



Electronic General Committee Meeting

Agenda

Meeting No. 13
October 5, 2020, 9:30 AM
Live streamed

Note: Members of the General Committee will be participating in the meeting remotely.

Due to COVID-19, our facilities are closed to the public.
Access is not permitted to the Markham Civic Centre and Council Chamber.

Members of the public may submit written deputations by email
to clerkspublic@markham.ca

Members of the public who wish to make virtual deputations must register by completing an online [***Request to Speak Form***](#) or e-mail clerkspublic@markham.ca providing full name, contact information and item they wish to speak to. Alternatively, you may connect via telephone by contacting the Clerk's office at 905-479-7760 on the day of the meeting.

General Committee meetings are video and audio streamed on the City's website at:

<https://pub-markham.escribemeetings.com/>



Electronic General Committee Agenda

Meeting Number: 13

October 5, 2020, 9:30 AM - 1:00 PM

Live streamed

Please bring this General Committee Agenda to the Council meeting on October 14, 2020.

Pages

1. CALL TO ORDER
2. DISCLOSURE OF PECUNIARY INTEREST
3. APPROVAL OF PREVIOUS MINUTES
 - 3.1 MINUTES OF THE SEPTEMBER 21, 2020 GENERAL COMMITTEE (16.0) 7
 1. That the minutes of the September 21, 2020 General Committee meeting be confirmed.
4. DEPUTATIONS
5. COMMUNICATIONS
6. PETITIONS
7. CONSENT REPORTS - FINANCE & ADMINISTRATIVE ISSUES
 - 7.1 MINUTES OF THE JULY 6, 2020 ADVISORY COMMITTEE ON ACCESSIBILITY (16.0) 17
 1. That the minutes of the July 6, 2020 Advisory Committee on Accessibility meeting be received for information purposes.
 - 7.2 2021 CAPITAL BUDGET PRE-APPROVAL (7.5) 19

V. Siu, ext. 2232

 1. That the report dated October 5, 2021 titled, “2021 Capital Budget Pre-Approval” be received; and
 2. That Council approve the 2021 Capital Budget Pre-Approval, which

totals \$10,292,800 as outlined in Appendices 1 and 2; and

3. That Staff be authorized and directed to do all things necessary to give effect to this resolution.

7.3 CONTRACT EXTENSION FOR WIDE AREA NETWORK (WAN) CONNECTIVITY AND INTERNET SERVICES (7.13)

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S. Rao, ext. 4868 & R. Patano, ext. 2990

1. That the report entitled “Contract Extension for Wide Area Network (WAN) Connectivity and Internet Services” be received; and,
2. That the contract for WAN Services and Internet Services be extended for two (2) years (October 1, 2020 - September 30, 2022) to Rogers Communications at 11.6% discounted rate, in the amount of \$577,814.44, inclusive of HST, broken down as follows;
 - October 1, 2020 – December 31, 2020 \$ 72,226.81
 - January 1, 2021 – December 31, 2021 \$288,907.22
 - January 1, 2022 – September 30, 2022 \$216,680.41 Total (2 years) \$577,814.44; and,
3. That the contract for Internet Services with higher bandwidth (increasing from 500Mbps to 600Mbps) be extended for two years (October 1, 2020 - September 30, 2022) to Bell Canada at the existing 2019 rate, in the amount of \$79,006.46 inclusive of HST, broken down as follows;
 - October 1, 2020 – December 31, 2020 \$ 9,875.81
 - January 1, 2021 – December 31, 2021 \$ 39,503.23
 - January 1, 2022 – September 30, 2022 \$ 29,627.42 Total (2 years) \$ 79,006.46; and,
4. That the WAN Services from Rogers and the two Internet Services from Rogers and Bell to be funded from operating budget account# 400-404-5108 in amount of \$656,820.90 (inclusive of HST) over a two (2) year period; and,
5. That the tendering process be waived in accordance with Purchasing Bylaw 2017-8, Part II, Section 7 (1) (c) which states “when the extension of an existing contract would prove more cost-effective or beneficial”; and further,
6. That Staff be authorized and directed to do all things necessary to give effect to this resolution.

7.4 CONTRACT # 043-S-20 TO OPERATE AND MAINTAIN THE COMBINED HEAT AND POWER SYSTEM AT ANGUS GLEN COMMUNITY CENTRE (7.12)

66

J. Vasilaki, ext. 2845 & F. Chan, ext. 3189

1. That the report entitled “Contract # 043-S-20 To Operate and Maintain the Combined Heat and Power System at Angus Glen Community Centre” be received; and,
2. That the Operation and Maintenance of the Angus Glen Combined Heat and Power System be awarded to Markham District Energy Inc. (“MDE”) to an annual upset limit of \$167,904.00 inclusive of HST impact for a period of five (5) years (2020 – 2024), totaling \$839,520.00 inclusive of HST impact (excluding adjustment to CPI) over that five (5) year period; and,
3. That years 2 – 5 (2021-2024) be adjusted based on the Consumer Price Index (CPI) Ontario All-Items (January to January); and,
4. That the 2020 award be funded from operating budget account 504-921-5314 “Service Agreements Facility Maintenance”; and,
5. That the tendering process be waived in accordance with Purchasing By-Law 2017-8, Part II, Section 11.1 (h), which states “where it is in the best interests of the City to acquire non-standard items or Professional Services from a supplier who has a proven track record with the City in terms of pricing, quality and service;” and,
6. That the Mayor and Clerk be authorized to execute the agreement with Markham District Energy Inc, in a form approved by CAO and the City Solicitor; and,
7. That the CAO be authorized to extend the contract for an additional five (5) years (2025-2029) subject to Council’s approval of the annual operating budget; and further,
8. That Staff be authorized and directed to do all things necessary to give effect to this resolution.

8. PRESENTATIONS - FINANCE & ADMINISTRATIVE ISSUES

8.1 WORLD COUNCIL ON CITY DATA ISO 37120 PLATINUM CERTIFICATION (12.2.6)

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Note: Dr. Patricia McCarney, President & CEO, WCCD and James Patava, Vice President, WCCD will be making the virtual presentation.

1. That the report dated October 5, 2020 titled “World Council on City Data, ISO 37120 Certification” be received, and,
2. That the formal virtual presentation of the World Council on City Data (WCCD), ISO 37120 Platinum Certification to the City of Markham be received.

8.2 INTELLIGENT COMMUNITY FORUM (ICF) UPDATE ON ICF TOP7 EVALUATION PROCESS (7.13)

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Note: Trinela Cane, Commissioner, Corporate Services will be in attendance to provide a presentation on this matter.

1. That the presentation entitled “Intelligent Community Forum (ICF) Update on ICF Top7 Evaluation Process” be received.

9. PRESENTATIONS - COMMUNITY SERVICES ISSUES

9.1 LIFESAVING SOCIETY ONTARIO - CLUB OF THE YEAR – NOMINATION - LIFESAVING CLUB OF MARKHAM (LCM) (12.2.6)

This award is presented to a club that has contributed to the development of lifesaving sport in Canada, through participation, leadership and performances of its members provincially, nationally and/or internationally.

Clara Grassia, Manager Sport Development, Susan Stiles, Sport Development Coordinator and Jeff McCurdy, Program Supervisor will be in attendance to receive the recognition on behalf of the coaches.

The following part time coaching staff supported the LCM for the 2019 season lead by Jeff McCurdy – Program Supervisor be recognized for Club of the Year nomination:

- o Bryan Tsang
- o Sarah Monaco
- o Alyssa Arcaina
- o Evan Fong
- o Jack Lin
- o Marjorie He
- o Raymond Tung
- o Richard Wilton
- o Laura Zhao
- o Celestina Chung
- o Ian Cook

9.2 ASSOCIATION OF MUNICIPALITIES OF ONTARIO - PETER J. MARSHALL INNOVATION AWARD (12.2.6)

The Peter J. Marshall Innovation Award presented its highest award to the City of Markham – Recreation Department for its Aaniin Community Hub Partnership project using the Aaniin Community Centre and Library as a hub from which some dozens of community organizations partner and deliver services. Partners are provided free use of space at the centre in exchange for providing volunteer services or programming that are otherwise unavailable or difficult to access in the area.

The following recreation staff will be in attendance to be recognized by Committee for receiving the Peter J. Marshall Innovation Award:

- Carolyn Thompson, Community Program Supervisor, Community Outreach

- Shawn Hermains, Community Program Coordinator
- Anthony Ierulli, Community Area Manager
- Jason Tsien, Senior Manager, Business Development
- Mary Creighton, Director Recreation Services

10. MOTIONS

11. NOTICES OF MOTION

12. NEW/OTHER BUSINESS

*As per Section 2 of the Council Procedural By-Law, "New/Other Business would generally apply to an item that is to be added to the **Agenda** due to an urgent statutory time requirement, or an emergency, or time sensitivity".*

13. ANNOUNCEMENTS

14. CONFIDENTIAL ITEMS

14.1 FINANCE & ADMINISTRATIVE ISSUES

14.1.1 GENERAL COMMITTEE CONFIDENTIAL MINUTES -
SEPTEMBER 8, 2020 (16.0) [Section 239 (2) (b)]

14.1.2 PERSONAL MATTERS ABOUT AN IDENTIFIABLE
INDIVIDUAL, INCLUDING MUNICIPAL OR LOCAL BOARD
EMPLOYEES – BOARD/COMMITTEE – APPOINTMENTS AND
RESIGNATIONS (16.24) [Section 239 (2) (b)]

14.1.3 THE SECURITY OF THE PROPERTY OF THE CITY OR LOCAL
BOARD – LEASE ASSIGNMENT (8.2) [Section 239 (2) (a)]

15. ADJOURNMENT

Information Page

General Committee Members: All Members of Council

General Committee

Chair: Regional Councillor Jack Heath

Vice Chair: Councillor Khalid Usman

Finance & Administrative Issues

Chair: Regional Councillor Jack Heath

Vice Chair: Councillor Khalid Usman

Community Services Issues

Chair: Councillor Karen Rea

Vice Chair: Councillor Isa Lee

Environment & Sustainability Issues

Chair: Regional Councillor Joe Li

Vice Chair: Councillor Reid McAlpine

Land, Building & Parks Construction Issues

Chair: Councillor Keith Irish

Vice Chair: Councillor Andrew Keyes

General Committee meetings are audio and video streamed live at the City of Markham's website.

Alternate formats are available upon request.

Consent Items: All matters listed under the consent agenda are considered to be routine and are recommended for approval by the department. They may be enacted on one motion, or any item may be discussed if a member so requests.

Note: The times listed on this agenda are approximate and may vary; Council may, at its discretion, alter the order of the agenda items.

**Note: As per the Council Procedural By-Law, Section 7.1 (h)
General Committee will take a 10 minute recess after
two hours have passed since the last break.**

Electronic General Committee Meeting Minutes

Meeting Number: 12
September 21, 2020, 9:30 AM - 1:00 PM
Live streamed

Roll Call	Mayor Frank Scarpitti	Councillor Reid McAlpine
	Deputy Mayor Don Hamilton	Councillor Karen Rea
	Regional Councillor Jack Heath	Councillor Andrew Keyes
	Regional Councillor Joe Li	Councillor Amanda Collucci
	Regional Councillor Jim Jones	Councillor Khalid Usman
	Councillor Keith Irish	Councillor Isa Lee
	Councillor Alan Ho	
Staff	Andy Taylor, Chief Administrative Officer	Laura Gold, Council/Committee Coordinator
	Trinela Cane, Commissioner, Corporate Services	John Wong, Technology Support Specialist II
	Arvin Prasad, Commissioner Development Services	Graham Seaman, Director, Sustainability & Asset Management
	Claudia Storto, City Solicitor and Director of Human Resources	Shane Manson, Senior Manager, Revenue & Property Taxation
	Joel Lustig, Treasurer	Grace Lombardi, Election & Council/Committee Coordinator
	Martha Pettit, Deputy City Clerk	Rob Grech, Manager, Stormwater
	Phoebe Fu, Director of Environmental Services	Mark Visser, Sr. Manager, Strategy Innovation & Investments
	Morgan Jones, Director, Operations	Sameem Shah, Project Manager
	Hristina Giantsopoulos, Elections & Council/Committee Coordinator	

1. CALL TO ORDER

In consideration of the ongoing public health orders, this meeting was conducted electronically to maintain physical distancing of participants. With the recent passage of Bill 197 COVID-19 Economic Recovery Act, municipal Council Members are now permitted to meet remotely and count towards quorum.

The General Committee Meeting convened at the hour of 9:33 AM in the Canada Room with Regional Councillor Jack Heath presiding as Chair for all items on the agenda.

Mayor, Frank Scarpitti addressed the Committee to speak about the death of the Right Honourable John N. Turner, former Prime Minister of Canada. The Mayor recognized his contributions to Canada and on behalf of all Members of Council extended deepest condolences to Mr. Turner's family and advised that flags at all City facilities would be lowered. Mayor Scarpitti led a moment of silence in his honour.

2. DISCLOSURE OF PECUNIARY INTEREST

There were none disclosed.

3. APPROVAL OF PREVIOUS MINUTES

3.1 MINUTES OF THE SEPTEMBER 8, 2020 GENERAL COMMITTEE (16.0)

Moved by Councillor Keith Irish

Seconded by Councillor Karen Rea

1. That the minutes of the September 8, 2020 General Committee meeting be confirmed.

Carried

4. DEPUTATIONS

Deputations were made for the following item:

8.1. Geese Management At Swan Lake - Overview Of Options & Path Forward

Refer to the individual item for the deputation details.

5. COMMUNICATIONS

There were no communications.

