project 190012. Further funding in the amount of $675,000 was also provided in 2020 from the Parkland Dedication Reserve Fund (PUB) for the field upgrades at the Bechtel Park Stadium via COM2021-020. In 2022, project 220033 was set up to be project managed by Parks staff and to track the cost of the Bechtel Ball diamond replacement separately from the Bechtel Stadium project 190012, which is being implemented by Facilities Design and Management staff. At that time, a transfer of $110,000 in CIRRF funding from the Bechtel Stadium project plus the $675,000 in PUB funding was transferred to project 220033 for an original project budget of $785,000.

With the previously approved funding and recommended additional transfers as per this report, RFT22-06 can be awarded to the low bidder in the amount of $1,117,177.25.

C. Technology Implications

There are no technological implications with respect to this report.

D. Link to Strategic Plan

(Strategic Objectives: Equity, Inclusion and a Sense of Belonging; Sustainability and the Environment; Safe, Sustainable Transportation; Healthy Community & Resilient Neighbourhoods; Infrastructure Renewal; Economic Growth & Development)

(Guiding Principles: Equity and Inclusion; Sustainability; Fiscal Responsibility; Healthy and Safe Workplace; Effective Engagement; Personal Leadership; Service Excellence)

Equity, Inclusion and a Sense of Belonging

- Project includes accessibility improvements to the site and site access

Infrastructure Renewal

- Upgrade current facility into a modern facility
- Improving field drainage to allow for less downtime during times of heavy rain

Healthy Community & Resilient Neighbourhoods

- Create inviting, vibrant and safe public space
- Create opportunity for low cost physical activity in the community

E. Previous Reports on this Topic

COM2019-006 – Outdoor Sports Field Strategy Implementation

COM2020-016 – Outdoor Sports Field Strategy Implementation

COM2021-020 – RIM Park Ball Diamond Upgrades Funding Redistribution

Award of RFT22-06 Bechtel Park Diamond Replacement
COM2022-015

Section 1: Background

On March 25, 2019, Council approved staff report COM2019-006 – Outdoor Sports Field Strategy Implementation. The report outlined the rehabilitation and upgrades of ball diamonds to be completed in the 2020-2022 budget period, including improvements to the Bechtel Park stadium building and diamond. RFT22-06 pertains to the diamond upgrades; the stadium building improvements are implemented under a separate project (#190012) by the Facility Design and Management team.

The work involved in the diamond upgrade contract includes the removal and disposal of existing fencing, vegetation, and infield surfaces, site regrading, supply and installation of new fencing and dugouts, accessible parking, concrete and asphalt paving, sodding, planting and irrigation works. The project offers an exciting opportunity to bring the diamond back to a top quality facility it once was. The City of Waterloo has hired the services of RK and Associates as the consultant to prepare design/construction documents, and provide contract administration for the project.

The following work has occurred to date on this project:

- A consultant was hired to provide design services,
- The concept design was created in consultation with the user groups
- A project web page was created on Engage Waterloo, providing project information and opportunity for feedback by the community
- Final design and tender documents were prepared
- Tenders were solicited in accordance with the City's Purchasing By-Law 2019-026

The stadium building upgrades, implemented under a separate project (#190012) by the Facility Design and Management team include the demolition of two ancillary stadium buildings, to be replaced with dugouts, as well as the upgrade of the main stadium building, including provision of an accessible washroom. The demolition of the ancillary buildings is now complete and the main building upgrades will take place in the fall/winter of 2022, after the completion of the diamond upgrade.

Upgrades to the diamond and the stadium are both expected to be complete ahead of the 2023 play season.

Section 2: Engagement Process

User groups were consulted and played an important role in the design development, as well as the implementation of impacts from construction. The groups have accepted the loss of one full season (2022) to ensure they have a new diamond ready for the 2023 season. The rescheduling process has begun and the groups are working diligently to rearrange their scheduling accordingly for 2022.

The project was also opened up to public comments through the Engage WR platform, where the project received positive feedback from the community. Some feedback requested even more investment in the diamond, to bring it to a higher standard of play to be able to host professional teams. However, the current objective for this diamond is to provide opportunities to local minor sports and other non-professional groups.

It is recommended the project move forward in the 2022 season. Delays in awarding the project are anticipated to create a higher price in the future. The user groups impacted by the loss of the 2022 season have worked diligently to reschedule their 2022 season to play on other diamonds. Delays in the project would affect future seasons as well causing significant challenges for the user groups.

Section 3: Procurement Process

RFT 22-06 – Construction Tender for Bechtel Diamond Replacement was advertised on Bids and Tenders on February 14th, 2022. The bid closing date was March 15th, 2022 and four (4) compliant submissions were received and opened electronically by procurement. Table 1 below summarizes the Bid Results.

Table 1: Contractor Bid Evaluation Summary RFT22-06

Bidder	Bid Price	Non-recoverable HST (1.76%)	Total including non-recoverable HST
Twin-City Interloc Inc.	$1,097,855.00	$19,322.25	$1,117,177.25
Bomar Landscaping Inc.	$1,249,626.00	$21,993.42	$1,271,619.42
39 Seven Inc.	$1,274,730.84	$22,435.26	$1,297,166.10
Buildscapes Construction Ltd.	$1,383,439.53	$24,348.54	$1,407,788.07

The project team carefully reviewed the bids and identified numerous factors that may be contributing to the received prices and the resulting budget shortfall. These include the overall budget being identified before the detail design was completed, the unexpected amount of earthworks required to fix incorrect diamond field drainage, inflation and other market forces (I.e. rising fuel costs, supply chain disruption and other COVID-19 related impacts). The project team identified the following options for council consideration:

1. Source additional funding to award RFT22-06 with the upset limit of $1,117,177, including the provisional items and negotiate with Twin-City Interloc Inc. to reduce that figure further.
2. Cancel the tender; defer the works and source additional funding through the 2023 or 2024-2026 capital budget.