6. PETITIONS

There were no petitions.

7. CONSENT REPORTS - ENVIRONMENT & SUSTAINABILITY ISSUES

7.1 ASSET MANAGEMENT PLAN PROGRESS UPDATE (5.0)

Graham Seaman, Director of Sustainability and Asset Management, addressed the committee to advise that this report is an Auditor General recommendation and is the first of subsequent annual reports. In response to the inquiry from the

Committee, he confirmed that future reports will encompass more detail to provide a better overview of City assets and their management.

The Committee requested that staff prepare a revised memo that provides more detail on the asset evaluation criteria and processes being considered for the 2021 Asset Management Plan update.

Moved by Councillor Reid McAlpine

Seconded by Councillor Isa Lee

1. That Council receive the Asset Management Plan Progress Update.

Carried

7.2 MARKHAM SUB-COMMITTEE MINUTES – (SWAN LAKE WATER QUALITY CONTROL PROGRAM) – AUGUST 14, 2020 (5.0 & 10.0)

Moved by Councillor Reid McAlpine

Seconded by Councillor Isa Lee

1. That the minutes of the Markham Sub-Committee - (Swan Lake Water Quality Control Program) meeting held August 14, 2020, be received for information purposes.

Carried

8. PRESENTATIONS - ENVIRONMENT & SUSTAINABILITY ISSUES

8.1 GEESE MANAGEMENT AT SWAN LAKE – OVERVIEW OF OPTIONS AND PATH FORWARD (5.0)

Fred Peters, representative of Friends of Swan Lake Park, addressed the Committee and delivered a presentation entitled, Friends of Swan Lake Park Geese Management and provided recommendations in support of the program proposed by staff. He requested that a strobe light initiative be added.

Ross Lunan, Swan Lake Resident, addressed the Committee in support of the hazing and relocation initiative in relation to the geese management program.

Mark Henschel, Swan Lake Resident, addressed the Committee to provide details on his data collection with respect to geese counts and his work with mute

swans. He indicated that he does not support the strobe light initiative because it does not isolate geese and will negatively affect the swan population.

Phoebe Fu, Director, Environmental Services, addressed the Committee to introduce the item and indicated that this is the first action component regarding the initiatives related to Swan Lake. She introduced Rob Grech, Manager, Stormwater, who delivered a presentation entitled, "Geese Management at Swan Lake – Overview of Options and Path Forward" that provided an update on current options and costs to undertake the geese management program at Swan Lake. Danny Moro, Project Manager, Toronto Regional Conservation Authority, was in attendance to respond to inquiries made by the Committee.

There was discussion relating to the proposed recommendations of the program, which included the following:

- Inquiry into the other species at Swan Lake;
- That geese population management is not a unique issue to Swan Lake and that solutions can benefit the community as a whole;
- The inclusion of the strobe light initiative for this season; and,
- The importance of developing a method to document other wildlife impacted by a strobe light initiative, without the inclusion of swans.

The Committee requested that staff obtain additional information to explore the environmental and financial impacts of a potential strobe light pilot and provide a memo at the Council Meeting on September 30, 2020.

Moved by Councillor Andrew Keyes

Seconded by Mayor Frank Scarpitti

1. That the presentation entitled "Geese Management at Swan Lake – Overview of Options and Path Forward", dated September 21, 2020, be received; and,
2. That Council approve the proposed changes outlined in the presentation to the existing Swan Lake Geese Control program; and,
3. That a review of options for modifying the habitat to deter geese from Swan Lake shall be considered through the Park Refresh Plan; and,
4. That the budget shortfall, in the amount of \$9,500, be funded from the Non-DC capital contingency for project 20250 Water Quality Improvements and Geese Control for the implementation of 2020 fall hazing and volunteer program; and,

5. That the 2021 Water Quality Improvements and Geese Control project request include \$10,000 for the TRCA managed geese relocation program; and further,
6. That Staff be authorized and directed to do all things necessary to give effect to this resolution.

Carried

Moved by Councillor Andrew Keyes
Seconded by Deputy Mayor Don Hamilton

That Council approve an additional \$9,000.00 to include a strobe light pilot for geese population management.

Carried

Moved by Mayor Frank Scarpitti
Seconded by Councillor Amanda Collucci

That staff be directed to provide additional information on the impacts of a strobe light pilot program to foster geese population management for the Council Meeting on September 30, 2020.

Carried

9. REGULAR REPORTS - ENVIRONMENT & SUSTAINABILITY ISSUES

9.1 ASSUMPTION OF MCCOWAN ROAD WATERMAIN AND ASSOCIATED INFRASTRUCTURE CONSTRUCTED BY THE REGIONAL MUNICIPALITY OF YORK (5.0)

Staff provided a description of the road assumption report and explained that in response to a water supply disruption, the Region built new watermain infrastructure and will transfer ownership of it to the City.

Moved by Councillor Karen Rea
Seconded by Mayor Frank Scarpitti

1. That the report entitled “Assumption of McCowan Road Watermain and associated infrastructure constructed by the Regional Municipality of York” be received; and,
2. That Staff be authorized to assume the ownership of the new McCowan Road 150mm diameter PVC watermain and associated infrastructure constructed by The Regional Municipality of York; and,
3. That the Director of Environmental Services be authorized to execute the Memorandum of Understanding between The Regional Municipality of York and the City of Markham related to the assumption of McCowan Road Watermain and associated infrastructure, to the satisfaction of the City Solicitor; and further,
4. That Staff be authorized and directed to do all things necessary to give effect to this resolution.

Carried

10. MOTIONS

There were no motions.

11. NOTICES OF MOTION

There were no notices of motions.

12. NEW/OTHER BUSINESS

12.1 EMERGENCY COVID-19 RELIEF FOR THE HOTEL ACCOMMODATION SECTOR

Mayor Scarpitti introduced a motion in relation to emergency COVID-19 relief specifically for the hotel accommodation sector in response to its significant financial impact.

There was discussion on the following:

- Inquiry into the possibility of requesting that the province provide assistance to other business or industry types;

- The potential response to other businesses or industry types;
- The City's proactive approach with implementing a number of property tax and fee relief measures to assist taxpayers experiencing financial hardship from the pandemic, which included;
 - Waiving late payment charges for all taxpayers until Dec 31st, 2020;
 - Elimination of the 2020 Stormwater fee;
 - Maintaining the April 1st, 2019 water rate; and,
 - Suspending the Municipal Accommodation Tax (MAT) to Dec 31st, 2020.
- That the main issue faced by the hotel industry currently is the record low occupancy levels and limited revenue potential;
- The significance between the lack of occupancy and revenue losses being experienced by hotels versus the income opportunities experienced by shopping malls and retail sector;
- Inquiry into whether the current situation has the potential to auto-correct itself over time;
- Consideration of deferring the MAT tax for 2021, would assist hotels with financial planning and budgeting; and,
- Consideration to allow this resolution to stand alone with respect to the hotel accommodation sector.

Andy Taylor, Chief Administrative Officer addressed the Committee and indicated that this is a once in a lifetime challenge being experienced by hoteliers in City and throughout the Province, as the Hotel industry has endured substantial financial losses, driven in part by the closure of international borders and low consumer travel confidence. Staff provided the Committee with an overview of how the current value assessments (CVA) of hotels are developed by the Municipal Property Assessment Corporation (MPAC) and further indicated that the current CVA's attributed to each hotel do not reflect the negative financial impact and the substantial revenue losses hotels are currently experiencing. As such, Staff advised Committee that this will result in significant property tax burdens moving into 2021, if a revaluation of all Hotel property assessments is not completed prior to the issuance of the 2021 final tax bill by municipalities.

The Committee, without objection, requested that staff forward the resolution immediately to the Premier of Ontario and those listed.

Moved by Mayor Frank Scarpitti
Seconded by Councillor Andrew Keyes

Whereas the COVID-19 pandemic has brought unprecedented public health challenges to Canada which has resulted in a slowdown of the Canadian economy and has created significant financial pressures to most industry sectors; and,

Whereas this unprecedented environment of economic uncertainty has directly and immediately impacted the hospitality and tourism sectors, with hotels experiencing record low occupancy rates driven in part by the closure of international borders, reduced business workshops and conferences combined with lower consumer travel confidence; and,

Whereas the uncertainty of recovery timing and the expectation that a full recovery may take several years, it is imperative that the provincial government provide immediate measures to protect and assist Ontario's Hotel Industry so they can remain resilient and viable during this uncertain time; and,

Whereas the COVID-19 pandemic had prompted the Province of Ontario to postpone the 2020 Assessment Update, and further directed that all Ontario property assessments to be levied upon for the 2021 tax year, continue to be based on the fully phased-in assessment amounts utilized for the 2020 tax year; and,

Whereas the current property assessment values of hotel properties do not represent the current negative financial impact of COVID-19 and the substantial decrease in revenue experienced by Hotels, which will result in inaccurate property assessments and significant property tax burdens moving forward into the 2021 taxation year and beyond; and,

Whereas Markham Council through the Destination Markham Corporation is in the midst of launching several programs and strategic initiatives to support the reopening and recovery of the tourism economy with the goal of increasing Hotel overnight stays.

Now therefore be it resolved:

1. That Markham Council requests the Province of Ontario work with local municipalities to develop immediate options which could assist the Hotel Industry with mitigating the significant financial impacts resulting from the COVID-19 pandemic; and,
2. That these options include but not be limited to the following:

- a. Requesting the Municipal Property Assessment Corporation (MPAC) undertake a review and re-evaluation of all Hotel property assessments prior to the issuance of the 2021 final tax bill by Ontario municipalities; and,
 - b. Requesting the Minister of Finance consider removing the education portion of the property taxes for Hotels properties in Ontario for the 2021 taxation year, and,
 - c. Requesting the Minister of Finance consider developing a tax relief program to assist Hotel properties with the record low occupancy rates and limited revenue potential during this unprecedented time; and,
3. Be it further resolved, that a copy of this resolution be sent to:
- a. The Honourable Doug Ford, Premier of Ontario;
 - b. The Honourable Rod Phillips, Minister of Finance;
 - c. The Honourable Steve Clark, Minister of Municipal Affairs and Housing;
 - d. All Members of Provincial Parliament in the Regional Municipality of York;
 - e. All Council Members of the Regional Municipality of York;
 - f. All Municipal Property Assessment Corporation (MPAC) Board of Directors;
 - g. Nicole McNeill, President and Chief Administrative Officer, MPAC;
 - h. Carmelo Lipsi, Vice-President, Valuation and Customer Relations and Chief Operating Officer, MPAC; and,
 - i. Greg Martino, Vice-President, Valuation and Assessment Standards and Chief Valuation and Standards Officer, MPAC.

Carried

13. ANNOUNCEMENTS

There were no announcements.

14. ADJOURNMENT

Moved by Mayor Frank Scarpitti

Seconded by Councillor Andrew Keyes

That the General Committee Meeting adjourn at 11:47 AM.

Carried

Advisory Committee on Accessibility Minutes

July 6, 2020

5:00 PM - 7:00 PM

Zoom Video Conference

Attendance: Barry Martin, Chair, Councillor Isa Lee, Robert Hunn, Vice-Chair, Laura Meffen, Jewell Lofsky, Rita Lam, Anna Giallonardo, Nahid Verma, Meenu Khanna, George George, Mona Nazif, Senior Manager HR Client Services, Laura Gold, Council/Committee Coordinator, and Grace Lombardi, Legislative Coordinator

Regrets:

Brian Lynch, Kaushi Ragunathan, Valerie Kitazaki, and Elaine Vollett

Item	Discussion	Action
1. Call to Order	The Advisory Committee on Accessibility convened at 5:14 PM with Barry Martin in the Chair.	
2. Approval of the Minutes	Moved by Councillor Isa Lee Seconded by Laura Meffen That the June 29, 2020 Advisory Committee on Accessibility Minutes be approved as presented. Carried	
3. Markham Accessibility Award	The Committee Members reviewed the nomination form and provided their recommendations. Due to COVID19, the Committee Members agreed to extend the nomination deadline to October 16, 2020, and to create a sub-committee at the September meeting to select the winners and provide the Committee with their recommendations. Committee Members discussed acknowledging the nominees with congratulatory letters if an Accessibility Award ceremony is unable to take place this year. The Committee requested the City's Corporate Communications department review the nomination form to confirm it is accessible and to assist with the promotion of the award through the City's social media channels.	Laura Gold to update the Nomination Form with Committee member's recommendations and the new date. Mona, Grace & Laura to communicate with the City's Corporate Communications department on the promotion of the Accessibility Award.
4. New Business	Committee Members expressed their disappointment that they were unable to provide advice to the City on accessibility matters during the COVID-19 Pandemic. It was suggested that Committee Members may find it useful to find ways to check in and provide support to each other during COVID.	Grace to send email to Committee Members to confirm best way of communication and consent to share

Advisory Committee on Accessibility

July 6, 2020

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Item	Discussion	Action
		information with other members.
5. Adjournment	The Advisory Committee on Accessibility adjourned at 6:18 PM.	



Report to: General Committee

Meeting Date: October 5, 2020

SUBJECT: 2021 Capital Budget Pre-Approval
PREPARED BY: Veronica Siu, Senior Financial Analyst, Financial Planning and Reporting

RECOMMENDATION:

1. That the report dated October 5, 2021 titled, “2021 Capital Budget Pre-Approval” be received; and
2. That Council approve the 2021 Capital Budget Pre-Approval, which totals \$10,292,800 as outlined in Appendices 1 and 2; and
3. That Staff be authorized and directed to do all things necessary to give effect to this resolution.

PURPOSE:

To obtain Council approval of the select 2021 capital projects included in this report.

BACKGROUND:

The 2021 Capital Budget is tentatively scheduled to be approved at the December 9, 2020 Council meeting. Prior to budget approval, some capital projects require earlier initiation to prevent delays in design or construction, meet operational/program requirements and allow timely commencement of the procurement process to potentially achieve competitive pricing. Pre-approval is being requested for the 2021 capital projects identified in this report to achieve those goals.

OPTIONS/ DISCUSSION:

Staff are requesting that fourteen (14) projects, totalling \$10,292,800, be pre-approved in this report, as listed in Appendix 1. The corresponding request forms are attached for reference in Appendix 2. Projects being requested for pre-approval, grouped by category, are as follows:

- Existing Roads/Bridges Repairs (\$3.16M)
 - o Asphalt Resurfacing
- Facility Repairs/Maintenance (\$2.99M)
 - o Theatre HVAC Replacement
 - o Parking Lots - Rehabilitation
 - o Civic Centre Vestibule Repairs and/or Replacements
 - o Theatre Fire Alarm 2 Stage Conversion
- Library Collections (\$1.60M)
 - o Library Collections

- Parks Construction/Maintenance (\$2.00M)
 - o Block Pruning Initiative - Phase 2 of 3
 - o Markham Trail Phase 1B Construction
 - o Berczy Beckett Park (Cherna Ave)
 - o Green Lane Park
 - o Yonge and Grandview Park
- Vehicle Replacement (\$0.29M)
 - o Corporate Fleet Replacement – Non-Fire
- Other (\$0.26M)
 - o Corporate Capital Contingency
 - o SCBA Decontamination Machine

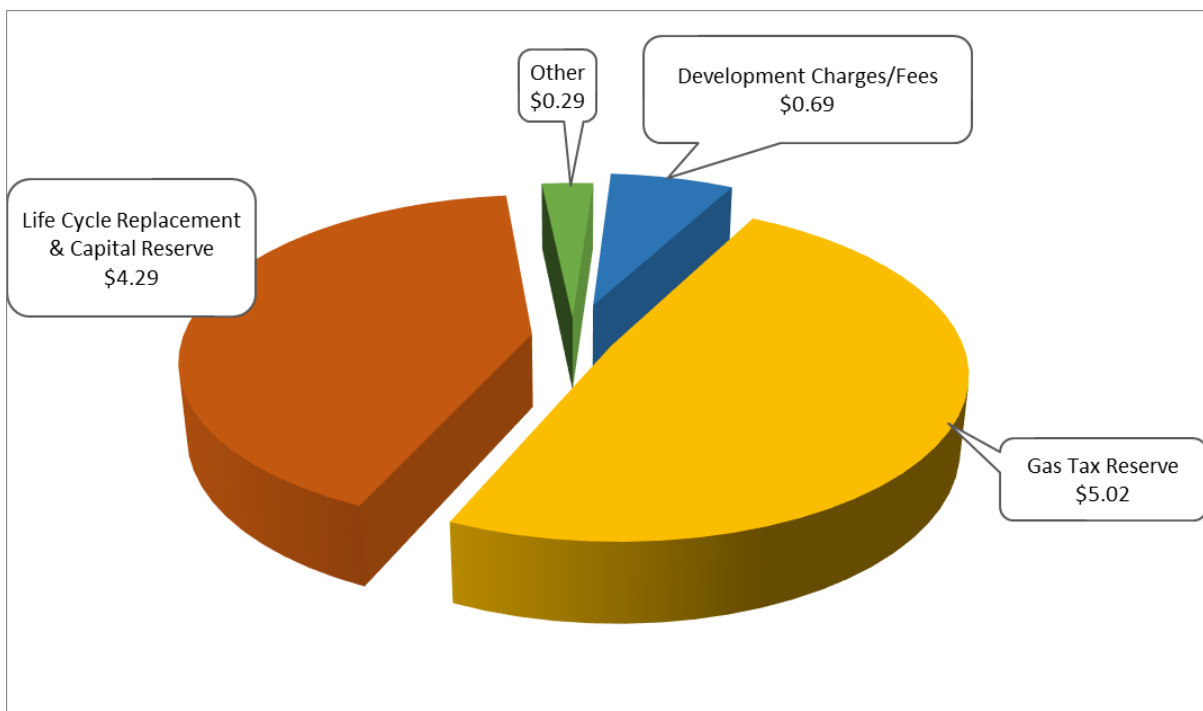
The major sources of funding for the 2021 Capital Budget pre-approval include:

- \$5.02M (48.8%) from Federal Gas Tax revenue;
- \$4.29M (41.7%) from Life Cycle Replacement and Capital Reserve Fund
- \$0.69M (2.8%) from Development Charges and Development Fees.
- \$0.29M (6.7%) from Other Funding Sources

A comparative illustration of sources of funding is illustrated in Chart 1.

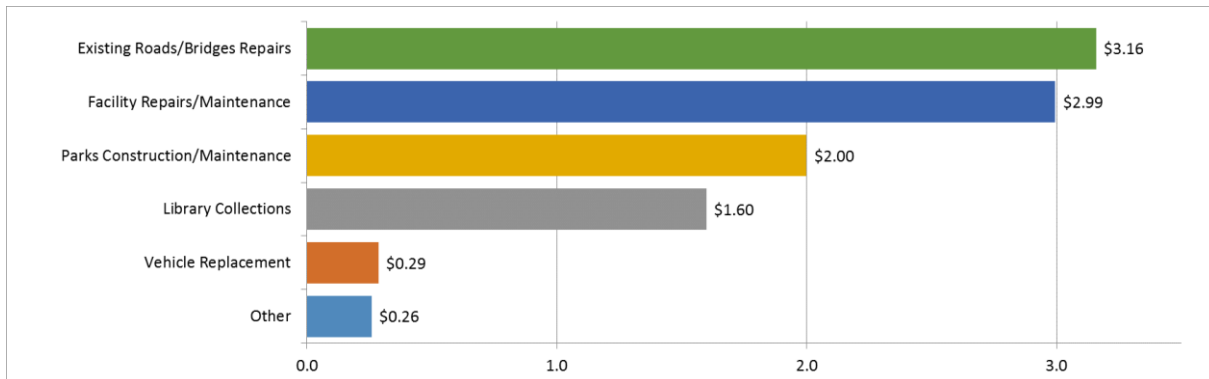
Chart 1: 2021 Capital Budget pre-approval funding sources

Total \$10.29M



The 2021 Capital Budget pre-approval expenditures, by category, are summarized in Chart 2.

Chart 2: 2021 Capital Budget pre-approval expenditures by category
Total \$10.29M



FINANCIAL CONSIDERATIONS

The 2021 Capital Budget pre-approval includes \$10,292,800 of capital projects which are funded from multiple funding sources as outlined in Appendix 1.

HUMAN RESOURCES CONSIDERATIONS

Not applicable

ALIGNMENT WITH STRATEGIC PRIORITIES:

The 2021 Capital Budget pre-approval includes capital projects that align with the City of Markham's strategic priorities developed by Council.

BUSINESS UNITS CONSULTED AND AFFECTED:

All affected business units have been consulted during the 2021 Capital Budget pre-approval submission and review process.

RECOMMENDED BY:

Joel Lustig
Treasurer

Trinela Cane
Commissioner, Corporate Services

ATTACHMENTS:

Appendix 1 – 2021 Capital and Other Programs Pre-Approval Budget

Appendix 2 – 2021 Capital and Other Programs Pre-Approval Budget Project Request
Forms

CITY OF MARKHAM
2021 CAPITAL and OTHER PROGRAMS PRE-APPROVAL BUDGET
by Department

#	Project Description	Total	Tax	Operating Life Cycle	DC - Reserve	Other	Description of Other Funding
<u>Development Services</u>							
<i>Theatre</i>							
21004	Theatre Fire Alarm 2 Stage Conversion	25,400		25,400			
	<u>TOTAL Theatre</u>	25,400		25,400	-	-	
<i>Design</i>							
21019	Berczy Beckett Park (Cherna Ave.) - Design & Construction	59,800			53,820	5,980	Parks Cash-in-Lieu; Note 1
21022	Green Lane Park - Design and Construction	48,000			43,200	4,800	Parks Cash-in-Lieu; Note 2
21023	Yonge and Grandview Park - Design and Construction	56,500			50,850	5,650	Parks Cash-in-Lieu; Note 3
	<u>TOTAL Design</u>	164,300		-	147,870	16,430	
<i>Engineering</i>							
21029	Markham Centre Trail Phase 1B Construction	816,000			530,400	285,600	Section 37
	<u>TOTAL Engineering</u>	816,000		-	530,400	285,600	
	<u>TOTAL Development Services</u>	1,005,700	-	25,400	678,270	302,030	
<u>Corporate Services</u>							
<i>Asset Management</i>							
21049	Civic Centre Vestibule Repairs and/or Replacements	290,700		290,700			
21063	Theatre-HVAC Replacement	2,000,000		91,200		1,908,800	Gas Tax
	<u>TOTAL Asset Management</u>	2,290,700		381,900	-	1,908,800	
	<u>TOTAL Corporate Services</u>	2,290,700		381,900	-	1,908,800	

CITY OF MARKHAM
2021 CAPITAL and OTHER PROGRAMS PRE-APPROVAL BUDGET
by Department

#	Project Description	Total	Tax	Operating Life Cycle	DC - Reserve	Other	Description of Other Funding
<u>Community & Fire Services</u>							
<i>Fire & Emergency Services</i>							
21071	SCBA Decontamination Machine	63,300	63,300				
	<u>TOTAL Recreation Services</u>	63,300	63,300	-		-	
<i>Markham Public Library</i>							
21099	Library Collections	1,598,200		1,598,200			Note 4
	<u>TOTAL Markham Public Library</u>	1,598,200		1,598,200			
<i>Operations - Roads</i>							
21101	Asphalt Resurfacing	3,157,900		224,340		2,933,560	Gas Tax; Note 5
21113	Parking Lots- Rehabilitation	678,900		678,900			
	<u>TOTAL Operations - Roads</u>	3,836,800	-	903,240	-	2,933,560	
<i>Operations - Parks</i>							
21119	Block Pruning Initiative - Year 2 of 3	1,017,600	1,017,600				
	<u>TOTAL Operations - Parks</u>	1,017,600	1,017,600	-			
<i>Operations - Fleet</i>							
21140	Corporate Fleet Replacement - Non-Fire	285,900		285,900			Note 6
	<u>TOTAL Operations - Fleet</u>	285,900		285,900			
	<u>TOTAL Community & Fire Services</u>	6,801,800	1,080,900	2,787,340	-	2,933,560	

CITY OF MARKHAM
2021 CAPITAL and OTHER PROGRAMS PRE-APPROVAL BUDGET
by Department

#	Project Description	Total	Tax	Operating Life Cycle	DC - Reserve	Other	Description of Other Funding
<u>Corporate Wide</u>							
<i>Corporate Wide</i>							
21177	Corporate Capital Contingency	194,600		12,200		182,400	Gas Tax; Note 7
	<u>TOTAL Corporate Wide</u>	194,600	-	12,200	-	182,400	
	<u>TOTAL Corporate Wide</u>	194,600	-	12,200	-	182,400	
	<u>TOTAL PRE-APPROVAL REQUESTS</u>	10,292,800	1,080,900	3,206,840	678,270	5,326,790	

Notes:

- 1) The overall project budget is \$465,200. The pre-approval request of \$59,800 is for consulting work only.
- 2) The overall project budget is \$549,300. The pre-approval request of \$48,000 is for consulting work only.
- 3) The overall project budget is \$637,900. The pre-approval request of \$56,500 is for consulting work only.
- 4) The overall project budget is \$2,806,300. The pre-approval request of \$1,598,200 is to ensure there is no gap in the supply of library materials in Q1, 2021.
- 5) The overall project budget is \$6,815,800. The pre-approval request of \$3,157,900 is to commence procurement of contracts earlier to potentially attain better pricing.
- 6) The overall project budget is \$1,620,700. The pre-approval request of \$285,900 is to commence procurement of articulating loader earlier to potentially attain better pricing.
- 7) The overall project budget is \$1,557,100. The pre-approval request of \$194,600 represents the contingency amounts required for all project pre-approval requests.