Option 2 is not recommended. Deferring the project would incur additional interim costs to restore items impacted by the project work already occurring on the associated stadium. Further, the market for this type of work has continued to increase in recent years and retendering in a few years is not expected to provide a better price. Finally, user groups have been waiting and advocating for the rehabilitation of this facility for many years and are anxious to see the works commence without further delay. The user groups have also already arranged for scheduling their 2022 games on other diamonds, expecting the Bechtel Park diamond to be out of commission until 2023.

After reviewing the bids and the above options, it is recommended that Twin-City Interloc Inc. be awarded the above contract as the lowest bidder with the additional funding being allocated as recommended in this report.

Section 4: Financial Implications

Though the project scope and costs have increased due to the above factors, based on the submitted low bid price, the project can still move forward in 2022 using several existing 2020-2022 approved capital budget sources (i.e. without any reserve draws). These include project-to-project transfers from related projects such as; $100,000 in CIRRF funding transferred from the Artificial Turf Replacement - RIM Park project #190011, $100,000 in CIRRF funding transferred from the Park Upgrades - City wide project #130028 and $250,000 in PUB funding transferred from the IPPW-PLN-Parkland Funding project #120039. Table 2 below presents the recommended funding plan via reallocations/transfers, enabling the project to move forward in 2022.

Table 2: Recommended Funding Reallocation Requests

Transfer from Existing Capital Projects		CIRRF	PUB	TOTAL	Notes
190011	Artificial Turf Replacement - RIM Park	$100,000		$100,000	Funding allocated for artificial turf repairs. Preventative maintenance was completed in 2021 – project surplus funding available for reallocation to Bechtel Park diamond replacement
130028	Park Upgrades - City Wide	$100,000		$100,000	Funding allocated for park upgrades – project surplus funding available for reallocation to Bechtel Park diamond replacement
120039	IPPW-PLN-Parkland Funding		$250,000	$250,000	Project originally for Parkland acquisition - Project surplus PUB funding available for reallocation to Bechtel Park Diamond Replacement project
Total Funding to be Transferred		$200,000	$250,000	**$450,000**	

With the previously approved funding, combined with the recommended additional funding as per the above, RFT22-06 can be awarded to the lowest compliant bidder, as summarized in Table 3 below.

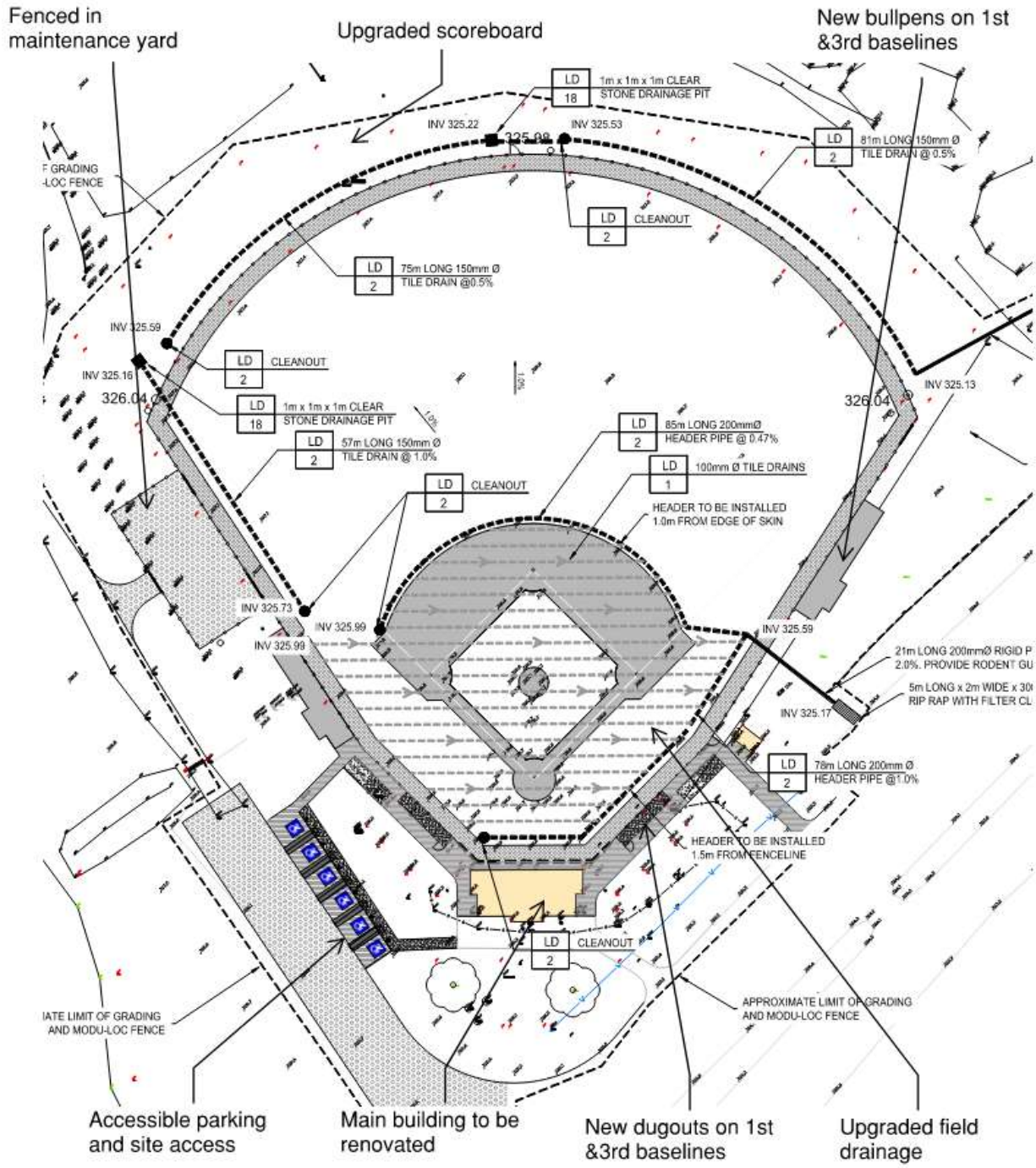
Table 3: Funding Approvals to Date and Estimated Costs