2021 PROJECT FUNDING REQUEST FORM

Appendix 2 Page 90

Number: **21004**

Project Cost: **\$25,400**

Project Name: **Theatre Fire Alarm 2 Stage Conversion**

Commission: Development Services

Repair/Replace

Department: Theatre

Useful Life: 20 Pre Approval: ☐

Project Mgr: Andrew Rosenfarb

Category: Minor

Ward(s): CW ☒ 1 ☐ 2 ☐ 3 ☐ 4

Cost Validation: Third party estimate

5 ☐ 6 ☐ 7 ☐ 8 ☐

Requirement Validation: Condition assessment

DETAILED DESCRIPTION (SCOPE OF PROJECT):

This project aims to transition the theatre from a single stage fire alarm which forces immediate evacuations, regardless of severity, to a two stage alarm which allows for a short investigation by staff before triggering a full evacuation. This project will also address an update to the fire panel allowing each smoke/heat detector device and pull stations to be updated to an addressable device. This means that from the fire panel, staff can see exactly what device has caused an alarm for quicker investigation and response.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

<u>PROJECT COSTS (\$)</u>	<u>2021</u>	<u>Future Phases</u>	<u>NOTES</u>
Cost/Quote:	25,000	0	Amount requested is consistent with life cycle. All theatres and attractions researched have 2 stage alarms to avoid unnecessary evacuations and is considered industry standard. Fire department has been consulted and they have no concerns as long as the Ontario Fire Code Regulations are met.
Internal Charges:	0	0	
External Consulting:	0	0	
Sub Total:	25,000	0	
HST Impact:	440	0	
Total Project Cost:	25,400	0	

<u>SOURCE(S) OF FUNDING (\$)</u>	<u>Components</u>						<u>Future Phases</u>
<u>Funding Type</u>	<u>Budget</u>					<u>TOTAL</u>	<u>Phases</u>
Operating Funded Life Cycle	25,400	0	0	0	0	0	0
TOTAL FUNDING	25,400					0	0

<u>OPERATING BUDGET IMPACT</u>	<u>Personnel</u>	<u>Non Personnel</u>	<u>Revenues</u>	<u>Expenditures/(Revenues)</u>
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

<u>DCA</u>	<u>Year</u>	<u>Amount</u>	<u>Amount in Study</u>	<u>Life Cycle</u>
<u>Name</u>				
				Amount in Study: <input type="text" value="2,739,100"/>
				Amount Incl HST <input type="text" value="25,400"/>
				Year in the study <input type="text" value="2021"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				



2021 PROJECT FUNDING REQUEST FORM

Number: **21019**

Project Cost: **\$465,200**

Project Name: **Berczy Beckett Park (Cherna Ave.) - Design & Construction**

Commission: Development Services

New Asset/Expansion

Department: Design

Useful Life: 25 Pre Approval: ☐

Project Mgr: Richard Fournier

Category: Major

Ward(s): CW ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐

Cost Validation: Recent awards

5 ☐ 6 ☒ 7 ☐ 8 ☐

Requirement Validation: Other(specify in Notes)

DETAILED DESCRIPTION (SCOPE OF PROJECT):

This project is to design and construct the 0.44 acre (0.17 ha) park located at the west end of Cherna Ave. Includes tree protection measures for existing tree during construction. Program amenities include retaining wall, shade structure & associated landscape works. This will be the last park in the Berczy subdivision.

BUILDING MARKHAM'S FUTURE TOGETHER: Engaged, Diverse & Thriving City

PROJECT COSTS (\$)	2021	Future Phases	NOTES
Cost/Quote:	370,000	0	Cost per ha is \$2,736,470 (\$465,200/0.17 ha) or \$1,057,273 per acre. Annualized operating cost is \$1,559 (0.17 ha x \$9170/ha) starting in 2022. Estimated in-service date: Q2 2022. Costs will be included in the Life Cycle Reserve Study at time of park assumption based on updated replacement cost for each amenity.
Internal Charges:	37,800	0	
External Consulting:	50,000	0	
Sub Total:	457,800	0	
HST Impact:	7,392	0	
Total Project Cost:	465,200	0	

SOURCE(S) OF FUNDING (\$)	Components						Future Phases
Funding Type	Budget					TOTAL	
DCA	418,680	0	0	0	0	0	0
Parks Cash-in-Lieu	46,520	0	0	0	0	0	0
TOTAL FUNDING	465,200					0	0

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

DCA	Amount in			Life Cycle
Name	Year	Amount	Study	
Parks - Berczy Beckett Neighbourhood Park	2017	418,680	661,500	Amount in Study: <input type="text"/>
TOTAL FUNDING		418,680	661,500	Amount Incl HST <input type="text"/>
				Year in the study <input type="text"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				
The amenities are less than anticipated in DCBS.				



2021 PROJECT FUNDING REQUEST FORM

Appendix 2 Page 26

Number: **21022**

Project Cost: **\$549,300**

Project Name: **Green Lane Park - Design and Construction**

Commission: Development Services

New Asset/Expansion

Department: Design

Useful Life: 25 Pre Approval: ☐

Project Mgr: Richard Fournier

Category: Major

Ward(s): CW ☐ 1 ☒ 2 ☐ 3 ☐ 4 ☐

Cost Validation: Recent awards

5 ☐ 6 ☐ 7 ☐ 8 ☐

Requirement Validation: Other(specify in Notes)

DETAILED DESCRIPTION (SCOPE OF PROJECT):

This project is to design and construct the 0.79ac (0.32ha) park at the south east corner of Green Lane and Harold Lawrie Lane. Anticipated amenities include Jr/Sr playground, half basketball, shade structure and associated landscape works.

BUILDING MARKHAM'S FUTURE TOGETHER: Engaged, Diverse & Thriving City

PROJECT COSTS (\$)	2021	Future Phases	NOTES
Cost/Quote:	450,000	0	Cost per ha is \$1,716,563 (\$549,300/0.32ha) or \$691,900 per acre. Annualized operating cost is \$2,934 (0.32ha X \$9,170). Estimated in service date: Q3 2022. Costs will be included in the Life Cycle Reserve Study at time of park assumption based on updated replacement cost for each amenity.
Internal Charges:	40,500	0	
External Consulting:	50,000	0	
Sub Total:	540,500	0	
HST Impact:	8,800	0	
Total Project Cost:	549,300	0	

SOURCE(S) OF FUNDING (\$)	Components						Future Phases
Funding Type	Budget					TOTAL	
DCA	494,370	0	0	0	0	0	0
Parks Cash-in-Lieu	54,930	0	0	0	0	0	0
TOTAL FUNDING	549,300					0	0

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

DCA	Amount in			Life Cycle
Name	Year	Amount	Study	
Parks - Yonge Canac Park	2021	494,370	696,807	Amount in Study: <input type="text"/>
TOTAL FUNDING		494,370	696,807	Amount Incl HST <input type="text"/>
				Year in the study <input type="text"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				



2021 PROJECT FUNDING REQUEST FORM

Appendix 2 Page 90

Number: **21023**

Project Cost: **\$637,900**

Project Name: **Yonge and Grandview Park - Design and Construction**

Commission: Development Services

New Asset/Expansion

Department: Design

Useful Life: 25 Pre Approval: ☐

Project Mgr: Richard Fournier

Category: Major

Cost Validation: Recent awards

Ward(s): CW ☐ 1 ☒ 2 ☐ 3 ☐ 4 ☐
5 ☐ 6 ☐ 7 ☐ 8 ☐

Requirement Validation: Other(specify in Notes)

DETAILED DESCRIPTION (SCOPE OF PROJECT):

This project is to design and construct the 0.73ac (0.29 ha) park located at the South east corner of Yonge St. and Grandview Ave. Anticipated park amenities include Junior/ Senior playground, plaza area, shade structure, pathways and associated landscape works.

BUILDING MARKHAM'S FUTURE TOGETHER: Engaged, Diverse & Thriving City

PROJECT COSTS (\$)	2021	Future Phases	NOTES
Cost/Quote:	530,000	0	Cost per ha is \$2,199,655 (\$637,900/0.29 ha) or \$873,836 per acre. Annualized operating cost is \$2,659 (0.29ha x \$9,170). Estimated in service date: Q3 2022. Costs will be included in the Life Cycle Reserve Study at time of park assumption based on updated replacement cost for each amenity.
Internal Charges:	47,700	0	
External Consulting:	50,000	0	
Sub Total:	627,700	0	
HST Impact:	10,208	0	
Total Project Cost:	637,900	0	

SOURCE(S) OF FUNDING (\$)	Components						Future Phases
Funding Type	Budget					TOTAL	
DCA	574,110	0	0	0	0	0	0
Parks Cash-in-Lieu	63,790	0	0	0	0	0	0
TOTAL FUNDING	637,900					0	0

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

DCA	Amount in			Life Cycle
Name	Year	Amount	Study	
Parks - Yonge Devron Park	2020	574,110	613,974	Amount in Study: <input type="text"/>
TOTAL FUNDING		574,110	613,974	Amount Incl HST <input type="text"/>
				Year in the study <input type="text"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				



2021 PROJECT FUNDING REQUEST FORM

Appendix 2 Page 99

Number: **21029**

Project Cost: **\$816,000**

Project Name: **Markham Centre Trail Phase 1B Construction**

Commission: Development Services

New Asset/Expansion

Department: Engineering

Useful Life: 0 Pre Approval: ☒

Project Mgr: Alberto Lim

Category: Major

Ward(s): CW ☐ 1 ☐ 2 ☐ 3 ☒ 4 ☐

Cost Validation: Recent awards

5 ☐ 6 ☐ 7 ☐ 8 ☐

Requirement Validation: Other(specify in Notes)

DETAILED DESCRIPTION (SCOPE OF PROJECT):

This Budget Request is for the construction of the Phase 1B of the trails on Markham Centre. This location is on the north side of Rouge River from Verdale to Birchmount Road.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

<u>PROJECT COSTS (\$)</u>	<u>2021</u>	<u>Future Phases</u>	<u>NOTES</u>
Cost/Quote:	723,270	0	The 2020 approved budget was not sufficient to fund the entire section of phase 1 due to new requirements (i.e. tree planting south of Rouge, permeable asphalt etc.) from Environmental agencies. Other internal is section 37 funding. Operating impacts will be determined at the time of construction award.
Internal Charges:	80,000	0	
External Consulting:	0	0	
Sub Total:	803,270	0	
HST Impact:	12,730	0	
Total Project Cost:	816,000	0	

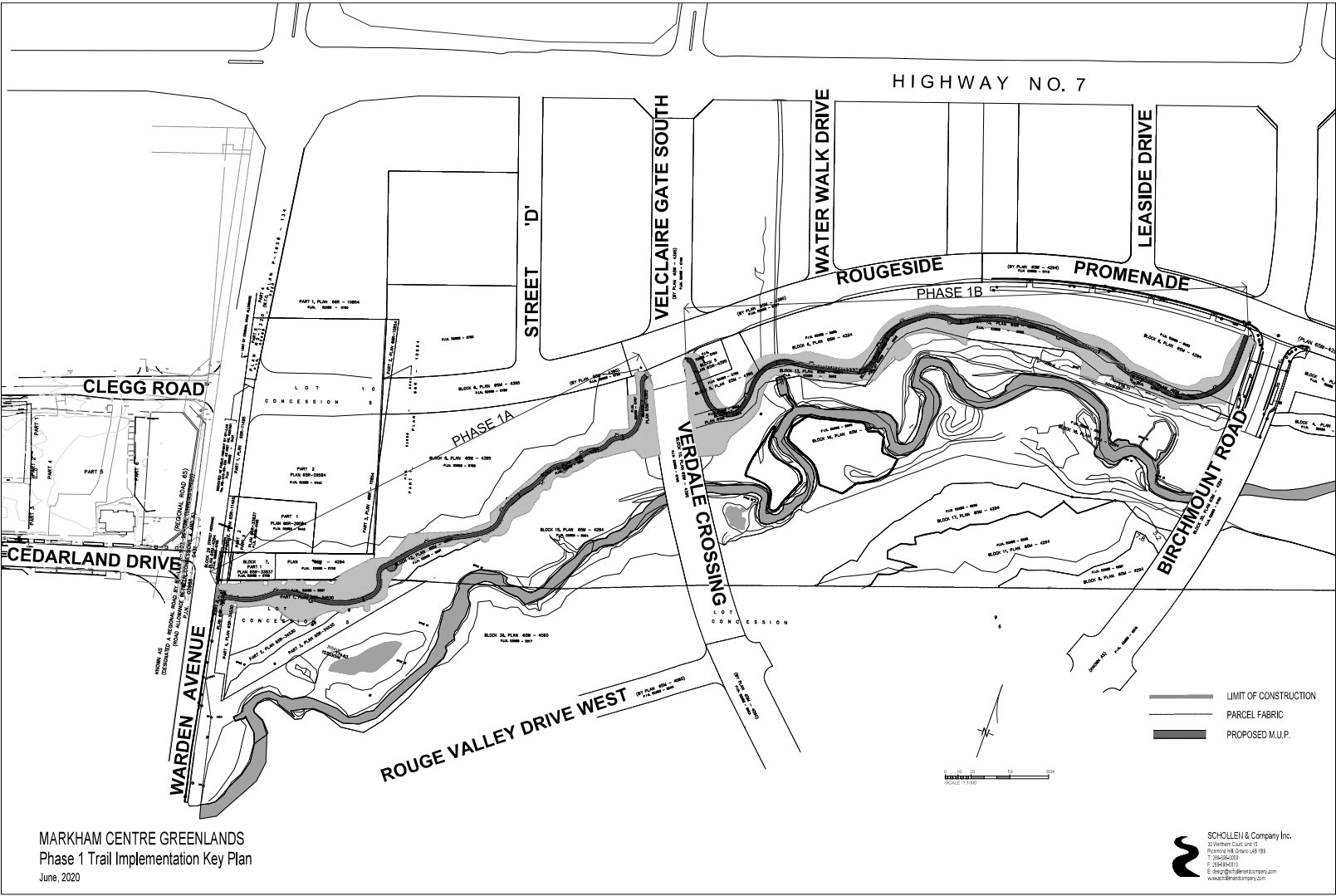
<u>SOURCE(S) OF FUNDING (\$)</u>	<u>Components</u>						<u>Future Phases</u>
<u>Funding Type</u>	<u>Budget</u>				<u>TOTAL</u>		<u>Phases</u>
DCA	530,400	0	0	0	0	0	0
Other Internal	285,600	0	0	0	0	0	0
TOTAL FUNDING	816,000				0		0

<u>OPERATING BUDGET IMPACT</u>	<u>Personnel</u>	<u>Non Personnel</u>	<u>Revenues</u>	<u>Expenditures/(Revenues)</u>
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

<u>DCA</u>	<u>Year</u>	<u>Amount</u>	<u>Amount in Study</u>	<u>Life Cycle</u>
<u>Name</u>				
Hard - Special Projects - City Wide - Bike Lanes on City and Regional Land		530,400	11,325,356	Amount in Study: <input type="text"/>
TOTAL FUNDING		530,400	11,325,356	Amount Incl HST <input type="text"/>
				Year in the study <input type="text"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				

Markham Centre Phase 1B Construction





2021 PROJECT FUNDING REQUEST FORM

Appendix Page 18

Number: 21049

Project Cost: \$290,700

Project Name: Civic Centre Vestibule Repairs and/or Replacements

Commission: Corporate Services

Repair/Replace

Department: Asset Management

Useful Life: 0 Pre Approval: ☒

Project Mgr: Sameem Shah

Category: Minor

Ward(s): CW ☐ 1 ☐ 2 ☒ 3 ☐ 4 ☐

Cost Validation: Published guidelines

5 ☐ 6 ☐ 7 ☐ 8 ☐

Requirement Validation: Condition assessment

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Project includes repair/replacement of various components of the Milliken and Great Hall Entrance Vestibules of the Civic Centre to maintain the Civic Centre Facility in a state of good repair and in alignment to the Asset Management Plan/Policy. Funding request is based on actual cost of similar project and life cycle database.

BUILDING MARKHAM'S FUTURE TOGETHER: Exceptional Services by Exceptional People

PROJECT COSTS (\$)	2021	Future Phases	NOTES
Cost/Quote:	285,672	0	\$290,700 - Great Hall Entrance and Milliken Entrance vestibule repair/replacement (1988) Amount is consistent with the 2020 Life Cycle Reserve Study update.
Internal Charges:	0	0	
External Consulting:	0	0	
Sub Total:	285,672	0	
HST Impact:	5,028	0	
Total Project Cost:	290,700	0	

SOURCE(S) OF FUNDING (\$)	Components					TOTAL	Future Phases
Funding Type	Budget	Great Hall and Milliken Vestibule					
Operating Funded Life Cycle	290,700	290,700	0	0	0	290,700	0
TOTAL FUNDING	290,700					290,700	0

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

DCA Name	Year	Amount	Amount in Study	Life Cycle
				Amount in Study: 868,800
				Amount Incl HST 290,700
				Year in the study 2021
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				



2021 PROJECT FUNDING REQUEST FORM

Appendix Page 16

Number: **21063**

Project Cost: **\$2,000,000**

Project Name: **Theatre-HVAC Replacement**

Commission: Corporate Services

Repair/Replace

Department: Asset Management

Useful Life: 30

Pre Approval: ☒

Project Mgr: Jason Vasilaki

Category: Major

Cost Validation: Third party estimate

Ward(s): CW ☒ 1 ☐ 2 ☐ 3 ☐ 4 ☐

Requirement Validation: Condition assessment

5 ☐ 6 ☐ 7 ☐ 8 ☐

DETAILED DESCRIPTION (SCOPE OF PROJECT):

The 3 year Theatre HVAC project began in 2019 with design & consultation and in 2020 with a class A cost estimate to allow an accurate capital budget request for 2021. The 37 year old HVAC system is original to the building and has been deemed at the end of its useful life. This project includes replacement of the venues major HVAC equipment including all air handlers and associated equipment (\$1,382,602) and the building automation system (\$424,198)

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

<u>PROJECT COSTS (\$)</u>	<u>2021</u>	<u>Future Phases</u>	<u>NOTES</u>
Cost/Quote:	1,806,800	0	Amount requested is consistent with life cycle. There is no expected incremental operating budget impact. This project requires a 10 week shut down for the venue between August 9-October 15, 2021. System will be connected to UHS/MDE to distribute the heating & cooling and fresh air into the Theatre. Energy savings estimated at \$24,400. Incentives estimated at \$13,000.
Internal Charges:	80,000	0	
External Consulting:	80,000	0	
Sub Total:	1,966,800	0	
HST Impact:	33,208	0	
Total Project Cost:	2,000,000	0	

<u>SOURCE(S) OF FUNDING (\$)</u>	<u>Components</u>						<u>Future Phases</u>
<u>Funding Type</u>	<u>Budget</u>				<u>TOTAL</u>		<u>Future Phases</u>
Gas Tax	1,908,800	0	0	0	0	0	0
Operating Funded Life Cycle	91,200	0	0	0	0	0	0
TOTAL FUNDING	2,000,000				0		0

<u>OPERATING BUDGET IMPACT</u>	<u>Personnel</u>	<u>Non Personnel</u>	<u>Revenues</u>	<u>Expenditures/(Revenues)</u>
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

<u>DCA</u>	<u>Year</u>	<u>Amount</u>	<u>Amount in Study</u>	<u>Life Cycle</u>
<u>Name</u>				Amount in Study: <input type="text" value="2,739,100"/>
				Amount Incl HST <input type="text" value="91,200"/>
				Year in the study <input type="text" value="2021"/>

DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:



BUILDING MARKHAM'S FUTURE TOGETHER
2020 – 2023 Strategic Plan





Summary

- In 2019, Sustainability & Asset Management conducted the design consultation phase to replace the HVAC systems and Building Automation System at Flato Markham Theatre.
- The HVAC equipment and BAS were original and initially installed in the 1980s. They are at the end of their service life.
- Heating and cooling supply to the existing and new HVAC systems will be by Markham District Energy via Unionville High School.
- Heating and cooling will soon be individually metered and billed for the building per agreement with School Board
- There is a need to improve energy efficiency for this facility and the newly designed systems will accomplish this requirement.



Project Details

- Five (5) large existing air handling units will be disassembled in-place and new units assembled within their respective mechanical rooms.
- Multiple crane lifts to remove and install the units through existing openings will be required.
- The amount of work is very substantial and it is anticipated to take approximately 10 weeks. This will require a complete shut down of the building.



Schedule

In consultation with Theater management and our consultant, the recommended schedule and impacts are as follows:

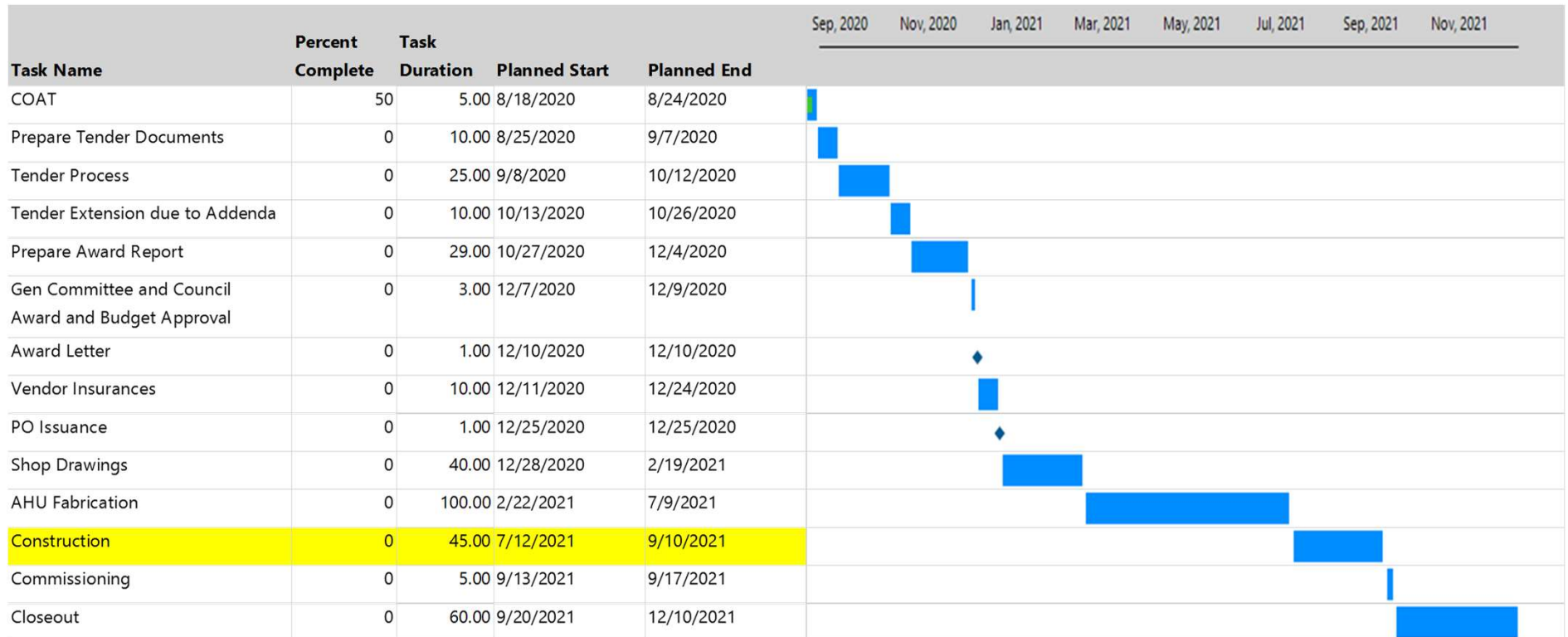
- Construction work is expected to take place beginning of July to mid-September of 2021.
- The time line above:
 - allows for sufficient factory fabrication time of the new units once procured (approximately 6 months lead time required)
 - is beneficial for moderating temperatures within the building during the HVAC shutdown (i.e. no very cold or very hot outdoor temperatures thereby saving the cost impact of temporary A/C or temporary heat)



BUILDING MARKHAM'S FUTURE TOGETHER 2020 – 2023 Strategic Plan



Potential Expedited Schedule





Theatre Closure Impacts

- The Theatre must be temporarily closed to rehearsals and performances during the work due to:
 - public safety
 - construction noise/disturbance
 - no capability to control temperature and humidity to the precise levels that performances require
- Typical season net revenue loss is anticipated to be \$120,000
- During the shutdown, Theatre staff will have to be relocated to work in a suitable location within the Civic Centre.
- The Box Office would remain open for sales but might be required to temporarily relocate also to within the Civic Centre.
- In the event the Theatre re-opens to the public before July 2021 for events that are already booked, construction will begin 1 month later, as a contingency plan.



Budget

- January 2020, a design (Class A) cost estimate was conducted based on complete drawings and specifications, which this budget request is based upon.
- Cost Estimate:
 - Construction - \$ 1,806,800
 - Consulting - \$ 80,000
 - HST Impact (on above) - \$ 33,200
 - Internal Charges - \$ 80,000
 - Total Project Cost \$ 2,000,000
- \$24,400 estimated annual energy efficiency savings (21% reduction)
- \$13,000 estimated one-time energy conservation incentives



2021 PROJECT FUNDING REQUEST FORM

Number: **21071**

Project Cost: **\$63,300**

Project Name: **SCBA Decontamination Machine**

Commission: Community & Fire Services

New Asset/Expansion

Department: Fire & Emergency Services

Useful Life: 10 Pre Approval: ☐

Project Mgr: Adam Grant

Category: Minor

Ward(s): CW ☒ 1 ☐ 2 ☐ 3 ☐ 4 ☐

Cost Validation: Third party estimate

5 ☐ 6 ☐ 7 ☐ 8 ☐

Requirement Validation: Other(specify in Notes)

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Request for 2 machines to decontaminate self contained breathing apparatus (SCBA) after exposure to harmful toxins/chemicals. The self contained cleaning process removes residue from soot and other toxins absorbed by SCBA gear (harness, facepiece, and air cylinder) in as little as 5 minutes, and is effective on steel, composite, rubber and steel.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

<u>PROJECT COSTS (\$)</u>	<u>2021</u>	<u>Future Phases</u>	<u>NOTES</u>
Cost/Quote:	62,246	0	After each firefighting operation, it is standard procedure for firefighters to launder their bunker gear (jacket, pants, boots) at one of two laundry stations. However, SCBA gear is currently not decontaminated after each operation. Markham Fire Services would like to include the decontamination of SCBA gear after each operation as part of standard procedure. The decontamination practice reduces the risk of developing job related cancers. Cost of each decontamination machine unit is \$31,650.
Internal Charges:	0	0	
External Consulting:	0	0	
Sub Total:	62,246	0	
HST Impact:	1,096	0	
Total Project Cost:	63,300	0	

<u>SOURCE(S) OF FUNDING (\$)</u>	<u>Components</u>						<u>Future Phases</u>
<u>Funding Type</u>	<u>Budget</u>					<u>TOTAL</u>	<u>Phases</u>
Tax	63,300	0	0	0	0	0	0
TOTAL FUNDING	63,300					0	0

<u>OPERATING BUDGET IMPACT</u>	<u>Personnel</u>	<u>Non Personnel</u>	<u>Revenues</u>	<u>Expenditures/(Revenues)</u>
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

<u>DCA</u>	<u>Year</u>	<u>Amount</u>	<u>Amount in Study</u>	<u>Life Cycle</u>
Name				Amount in Study: <input type="text"/>
				Amount Incl HST <input type="text"/>
				Year in the study <input type="text"/>

DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:



2021 PROJECT FUNDING REQUEST FORM

Appendix Page 20 of 20

Number: **21099**

Project Cost: **\$2,831,400**

Project Name: **Library Collections**

Commission: Community & Fire Services

Repair/Replace

Department: Markham Public Library

Useful Life: 7

Pre Approval: ☒

Project Mgr: Catherine Biss

Category: Annual

Ward(s): CW ☒ 1 ☐ 2 ☐ 3 ☐ 4 ☐

Cost Validation: Recent awards

5 ☐ 6 ☐ 7 ☐ 8 ☐

Requirement Validation: Condition assessment

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Collections are the Library's main product and are used heavily by the public, which expects currency. This requires ongoing acquisition of new materials, including those in print and non-print formats and non-English language materials, which are in high demand in Markham. In a 2020 survey of 2,521 residents, 94% indicated that it was important that MPL provides books and valued borrowing materials as the #1 Library service. A constant stream of new material is required to keep up with customer interest and demand.