Description	Report Number	Approval Date	$ Amount *
FUNDING:			
Funding – 2021 (transfer from 190012)		routine	$110,000
Funding – 2021 (transfer from 190012)	COM2021-020	June 28, 2021	$675,000
Funding – 2022 (transfers from 190011)	COM2022-015	April 25, 2022	$100,000
Funding – 2022 (transfers from 130028)	COM2022-015	April 25, 2022	$100,000
Funding – 2022 (transfers from 120039)	COM2022-015	April 25, 2022	$250,000
Total Funding			**$1,235,000**
EXPENDITURES:			
Project Expenses Incurred to Date (public art contribution, overhead transfer)			$38,150
Award RFT22-06			$1,117,177
Other Project Costs (including but not limited to): contingency, signage, misc.			$79,673
Total Expenditures			**$1,235,000**
BALANCE			**$0**

* Note: non-recoverable portion of HST included

Section 5: Images

Figure-1: Bechtel Park Diamond Final Site Plan



STAFF REPORT
Municipal Enforcement Services

Title:	Lot Maintenance By-law Amendments
Report Number:	COM2022-016
Author:	Grant Curlew, Manager, Licensing & Standards
Council Date:	April 25, 2022
File:	N/A
Attachments:	N/A
Ward No.:	City Wide

Recommendations:

1. That Council approve report COM2022-016.

2. That Council amend By-law 2011-123 to include additional allowances for naturalized areas on private lots and increased grass height limits in an effort to support the native pollinator population.

A. Executive Summary

On February 26th, 2018, Council approved COM2018-008, designating the City of Waterloo as a Bee City. The objective of this designation is to encourage health and sustainable habits in the community to support our pollinator population. Since this designation, the City has continued to look for strategies to accomplish the program objectives.

Currently, the City's Lot Maintenance By-law does not expressly permit a lawn to be naturalized. Municipal Enforcement Services receives multiple requests each year to allow citizens to establish naturalized areas on their properties, requiring enforcement staff to make reasonable allowances based on subjective standards.

Additionally, the "No Mow May" movement has grown in popularity in recent years. The premise of "No Mow May" is that no lawn maintenance until the end of May will further support the pollinator population. However, the benefits of planting a pollinator patch, native shrubs and trees far outweigh the benefits or not cutting a lawn in May.

Input from residents was received through an Engage Waterloo survey that received over 165 responses. Staff also looked at other municipalities, environmental impacts, and the implications to enforcement.

Staff recommend that Council approve report COM2022-016 and all proposed amendments to Lot Maintenance By-law #2011-123.

B. Financial Implications

No financial implications.

C. Technology Implications

No technology implications.

D. Link to Strategic Plan

(Strategic Objectives: Equity, Inclusion and a Sense of Belonging; Sustainability and the Environment; Safe, Sustainable Transportation; Healthy Community & Resilient Neighbourhoods; Infrastructure Renewal; Economic Growth & Development)

(Guiding Principles: Equity and Inclusion; Sustainability; Fiscal Responsibility; Healthy and Safe Workplace; Effective Engagement; Personal Leadership; Service Excellence)

This report links to the strategic goals and objectives of the City of Waterloo pertaining to environmental sustainability, healthy communities, and resilient neighbourhoods in that the additional naturalized areas can support native pollinator populations, reduce water use for lawn watering, and add to the vibrancy of neighbourhoods.

E. Previous Reports on this Topic

COM2018-008 – Bee City Canada Designation

Lot Maintenance By-law Amendments
COM2022-016

Background

The City's Lot Maintenance By-law was enacted by Council in 2011. It provides basic maintenance standards for both residential and commercial lots. Since the time of its enactment, there has been increased public awareness to the threats facing the pollinator population. The increased awareness has resulted in a desire by citizens to provide naturalized areas and has driven more interest in the "No Mow May" movement. Staff have observed that the enhanced public awareness has resulted in more requests from the public to naturalize their lawns or allow them to grow their lawns longer before cutting. The Lot Maintenance By-law currently does not expressly allow for a lawn to be naturalized and restricts turf grass to a height of 15.24cm (6 inches).