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<u>PROJECT COSTS (\$)</u>	<u>2021</u>	<u>Future Phases</u>	<u>NOTES</u>
Cost/Quote:	2,782,440	0	Preliminary allocations (incl. processing): Books & Subscriptions \$960K/ Audio-visual \$315K/ French \$25K/ Multilingual \$300K/ Microfilms \$3.5K/ Periodicals \$100K/ Electronic Resources \$937K/ Processing Supplies \$180K. Figures subject to revision based on material availability, customer needs & final Library review. 25% funding (excl. processing costs) devoted to non-English materials (Multilingual, French). Cost for replacement of existing E-Resources (when invoiced in USD) based on exchange rate of 1.37 (\$537K USD\$). Pre-approval request is \$1,598,200.
Internal Charges:	0	0	
External Consulting:	0	0	
Sub Total:	2,782,440	0	
HST Impact:	48,971	0	
Total Project Cost:	2,831,400	0	

<u>SOURCE(S) OF FUNDING (\$)</u>	<u>Components</u>					<u>Future Phases</u>
<u>Funding Type</u>	<u>Budget</u>	<u>Collections</u>			<u>TOTAL</u>	
Operating Funded Life Cycle	2,831,400	2,831,400	0	0	0 2,831,400	0
TOTAL FUNDING	2,831,400				2,831,400	0

<u>OPERATING BUDGET IMPACT</u>	<u>Personnel</u>	<u>Non Personnel</u>	<u>Revenues</u>	<u>Expenditures/(Revenues)</u>
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

<u>DCA</u>	<u>Year</u>	<u>Amount</u>	<u>Amount in Study</u>	<u>Life Cycle</u>
<u>Name</u>				
				Amount in Study: <input type="text" value="2,831,400"/>
				Amount Incl HST <input type="text" value="2,831,400"/>
				Year in the study <input type="text" value="2021"/>

DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:

2021 LIBRARY COLLECTIONS BUDGET SUPPORTING INFORMATION

The Library's Business Model for Material Selection:

MPL's business model for material selection is designed to achieve the following outcomes:

- Strong ROI on funding dollars, respecting the tax-payer's investment in library services;
- Strong library collections as a fundamental element in library service;
- Anticipating and meeting customer needs as determined by analysis of data regarding usage, trends and consumption of content, and broader trends in the publishing, retail, and public sectors;
- Alignment with the diversity of Markham's socio-demographic structure including age cohorts, language needs and preferences, and learning and leisure pursuits;
- Sector leading performance in Key Performance Indicators, including circulation per capita, collection turnover, materials as percentage of total expenditures, and visits per capita;
- Efficient use of funding dollars through a system wide approach to selection, eliminating overlap and duplication amongst the branches;
- Leveraging of alternative sources of content (i.e. online content and interlibrary loan) to satisfy long tail (non-mainstream) needs;
- High levels of use through aggressive targets for percentage of materials checked out at any given time. We want library materials to be in the hands of customers, enriching lives and supporting education.

Depth and Breadth of Library Materials:

Like all public library systems in Canada, MPL's collection policy defines the library mandate to meet the diverse information and knowledge needs of Markham residents through a collection that provides an appropriate balance of depth and breadth; meeting anticipated and expressed individual and community needs.

- **Bestsellers vs. Backlist:** Like bookstores, library "stock" includes both current bestsellers and backlist (older books still in print) items that are in demand by library customers
 - Backlist would include materials such as classics of children's literature
 - Classic board books and picture books for babies and pre-schoolers (*Goodnight Moon, Brown Bear, Brown Bear, What Do You See?*)
 - Series fiction for school aged children (*Diary of a Wimpy Kid, Dork Diaries, Geronimo Stilton*, etc.)
 - Classic children's fiction for school aged children (*Harry Potter, Anne of Green Gables, Treasure Island*)
 - Curriculum related materials (children's non-fiction books on Lands & People, Science, Technology and Math, Social Studies, etc.)
 - Backlist materials for teens such as popular teen fiction series and classics
 - Popular teen fiction (*Twilight, Divergent, The Hunger Games, The Giver*, etc.)\
 - Curriculum related non-fiction (materials to support Independent Study Units)
 - Classic literature (Margaret Atwood, William Shakespeare, Harper Lee, William Golding, F. Scott Fitzgerald, etc.)
 - Backlist materials for adults such as classic literature, series fiction and non-fiction
 - Backlist of popular authors (James Patterson, Sue Grafton, Stephen King)
 - Backlist non-fiction (Health & Wellness, Travel, Food & Drink, Business and Financial Investments, Computers, Home & Garden, etc.)

- Genre fiction (Romance, Mysteries, Horror, Fantasy, etc.)
 - Backlist materials for senior adults
 - Large print (popular fiction and non-fiction titles)
 - Audiobooks
- **Linguistic Diversity:** An additional challenge for Markham, in the context of the City's high level of linguistic diversity, is to allocate adequate funding to the demand for multilingual materials in each service area.
- **Customer Purchase Suggestions:** Appropriate response to purchase suggestions by Markham residents where they meet the Library's selection criteria including ensuring that the item would be of interest of other Markham residents.
- **Fiscal Responsibility:** Our collection policy excludes purchasing niche or scholarly materials, ensuring that MPL's collection appeals to the general public and not for niche interests (we try to meet these needs through Interlibrary Loans or online databases).

Estimated budget breakdown for 2021:

Books & Subscriptions	\$960,000
Audiovisual	\$315,000
French Books	\$25,000
Multilingual	\$300,000
Microfilms	\$3,500
Periodicals	\$100,000
eResources	\$937,000
Processing & Supplies	\$180,000

Circulation in 2019 VS 2018:

Circulation	2019	2018	%+/-
Physical Circulation	4,845,118	4,905,024	(1.2)
Digital Circulation (eCirc)	731,177	555,728	31.6
Total Circ (incl. eCirc)	5,576,295	5,460,752	2.1

Electronic circulation over the past 5 years:

Years	2011	2012	2013	2014	2015	2016	2017	2018	2019
eCirculation	67,500	93,651	148,235	164,791	246,864	310,208	370,779	555,728	731,177
%Increase		38.7%	58.3%	11.2%	49.8%	25.66%	19.53%	49.88%	31.57%

As of June 2020, the Library is seeing an increase of 70% in digital circulation over the same period in 2019, a huge increase due in part to COVID 19.

CUSTOMER SATISFACTION WITH COLLECTIONS:

The number one reason for Markham residents using the library is for its collection as they continuously state in all surveys. As you can see from the chart below, our customer expectations of the content MPL provides exceeds their actual satisfaction with the collection.

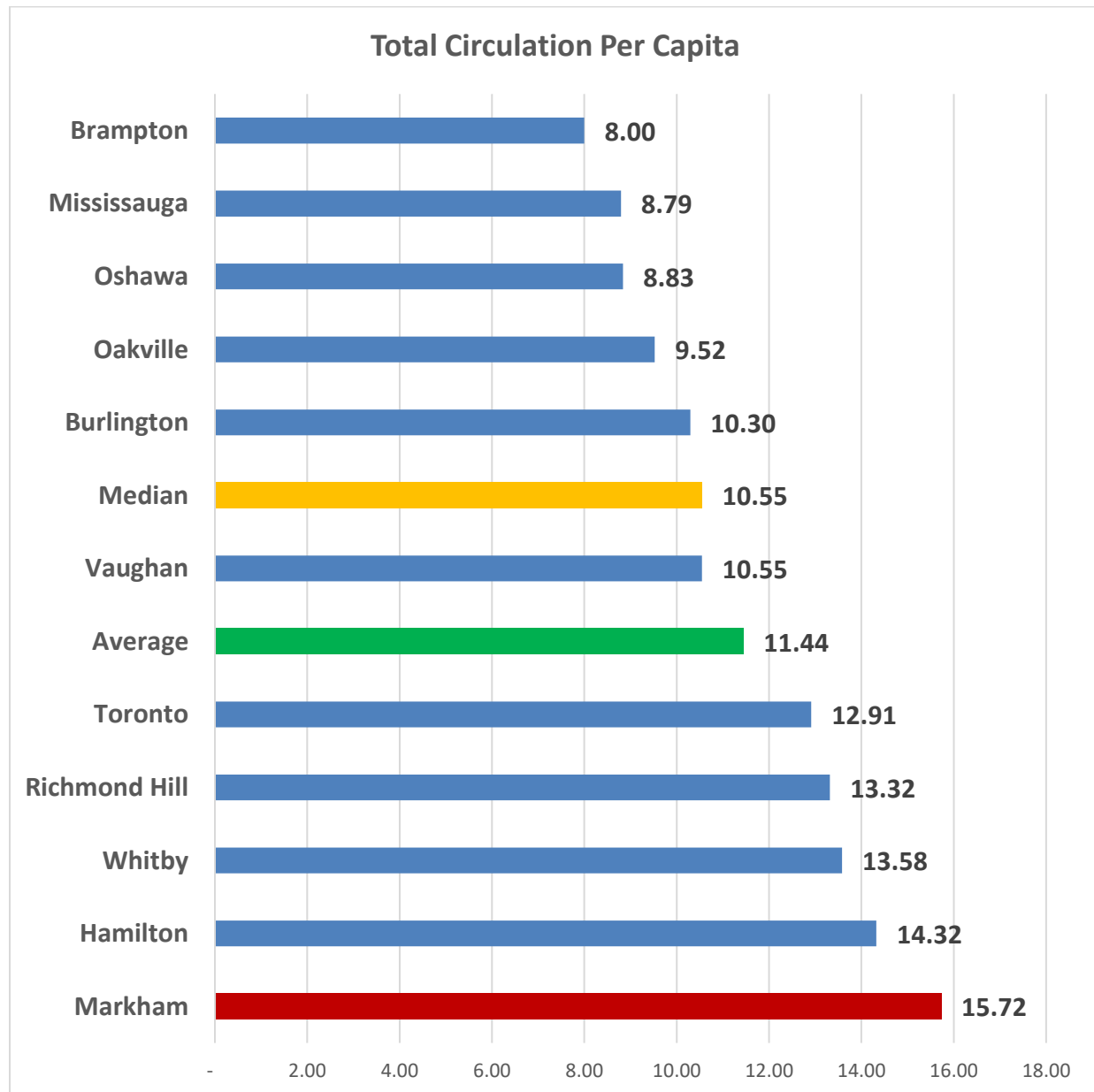
	2019
Importance	9.20/10
Satisfaction	8.03/10
Gap	1.17

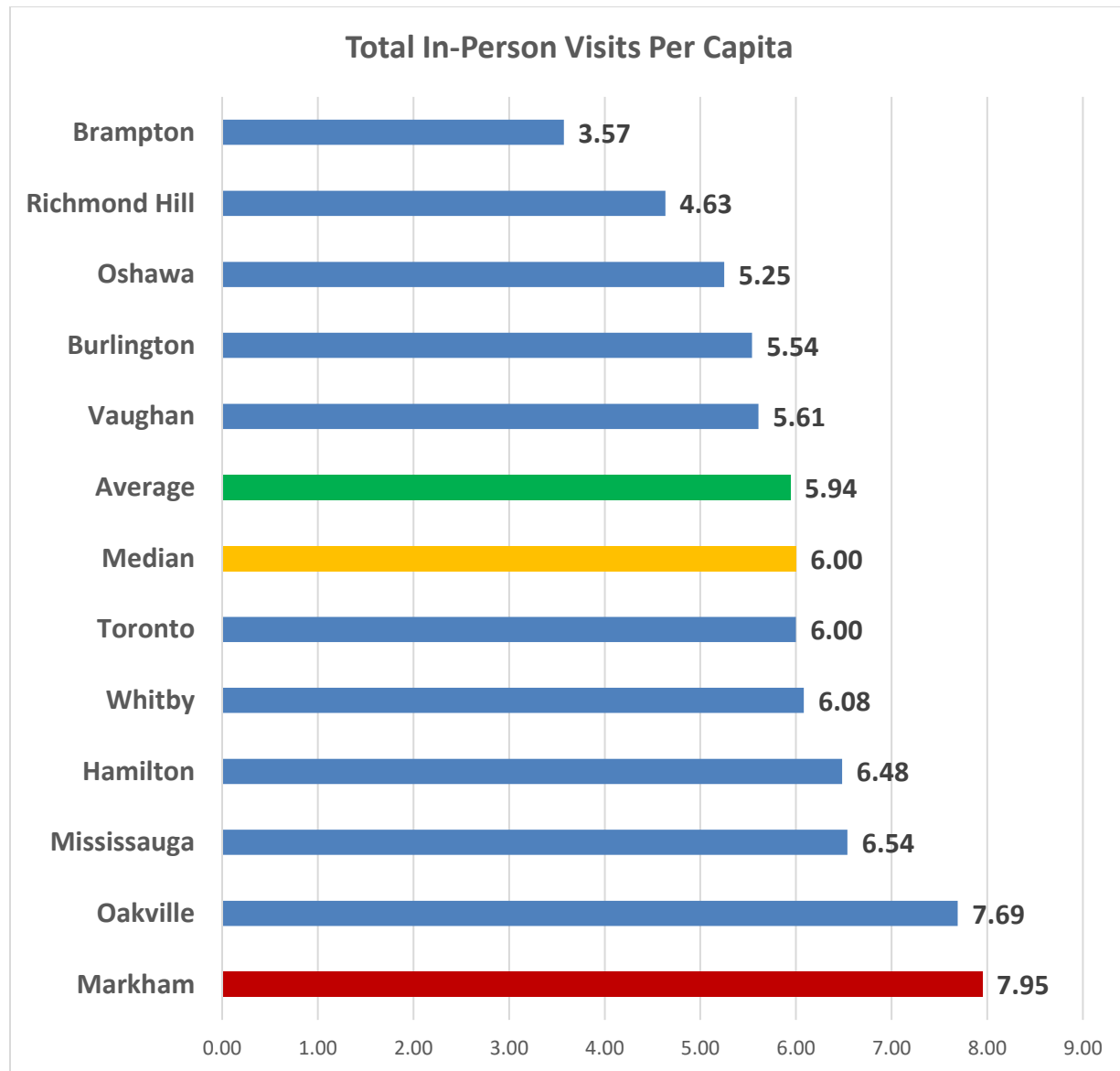
LANGUAGES COLLECTED:

- English, French, Arabic, German, Greek, Gujarati, Hebrew, Hindi, Italian, Korean, Persian, Panjabi, Russian, Spanish, Tagalog, Tamil, Urdu, and Chinese.