Naturalized areas are landscaped areas that have been allowed to establish vegetation through a combination of natural regeneration and deliberate plantings of native and non-native species of wildflowers, annuals, perennials, shrubs and grasses. When designed and implemented properly, they will typically require less watering and maintenance than a turf grass lawn. Staff are purposing amendments that will permit naturalized areas throughout a property and increase the turf grass to a maximum height limit of 8 inches.

Staff have also considered feedback received from other departments and the public around safety and encroachments. Proposed amendments have been added to include a requirement for a buffer strip around naturalized areas. This provision will assist in keeping tall plants out of visibility sightlines and prevent unwanted encroachment onto neighbouring properties and city boulevards. Buffer strips can be turf grass, low-lying vegetation, or other suitable ground cover. It should be noted that Transportation Services staff are currently reviewing the provisions for boulevard gardens, which are anticipated to complement these proposed amendments and would have similar considerations around plant heights.

Through the review of the by-law, staff have also noted some aspects of the by-law that could be enhanced to provide better clarity and assist with enforcement. These items include an updated definition of standing water, which can be a breeding ground for mosquitos and can attract other unwanted wildlife. They also include an updated definition of an inoperable vehicle, taking into consideration the recent validation sticker changes made by the provincial government, and refining some of the regulations related to

composting. Lastly, a clearer requirement for a property owner to maintain the adjacent boulevards clear from garbage and debris.

Bee City Canada Designation

On February 26th, 2018, Council approved COM2018-008, designating the City of Waterloo as a Bee City. Through our Pollinator Working Group, the objective of this designation is to encourage health, sustainable habits in the community to support our pollinator population. Although the working group's efforts are restricted to city park lands, the naturalization and increased turf grass height allowances put forth in this amendment will further the objectives of this designation on private properties.

No Mow May

"No Mow May" is a movement that was started in the United Kingdom, but has been gaining momentum in Canada in recent years. The objective is to provide increased habitat for natural pollinators by not cutting your lawn during the month of May. However, the benefits of planting a pollinator patch, native shrubs and trees far outweigh the benefits or not cutting a lawn in May.

Staff are of the opinion that the purposed amendments for additional naturalized area allowances and increase in turf grass height will provide for and encourage greater benefit than the "No Mow May" movement, while ensuring properties are consistently maintained to standards set out in the Lot Maintenance By-law.

Engage Waterloo

An Engage Waterloo survey was initiated and was available online in March of 2022. This survey was helpful to gauge public sentiment related to naturalized areas and longer grass height allowances. The survey received 165 responses. While this survey was helpful to gauge public sentiment with regard to this topic, it is not statistically reliable as the number of responses was small relative to the city's population.

With regard to the fundamental question, 89 percent of respondents reported that they would be in favour of naturalizing some or all of their own lawn and 80 percent of respondents were in favour of increased turf grass height limits.

Respondents indicated that their biggest concerns were around invasive plants encroaching onto their property from a naturalized area and lawns/gardens being unkempt. A majority of respondents were in favour of some form of buffer strip requirements and a somewhat strict approach on prohibition of select plant types.

Municipal Scan

Staff conducted a scan of other municipalities to determine their regulation around naturalization and grass height limits. It was found that most municipalities that staff

reviewed permit naturalized areas. Staff also note that the City of Waterloo currently has the strictest regulation for grass height, limiting grass height to 6 inches. The purposed turf grass height allowances of 8 inches would bring the City of Waterloo in line with other area municipalities.

Municipality	**Maximum Grass Height Permitted**	**Naturalization Permitted?**
City of Guelph	20 centimetres (8 inches)	Yes
City of London	20 centimetres (8 inches)	Yes
City of Oshawa	20 centimetres (8 inches)	No
City of Toronto	20 centimetres (8 inches)	Yes
City of Kitchener	20 centimetres (8 inches)	Yes
City of Windsor	31 centimeters (12 inches)	Yes
City of Stratford	20 centimetres (8 inches)	Yes
City of Hamilton	21 centimetres (8.2 inches)	Yes

STAFF REPORT
Legislative Services

Title:	Waterloo North Hydro Holdco Shareholder Nominations and Proxy
Report Number:	CORP2022-013
Author:	Julie Scott
Meeting Type:	Council Meeting
Council/Committee Date:	April 25, 2022
File:	[File]
Attachments:	[Attachments]
Ward No.:	City Wide

Recommendations:

1) That Staff Report CORP2022-013 be approved.
2) That Council nominate the following Council and citizen representatives for appointment to the Waterloo North Hydro Holding Corporation Board of Directors until the board of the new corporate entity is formed.
    - Mayor of the City of Waterloo
    - Member of Council appointed finance liaison for the City of Waterloo
    - Steven McCartney
    - John Milloy
    - Janet Peddigrew
    - David Petras
3) That Council appoint Councillor Jeff Henry as proxy to vote for the Corporation of the City of Waterloo at the Annual Meeting of Shareholders of the Waterloo North Hydro Holding Corporation to be held on May 19, 2022 and at any adjournments thereof, revoking any proxy previously given and that the Mayor and Clerk be authorized to sign the proxy resolution and any other related documents for such meeting.
4) That Council endorses the nomination of the following to the boards of the new corporate entity:
   City of Waterloo MergeCo Holdco representatives
    - David Petras
    - Tim Martin (recommended to serve as Vice Chair)
5) That Council nominates the Mayor and the Councillor appointed as the finance liaison as the non-independent board representatives for the new corporate

entity Holding Corporation Board of Directors and the Mayor for the new corporate entity Wires Company.

A. Executive Summary

Annually the City appoints a member of Council to represent the municipality at the annual meeting of shareholders of Waterloo North Hydro Corporation. Staff recommend Council nominate Councillor Henry as current member of the Holdco Board and City of Waterloo Finance Liaison.

At the shareholders meeting nominations for representatives on the Holdco Board of Directors will also be considered.

Under the current Shareholders' agreement Waterloo nominates 6 representatives to the Waterloo North Hydro Holding Corporation which are considered for appointment at an annual meeting to be held on May 19th in 2022.

Current Waterloo representatives include:

- Mayor of the City of Waterloo
- Council member appointed as the finance liaison
- Steven McCartney
- John Milloy
- Janet Peddigrew
- David Petras

Additionally, work is underway regarding the proposed merger between Waterloo North Hydro Holding Corporation and Kitchener Power Corp. and their subsidiaries, Waterloo North Hydro Inc. and Kitchener-Wilmot Hydro Inc., which Council as Shareholder approved on December 13, 2021.

In preparation for that transition staff recommend Council endorses the nomination of the following to the boards of the new corporate entity:

City of Waterloo MergeCo **Holdco** representatives

- David Petras
- Tim Martin (recommended to serve as Vice Chair)

Additionally staff recommend Council nominates the Mayor and the Councillor appointed as the finance liaison as the non-independent board representatives for the new corporate entity Holding Corporation Board of Directors and the Mayor for the new corporate entity Wires Company Board of Directors.

B. Financial Implications

None.

C. Technology Implications

None.

D. Link to Strategic Plan

(Strategic Objectives: Equity, Inclusion and a Sense of Belonging; Sustainability and the Environment; Safe, Sustainable Transportation; Healthy Community & Resilient Neighbourhoods; Infrastructure Renewal; Economic Growth & Development)

(Guiding Principles: Equity and Inclusion; Sustainability; Fiscal Responsibility; Healthy and Safe Workplace; Effective Engagement; Personal Leadership; Service Excellence)

Fiscal responsibility and community engagement

E. Previous Reports on this Topic

CORP2021-047 - Proposed Merger between Waterloo North Hydro Holding Corporation and Kitchener Power Corp. and their subsidiaries Waterloo North Hydro Inc. and Kitchener-Wilmot Hydro Inc. (December 13, 2021)

CORP2014-011 - Amending the Waterloo North Hydro HOLDCO Recruitment Procedure (February 10, 2014)

STAFF REPORT
Legislative Services

Title:	Ombuds Services
Report Number:	CORP2022-023
Author:	Julie Scott
Meeting Type:	Council Meeting
Council/Committee Date:	April 25, 2022
File:	[File]
Attachments:	[Attachments]
Ward No.:	City Wide

Recommendations:

1. That Staff Report CORP2022-023 be approved.
2. That Council defer to the Ombudsman Ontario for Ombuds services.

A. Executive Summary

Section 223.13 of the *Municipal Act,* 2001 (the Act) gives municipalities the authority to appoint an ombudsman who reports to Council and investigates in an independent manner any decision or recommendation made or act done or omitted in the course of the administration of the municipality and its local boards or municipally controlled corporations. If a municipality does not appoint its own ombudsman the provincial ombudsman through the office of Ombudsman Ontario is the legislated Ombuds by default.

The City of Waterloo, Region of Waterloo and other area municipalities contracted these services previously to an independent company and shared the retainer cost amongst participating municipalities. Each municipality was responsible for their own investigation expenses. The contract will expire May 31, 2022 and most participating municipalities have already defaulted to the provincial ombudsman or staff will be recommending they do so.

As a result Waterloo staff are recommending Council default ombuds services to the province.

B. Financial Implications

Expenses relating to the retainer and investigations were unbudgeted and absorbed within the Legislative Services Division. There is no cost to default to the provincial ombudsman. The annual expense fluctuates due to the volume of complaints or investigations and has averaged approximately $6,500/year. If council does not approve the staff recommendation staff will initiate a quotation process to secure independent Ombuds services which we would expect to be higher due to the inability to share the retainer with area municipalities.

C. Technology Implications

None.

D. Link to Strategic Plan

(Strategic Objectives: Equity, Inclusion and a Sense of Belonging; Sustainability and the Environment; Safe, Sustainable Transportation; Healthy Community & Resilient Neighbourhoods; Infrastructure Renewal; Economic Growth & Development)

(Guiding Principles: Equity and Inclusion; Sustainability; Fiscal Responsibility; Healthy and Safe Workplace; Effective Engagement; Personal Leadership; Service Excellence)

Ombuds services are intended to be the last resort for constituent or customer concerns regarding service delivery. The option to default concerns to the provincial ombudsman will provide this service is Council adopt the staff recommendation.

E. Previous Reports on this Topic

CORP2020-035 Renewal of Ombuds Services May 25, 2020

Ombuds Services
CORP2022-023

In 2015, provisions of the *Municipal Act*, 2001 (the Act) were changed to allow municipalities to appoint their own Ombudsman.

In 2016, after discussions with the area municipalities, there was an agreement by the Region and five (5) area municipalities to proceed with a local appointment. The Region, the Cities of Cambridge and Waterloo, and the Townships of Wellesley, Wilmot and Woolwich appointed Agree Inc. as the Waterloo Area Municipal Ombuds Office.