KEY PERFORMANCE INDICATORS

(Based on the latest 2018 statistics submitted to Ontario Ministry by Public Libraries)







2021 PROJECT FUNDING REQUEST FORM

Appendix Page 36

Number: 21101

Project Cost: \$6,815,800

Project Name: Asphalt Resurfacing

Commission: Community & Fire Services

Department: Operations - Roads

Project Mgr: Zoyeb Vahora

Ward(s): CW ☒ 1 ☐ 2 ☐ 3 ☐ 4 ☐
5 ☐ 6 ☐ 7 ☐ 8 ☐

Repair/Replace

Useful Life: 20

Pre Approval: ☒

Category: Minor

Cost Validation: Recent awards

Requirement Validation: Condition assessment

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Asphalt resurfacing of roads throughout the City utilizing a pavement management program to select rehabilitation candidates. The overall goal is to maintain an acceptable pavement condition index and user satisfaction by implementing cost effective strategies designed to extend pavement life and reduce overall maintenance costs of the road network. Other work includes interlock, material testing, route and seal, steel, and AC index. Various strategies are utilized on a site specific basis to reach program goals.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

PROJECT COSTS (\$)	2021	Future Phases	NOTES
Cost/Quote:	6,610,428	0	Asphalt Resurfacing of approximately 17.5km of two lane and four lane roads. 6.8km of four lane roads of pavement preservation which is comparable to last year's program. There is no substantial backlog in this program. Laser condition survey conducted bi-annually indicates 2019 pavement condition result shows that 72.9% of the road network is deemed good or better (target = 80%). Amount requested is consistent with the 2020 Life Cycle Reserve Study update.
Internal Charges:	89,002	0	
External Consulting:	0	0	
Sub Total:	6,699,430	0	
HST Impact:	116,344	0	
Total Project Cost:	6,815,800	0	

SOURCE(S) OF FUNDING (\$)	Components						Future Phases
Funding Type	Budget					TOTAL	
Gas Tax	6,331,600	0	0	0	0	0	0
Operating Funded Life Cycle	484,200	0	0	0	0	0	0
TOTAL FUNDING	6,815,800					0	0

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

DCA Name	Year	Amount	Amount in Study	Life Cycle
				Amount in Study: 6,815,800
				Amount Incl HST 6,815,800
				Year in the study 2021

DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:

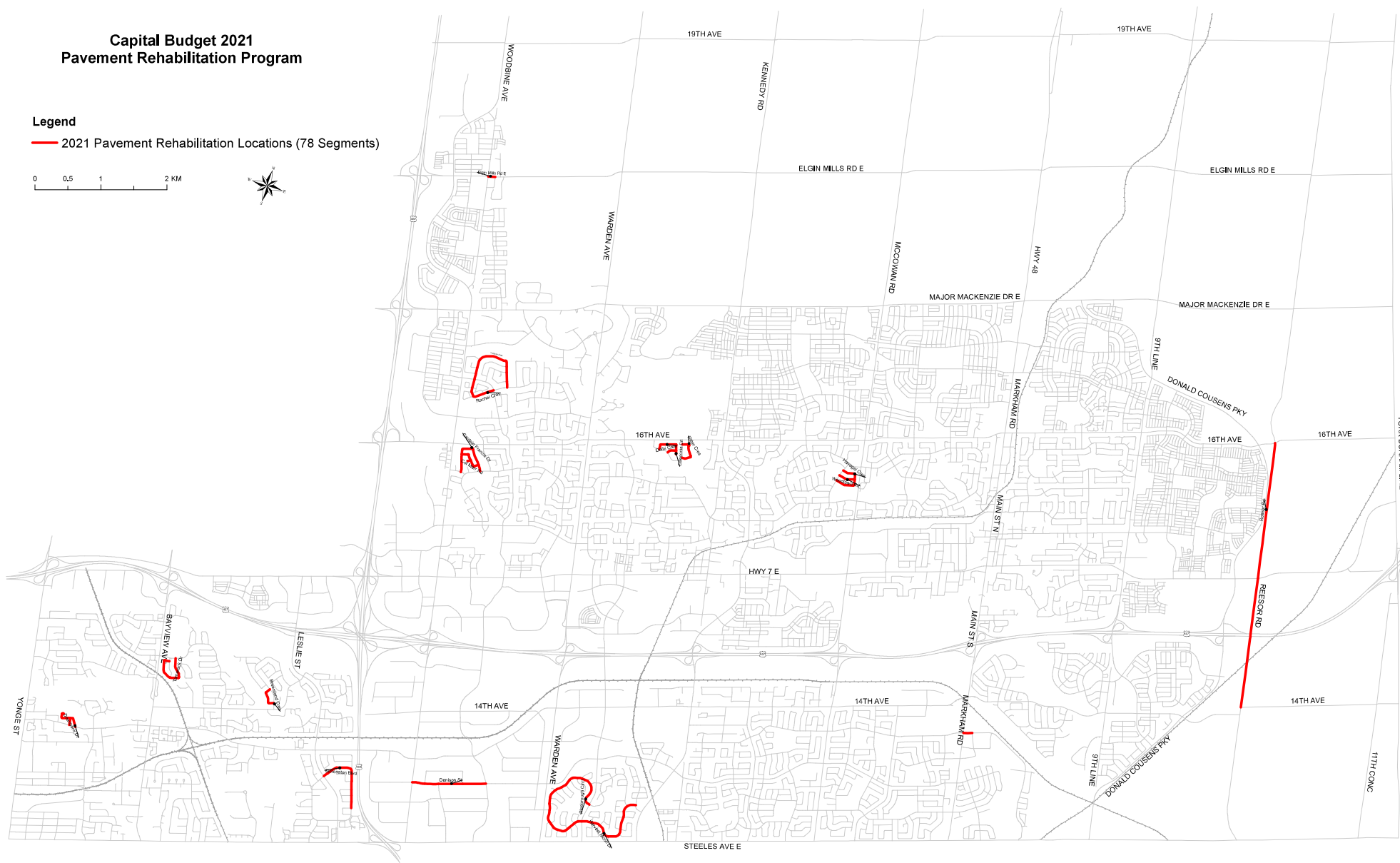
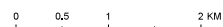
Project	Asphalt Resurfacing
2021 Capital Request	\$6,815,800
Funding Source	Life Cycle Reserve
Description of Program	Asphalt resurfacing of roads throughout the City utilizing a pavement management program to select rehabilitation candidates. The overall goal is to maintain an acceptable pavement condition index and user satisfaction by implementing cost effective strategies designed to extend pavement life and reduce overall maintenance and reconstruction costs of the road network.
Project Rationale	Condition assessment is conducted bi-annually to determine specific locations. This is followed by a detailed visual inspection by Operations staff which verifies the laser condition assessment. Identified in the Life Cycle Reserve Study.
Legislative Requirement	O. Reg. 239/02: Minimum Maintenance Standards for Municipal Highways outlines patrol and maintenance requirement related to roadway infrastructure inclusive of asphalt pavement and sidewalk.
History	n/a
Future Phases	This funding is requested each year.
Total Project Cost	n/a
Related Projects	Parking Lot Rehabilitation, Localized Repairs – Concrete/Asphalt
Related Maps	..\Roads\Back Up\Asphalt Rehab\2021 Pavement Rehabilitation Locations.pdf
Alignment to the Strategic Plan	Properly paved and well maintained roads help reduce accidents and promotes safe movement of traffic reducing traveling time. Contracts within this program call for reharvesting and recycling of construction materials. Strategies include warm mix designs which lowers emissions and utilizes recycled aggregate.



Capital Budget 2021 Pavement Rehabilitation Program

Legend

— 2021 Pavement Rehabilitation Locations (78 Segments)



2021 Road Rehabilitation Program

Street Name	Road-Segment ID		From	To	Length	Width	Area
Captain Francis Drive	01473 - 001,002,003		Entirety		872	8	6976
Colonel Marr Road	02028 - 001,002		Entirety		388.85	8	3110.8
Bliss Court	00949 - 001		Entirety		50	8.5	425
Forester Crescent	10693 - 001 to 007		Entirety		1145	8.5	9732.5
Rachel Crescent	10685 - 001 to 005				594	10.5	6237
Ritter Crescent	07811 - 001		Entirety		464	8	3712
Delhi Crescent	02534 - 001, 002		Entirety		640	8	5120
Caledonia Court	01376 - 001		Entirety		60	8.5	510
Leahill Drive	05541 - 001		Entirety		100	6	600
Deanbank Drive	02461 - 001		Entirety		177	3.5	619.5
Deanbank Drive	02461 - 002		Entirety		222	8	1776
Simonston Boulevard East	08468 - 014,016,026,001,004,012,019,024		Dersingham Crescent North	Don Mills	1054	10.5	11067
Brewsland Crescent	01112 - 001		Entirety		329	8	2632
Tamarack Drive	09172 - 001, 002		Entirety		839	8	6712
Elgin Mills Road East	10545 - 013		Victoria Square Boulevard	Warden Avenue	2049	9	18441
Reesor Road	10634 - 004,008		16th	407 ETR	2900	9	26100
Harvest Moon Drive	04268 - 001 to 009		Entirety		1276	9	11484
Riseborough Circuit	07803 - 001 to 022		Entirety		2118	9	19062
Havagal Crescent	04294 - 001, 002		Entirety		655	8	5240
Woodlawn Road	10421 - 001		Entirety		247	8	1976
Denison Street	02585 - 003,006,017,022		Esna Park	Woodbine Avenue	1120	13.5	15120
Kirkham	12009 - 001		Markham Road	New Delhi Drive	135	16	2160

Total

17.43485
km

158812.80
square meters



2021 PROJECT FUNDING REQUEST FORM

Appendix 2 Page 40

Number: 21113

Project Cost: \$678,900

Project Name: **Parking Lots- Rehabilitation**

Commission: Community & Fire Services

Repair/Replace

Department: Operations - Roads

Useful Life: 20 Pre Approval: ☐

Project Mgr: Zoyeb Vahora

Category: Minor

Ward(s): CW ☒ 1 ☐ 2 ☐ 3 ☐ 4 ☐

Cost Validation: Recent awards

5 ☐ 6 ☐ 7 ☐ 8 ☐

Requirement Validation: Condition assessment

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Complete rehabilitation of selected municipal parking lots throughout the City. Includes removal and replacement of concrete, interlock and asphalt infrastructure, as well as maintenance holes and catch basin adjustments.

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PROJECT COSTS (\$)	2021	Future Phases	NOTES
Cost/Quote:	667,139	0	Rehabilitation of Miller yard inside gate (19,988sqm), and German Mills/Sabiston (1170sqm). There is no backlog in the program. The parking lots are in a state of good repair. Unit cost is consistent with recent award plus inflation. Amount requested is consistent with the 2020 Life Cycle Reserve Study update.
Internal Charges:	0	0	
External Consulting:	0	0	
Sub Total:	667,139	0	
HST Impact:	11,742	0	
Total Project Cost:	678,900	0	

SOURCE(S) OF FUNDING (\$)	Components					Future Phases
Funding Type	Budget	Miller Yard	Sabiston	TOTAL		
Operating Funded Life Cycle	678,900	641,400	37,500	0	0	678,900
TOTAL FUNDING	678,900					0

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

DCA	Year	Amount	Amount in Study	Life Cycle
Name				
				Amount in Study: 1,475,600
				Amount Incl HST 678,900
				Year in the study 2021

DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:

75 Clegg deferred until direction from Legal is received. Milliken Mills CC deferred to 2022 due to potential community centre expansion.

Project	Parking Lot Rehabilitation
2021 Capital Request	\$678,900
Funding Source	Life Cycle Reserve
Description of Program	Asphalt resurfacing of City owned parking lot throughout the City. The overall goal is to maintain an acceptable pavement condition and user satisfaction by implementing timely rehabilitation to extend pavement life and reduce overall maintenance and reconstruction costs of the City's assets.
Project Rationale	Condition assessment is conducted bi-annually to determine specific locations. This is followed by a detailed visual inspection by Operations staff which verifies the laser condition assessment. Identified in the Life Cycle Reserve Study.
Legislative Requirement	O. Reg. 588/17: Asset Management Planning for Municipal Infrastructure outline asset management requirement related to Municipal infrastructure.
History	n/a
Future Phases	This funding is requested each year.
Total Project Cost	n/a
Related Projects	Localized Repairs - Parking Lots
Related Maps	n/a
Alignment to the Strategic Plan	Properly paved and well maintained parking lots help reduce accidents and promotes safe movement of traffic reducing within City owned facilities. Contracts within this program call for reharvesting and recycling of construction materials. Strategies include warm mix designs which lowers emissions and utilizes recycled aggregate.