In June 2018, Wellesley Township did not renew their contract and in June 2020, the City of Cambridge did not renew. Since that time the Region has decided not to renew the contract and the remaining participant has indicated they will recommend the same.

If the City does not appoints its' own the ombuds services default to the Provincial Ombudsman for no fee.

Staff recommend defaulting to the Provincial ombudsman and will monitor the service and make future recommendations to Council as required.

All files currently in control of the Agree Inc. will be transferred to the provincial ombudsman at the end of their contract and this does not limit the City from exploring independent services in the future.

Overview of the Ombudsman Ontario services:

HOW CAN THE OMBUDSMAN HELP YOU?

- Review and investigate complaints about provincial government organizations, administrative tribunals, municipalities, universities, school boards, child protection services and French language services.
- Help you connect with the appropriate officials, if you have not already tried to resolve your complaint.
- Refer you to others who can help, if the matter is not within our jurisdiction.
- Attempt to resolve your problem through communication with the organization(s) involved, if your efforts to do so have failed, and the matter is within our jurisdiction.
- Determine whether or not the organization's actions or processes were fair.

- Flag trends in complaints to government officials and recommend best practices and/or ways to improve administrative fairness.
- Assist public sector officials with general questions about our processes or best practices.
- Conduct a formal investigation, if the Ombudsman determines it is warranted, and make recommendations for constructive change.

THE OMBUDSMAN'S PROCESS:

COMPLAINT INTAKE

We take complaints via the complaint form on our website, by email, phone or letter, or in person (when COVID-19 restrictions permit). Our staff will contact you for more details to pursue your complaint. We will not divulge your name or information to anyone without your consent, and there is no charge for our services.

Not a complaint? No problem – we also handle inquiries. Our staff can answer general questions or point you in the right direction.

REFERRALS

If your complaint is not within the Ombudsman's jurisdiction, we will refer you accordingly. If you haven't tried existing complaint mechanisms, we'll suggest you do that first – and return to us if the issue isn't resolved.

EARLY RESOLUTION

We always seek to resolve complaints at the lowest level possible. To do so, we often make informal inquiries and requests for information with the relevant bodies, for example, to learn more about their processes and policies.

INVESTIGATION

If we are unable to resolve the matter informally, the Ombudsman may decide to conduct an investigation. We notify the organization in question, and we may conduct interviews and request documents or other relevant evidence. If the Ombudsman determines that there is a potential systemic issue underlying the complaints, he may decide to launch a systemic investigation.

FINDINGS AND REPORTS

The Ombudsman provides his findings to the organization in question for a response before they are finalized. His findings and recommendations are published in investigation reports and/or in our Annual Reports, and shared publicly on our website, via social media, news media and our e-newsletter. Copies are also available from our Office.

RESULTS

We communicate the outcome of individual investigations and most reviews and informal resolutions to complainants and the relevant public sector bodies, as warranted. Summaries of many such cases are published in our Annual Reports and other communications. When the Ombudsman’s recommendations are accepted, our staff follow up to ensure they are implemented, and we monitor to ensure problems don’t recur.

THE CITY OF Waterloo

STAFF REPORT
Planning

Title:	Deeming By-law, High Noon Investment Corporation, for 40 Frobisher Drive and 40 Baffin Place
Report Number:	IPPW2022-030
Author:	Joel Cotter
Council Date:	April 25, 2022
File:	Site Plan SP-22-03
Attachments:	Appendix 'A' – Legal Descriptions Appendix 'B' – Conceptual Site Plan SP-22-03
Ward No.:	Ward 3

Recommendations:

1. That Council approve report IPPW2022-030.

2. That Council approve High Noon Investment Corporation's request for a deeming by-law pursuant to subsection 50(4) of the Planning Act for the lands known municipally as 40 Frobisher Drive and 40 Baffin Place, to enable the consolidation of 35 Northland Road, 40 Frobisher Drive and 40 Baffin Place.

A. Report

High Noon Investment Corporation ("**HNIC**") owns three abutting properties known municipally as 35 Northland Road, 40 Frobisher Drive, and 40 Baffin Place, which are legally described in Appendix 'A' (the "**Lands**"). HNIC submitted Site Plan Application SP-22-03 to expand DC Food Processing at 35 Northland Road (see Appendix 'B'). The proposed building expansion extends onto 40 Frobisher Drive and 40 Baffin Place, requiring the consolidation of the Lands.

To consolidate the Lands, HNIC is requesting that the City pass a deeming by-law pursuant to subsection 50(4) of the Planning Act for 40 Frobisher Drive and 40 Baffin Place. Deeming by-laws allow local municipalities to designate any plan of subdivision, or part thereof, that has been registered for eight or more years, to not be a registered

plan of subdivision for the purposes of subsection 50(3) of the Planning Act, meaning a consent would not be required to consolidate the Lands.

Pursuant to subsection 50(29) of the Planning Act, no notice or hearing is required prior to Council passing a deeming by-law. However, the City is required to give notice of the passing of deeming by-laws to each person appearing on the last revised assessment roll as the owner of lands to which the deeming by-law applies. Notice must be issued within thirty days of the passing of the by-law. Those notified have twenty days to advise the City Clerk that they want to address Council on the deeming by-law, and Council is required to hear all such delegations. If no delegations are requested, after twenty days, the Clerk may register a certified copy of the deeming by-law at the land registry office, and upon registration the by-law takes effect. If delegations are requested, Council will consider all submissions on their merits, and determine if the deeming by-law is to remain or be repealed. If the by-law is to remain, the Clerk may register a certified copy of the by-law at the land registry office, and upon registration the by-law takes effect.

In order to finalize Site Plan SP-22-03 and enable the proposed industrial building expansion, the Lands must be consolidated. Site Plan SP-22-03 will ensure the Lands are comprehensively planned and designed. Staff have no objection to the requested deeming by-law.

B. Financial Implications

None

C. Technology Implications

None

D. Link to Strategic Plan

(Strategic Objectives: Equity, Inclusion and a Sense of Belonging; Sustainability and the Environment; Safe, Sustainable Transportation; Healthy Community & Resilient Neighbourhoods; Infrastructure Renewal; Economic Growth & Development)

(Guiding Principles: Equity and Inclusion; Sustainability; Fiscal Responsibility; Healthy and Safe Workplace; Effective Engagement; Personal Leadership; Service Excellence)

Economic Growth & Development - Foster a robust and diversified economy.

E. Previous Reports on this Topic

None

APPENDIX ‘A’

Legal Description of Lands

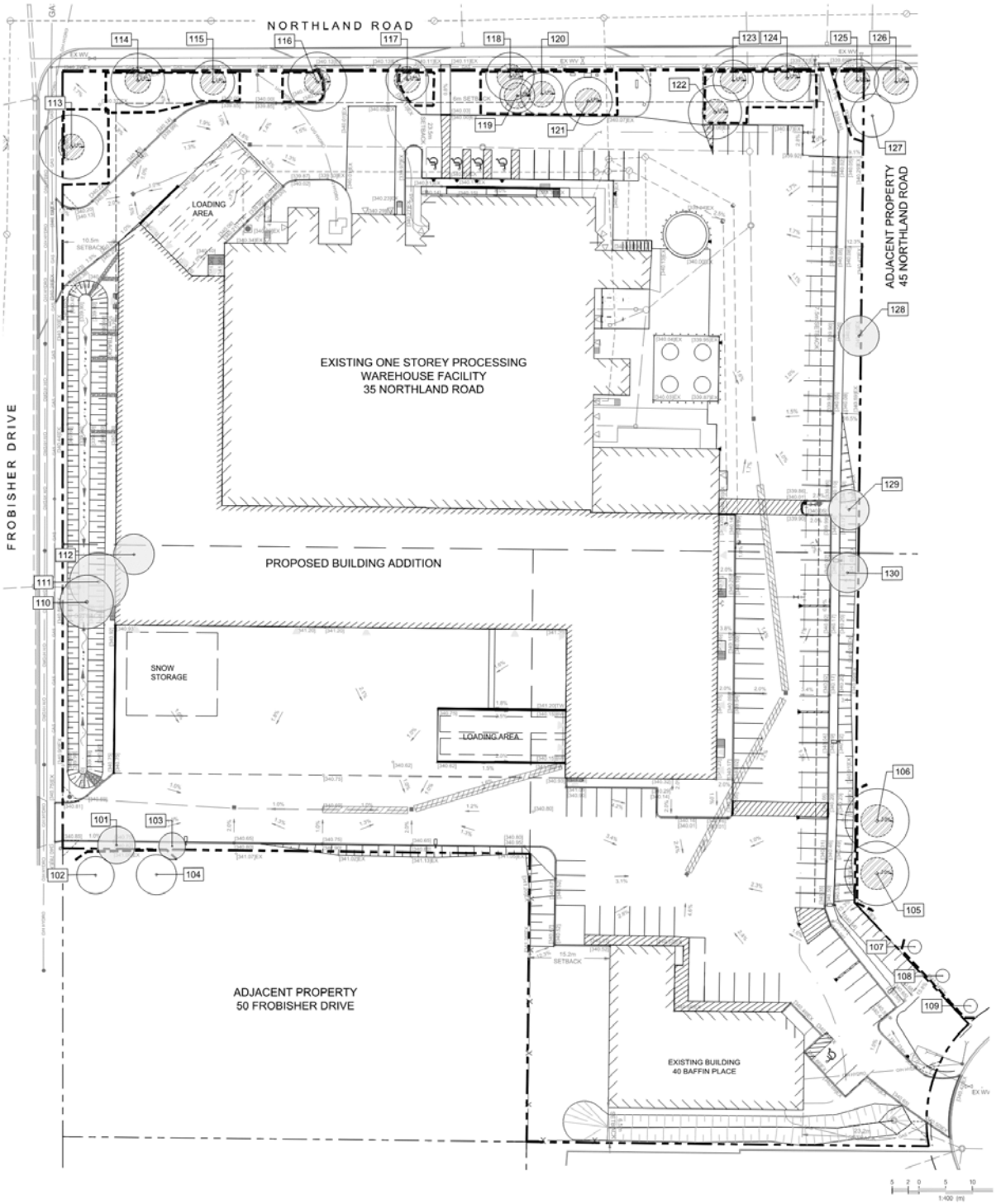
35 Northland Road (not subject to Deeming By-law)
PT LT 9 GERMAN COMPANY TRACT CITY OF WATERLOO PT 1 58R6004; WATERLOO
PIN 22282-0070

40 Frobisher Drive (subject to Deeming By-law)
LT 34 PL 1672 CITY OF WATERLOO; WATERLOO
PIN 22282-0069

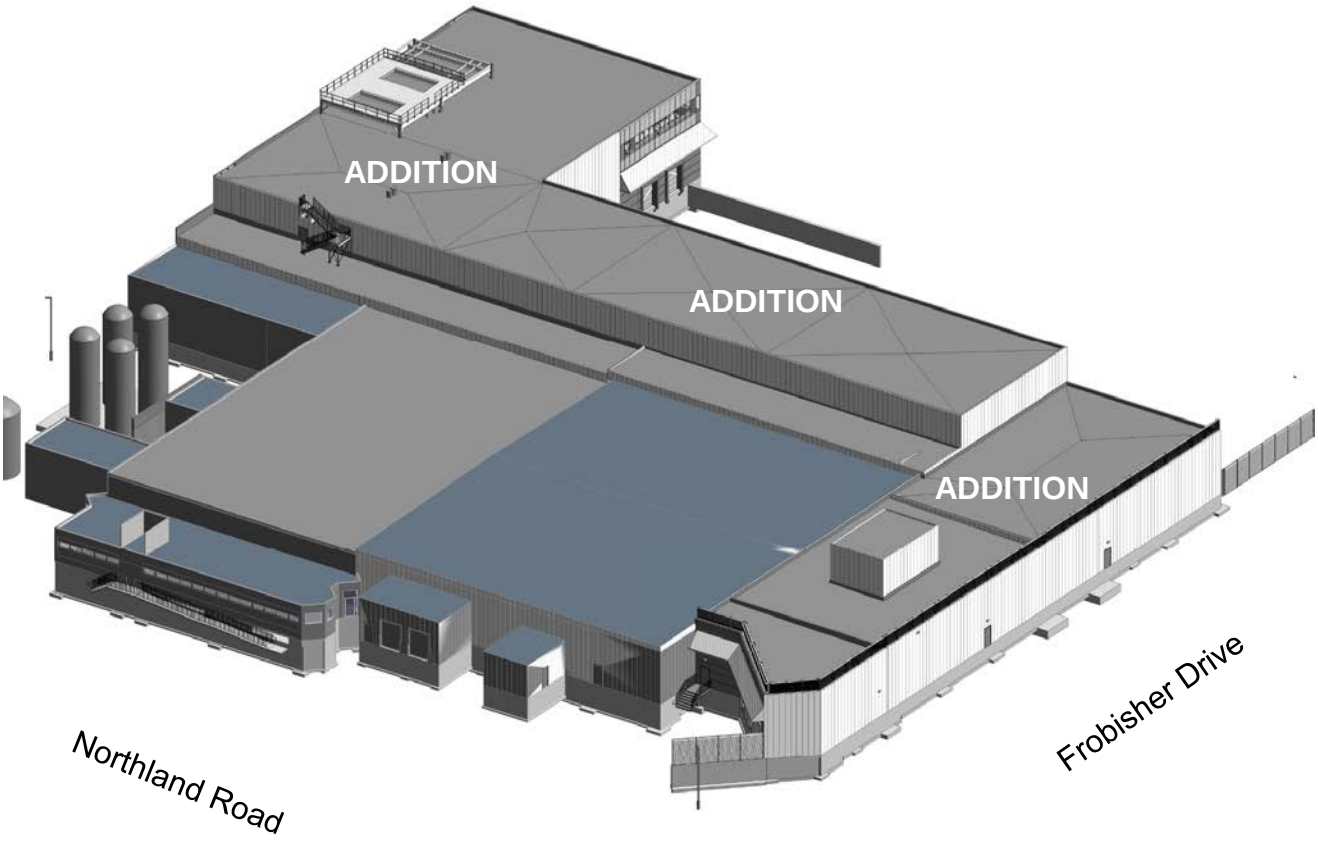
40 Baffin Place (subject to Deeming By-law)
LT 16 PL 1672 CITY OF WATERLOO; S/T 940914; WATERLOO
PIN 22282-0086 (LT)

APPENDIX ‘B’

Conceptual Site Plan



CONCEPTUAL 3D RENDERING



Corporate Accessibility & Inclusion Review Council Appointments Request

This spring a cross-departmental City of Waterloo staff team will engage in a Corporate Accessibility & Inclusion Review to support the development of Waterloo's next Multi-year Accessibility Plan. The goal of this review is to assess and analyze internal practices, processes and the culture of the organization to ensure strategic planning and implementation across the organization considers the lens of accessibility and inclusion.

Through an evidence-based approach staff will work with a consulting group to self-identify areas of improvement to renew/revise initiatives and processes that are specific, sustainable and scalable. The process will assess present status and how the city aligns with accessibility laws, policies, strategies, recovery planning, funding priorities and community representation. An action plan with short, mid and long-term goals, to embed accessibility and inclusion into everyday work will be developed.

Process and Timeline

Activity	Purpose	Time Involved	Suggested Timeline
Inclusion Workshop	Establish a common understanding of accessibility and inclusion terms and concepts	One-hour virtual meeting	May/June
Self-Assessment	Go through the nine themes and indicators to assess strengths and improvement areas, using an evidenced-based rating system	Three 2-hour online sessions	June/July
Improvement Planning	Review the Improvement Plan developed, prioritize, and assign Project Leads to implement the plan	90 minutes	July/August

To ensure a fulsome perspective, staff are requesting that the member of Council appointed to GRAAC and one additional member of Council be appointed to this review team.