2021 PROJECT FUNDING REQUEST FORM

Appendix Page 46

Number: 21119

Project Cost: \$1,017,600

Project Name: Block Pruning Initiative - Year 2 of 3

Commission: Community & Fire Services

Department: Operations - Parks

Project Mgr: Miles Peart

Ward(s): CW ☒ 1 ☐ 2 ☐ 3 ☐ 4 ☐
5 ☐ 6 ☐ 7 ☐ 8 ☐

Repair/Replace

Useful Life: 0 Pre Approval: ☒

Category: Major

Cost Validation: Third party estimate

Requirement Validation: Visual inspection

DETAILED DESCRIPTION (SCOPE OF PROJECT):

The City owns approximately 100,000 street trees. This is a 3 year capital project to prune City trees proactively to improve storm damage resistance and reduce residents complaints which currently are over 2,700 per year. This program will address proactive street tree pruning of 23,333 trees per year through contracted services.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

PROJECT COSTS (\$)	2021	Future Phases
Cost/Quote:	1,000,000	777,127
Internal Charges:	0	0
External Consulting:	0	0
Sub Total:	1,000,000	777,127
HST Impact:	17,600	13,677
Total Project Cost:	1,017,600	790,800

NOTES

Phase 1 is 95% complete and has made a noticeable improvement in the neighborhoods which have been completed. Once the 70,000 trees have been pruned the remaining 30,000 trees will be addressed as part of the regular operating budget. The operating budget is being increased by \$50K each year from 2020 to 2022 to ensure a total of \$150K additional operating funding is available by 2023. Currently, the tree inventory is not in a state of good repair & backlog led to this proactive approach to updating the asset.

SOURCE(S) OF FUNDING (\$)	Components						Future Phases
Funding Type	Budget					TOTAL	
Tax	1,017,600	0	0	0	0	0	790,800
TOTAL FUNDING	1,017,600					0	790,800

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

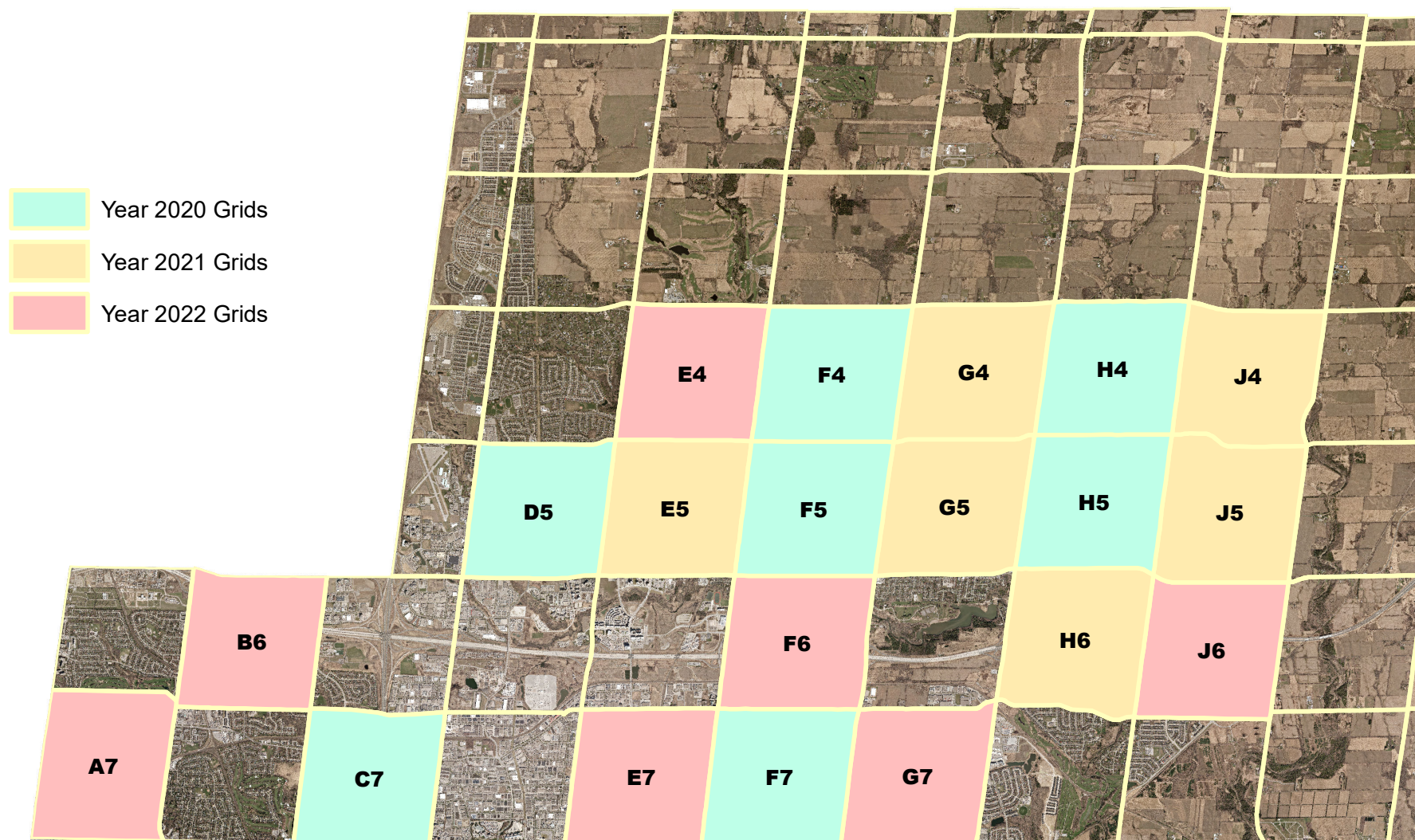
DCA	Year	Amount	Amount in Study	Life Cycle
Name				
				Amount in Study: <input type="text"/>
				Amount Incl HST <input type="text"/>
				Year in the study <input type="text"/>

DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:

Project: Block Pruning 3 Year Project
Total Project Cost Table

	Project Number(s)	Past Projects (\$)	Current Project (\$)	Future Projects (\$)	Total (\$)
Project Component 1	20197		\$ 1,244,396		\$ 1,244,396
Project Component 2			\$ 1,017,600		\$ 1,017,600
Project Component 3			\$ 790,804		\$ 790,804
Total (\$)		\$ -	\$ 3,052,800	\$ -	\$ 3,052,800
Description of Project	3 year capital project to prune 70% of all City trees to improve storm damage resistance and reduce residents complaints which currently are over 2,000 ACRs per year.				
What was completed in the past? Include timeline of works done.	Year 1 program was 7 complete blocks which represented the highest risk trees. The year 1 program will be 100% complete by December 31, 2020.				
Current project objective	Year 2 of the program will be to complete 6 complete blocks which represent the next highest risk trees. The goal is to start in late fall and be complete by June 1, 2021.				
Description of future work required. Include estimated timing.	Complete block pruning of map grids E5,G4,G5,H6,J4,J5 by June 1, 2021				

Neighbourhood Tree Maintenance Project 2020, 2021 and 2022 Grids





2021 PROJECT FUNDING REQUEST FORM

Appendix Page 49

Number: 21140

Project Cost: \$1,620,700

Project Name: Corporate Fleet Replacement - Non-Fire

Commission: Community & Fire Services

Repair/Replace

Department: Operations - Fleet

Useful Life: 5 Pre Approval: ☐

Project Mgr: Raymond Law/Peter Englezakos

Category: Major

Cost Validation: Other(specify in Notes)

Ward(s): CW ☒ 1 ☐ 2 ☐ 3 ☐ 4 ☐
5 ☐ 6 ☐ 7 ☐ 8 ☐

Requirement Validation: Multiple(specify)

DETAILED DESCRIPTION (SCOPE OF PROJECT):

2021 Annual Fleet Replacement Program based on the Council adopted Corporate Fleet Policy Guidelines. Life cycle costing targets optimal replacement intervals (ORI) which identifies the most cost effective time period for replacement. All vehicles and equipment contained in this program have reached or surpassed the ORI. User Departments were consulted with respect to the units in this program. Total units - 31 units

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

PROJECT COSTS (\$)	2021	Future Phases	NOTES
Cost/Quote:	1,592,680	0	Useful life varies - 4 to 12 years based on units types. Operations-Non Fleet (\$53k) includes cord trimmers, chainsaws, blowers, etc. Cost Validation- Most recent purchase of similar unit type; Requirement validation - Condition assessment, vehicle reliability & down time, & operating costs. Units specified in this program will be purchased with the most recent technology available at time of purchase providing maximized fuel economy with minimal emissions.
Internal Charges:	0	0	
External Consulting:	0	0	
Sub Total:	1,592,680	0	
HST Impact:	28,031	0	
Total Project Cost:	1,620,700	0	

SOURCE(S) OF FUNDING (\$)		Components				Future Phases
Funding Type	Budget	Licensed	Non Licensed	Non Fleet	TOTAL	
Operating Funded Life Cycle	1,620,700	727,633	840,131	52,936	0 1,620,700	0
TOTAL FUNDING	1,620,700				1,620,700	0

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

DCA Name	Year	Amount	Amount in Study	Life Cycle
				Amount in Study: 2,440,500
				Amount Incl HST 2,416,900
				Year in the study 2021
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				
<div></div>				

2021 Corporate Fleet Replacement - Non-Fire

Asset ID	Inventory Description	Model	Mileage (km)	Usage (hours)	Facility	Category	2021 Updated Cost	Project Notes
1232	ONE TON CREWCAB FLATBED DIESEL-C3500 SILV	2013	151,087		OPERATIONS-Licensed	Licensed	62,261	
1240	COMPACT SUV FWD-ESCAPE	2012	80,659		OPERATIONS-Licensed	Licensed	28,854	Deferred from 2020 to 2021
1243	SERVICE BODY SIGN TRUCK C/W POST PULLER-F 550	2013	121,123		OPERATIONS-Licensed	Licensed	90,048	
1421	3.5 YD ARTICULATING LOADER -721 D	2014		9,502	OPERATIONS-Non Licensed	Non Licensed	280,908	
1426	TRACTOR 4 WD WITH CAB-6320	2003		7,011	OPERATIONS-Non Licensed	Non Licensed	160,092	Project 18247 - life extended, deferred to 2021 to be re-submitted
1913	90 ' V BIN STOCKPILING CONVEYOR-	2010		4,370	OPERATIONS-Non Licensed	Non Licensed	90,145	Deferred from 2020 to 2021
1973	TRAILER-TRAILER	2009			OPERATIONS-Licensed	Licensed	7,632	Deferred from 2019 to 2021
1977	3 PT HITCH PTO DRIVEN SANDER-1140P	2009			SIDEWALK-Non Licensed	Non Licensed	4,897	
3321	3/4 TON 4X4 PICK UP C/W 8' SNOW PLOW	2011	121,960		OPERATIONS-Licensed	Licensed	51,378	Previously approved in 2019 (Project 19207) - to be resubmitted in 2021 due to budget shortfall; Updated price based on 090-T-20 - \$50,370 plus 2% inflation
3327	FULL SIZE PICKUP 4X4 WITH 8' ARCTIC PLOW-F250	2013	117,208		OPERATIONS / PARKS-Licensed	Licensed	42,838	
3328	FULL SIZE PICKUP 4X4 WITH 8' ARCTIC PLOW-F250	2013	112,992		OPERATIONS / PARKS-Licensed	Licensed	42,838	
3334	ONE TON CREW CAB FLATBED DIESEL-C3500 SILV	2013	81,822		OPERATIONS-Licensed	Licensed	62,242	
3344	CREW CAB DIESEL 9' DUMP	2010	68,384		OPERATIONS-Licensed	Licensed	41,377	Previously approved in 2019 (Project 19207) - to be resubmitted in 2021 due to budget shortfall; Updated price based on 090-T-20 - \$40,566, plus 2% inflation
3376	16 ' CUBE VAN	2008	93,309		OPERATIONS-Licensed	Licensed	51,328	Previously approved in 2019 (Project 19207) - to be resubmitted in 2021 due to budget shortfall; Updated price based on 090-T-20 - \$50,322 plus 2% inflation
3443	56 HP 2 WHEEL DRIVE TRACTOR C/W CAB-5225	2007		3,622	OPERATIONS-Non Licensed	Non Licensed	51,141	Deferred from 2019 to 2021
3458	4 X 4 TRACTOR LOADER	2007			OPERATIONS-Non Licensed	Non Licensed	127,500	Previously approved in 2019 (Project 19207 - \$85,200) - to be resubmitted in 2021 due to budget shortfall; Updated price based on 108-Q-20 - \$125k, plus 2% inflation
3471	ZERO TURN 60" DIESEL POWERED-ZD21F ZERO TURN	2012		1,532	OPERATIONS-Non Licensed	Non Licensed	15,814	Deferred from 2020 to 2021
3472	ZERO TURN 60" DIESEL POWERED-ZD21F ZERO TURN	2012		1,306	OPERATIONS-Non Licensed	Non Licensed	15,814	Deferred from 2020 to 2021
3493	ZERO TURN MOWER 60" DIESEL POWERED-ZD21F ZERO TURN	2012		1,676	OPERATIONS-Non Licensed	Non Licensed	15,814	Deferred from 2020 to 2021
3494	ZERO TURN MOWER 60" DIESEL POWERED-ZD21F ZERO TURN	2012		1,460	OPERATIONS-Non Licensed	Non Licensed	15,814	Deferred from 2020 to 2021
4036	ZERO TURN 60" REAR DISCHARGE DIESEL -TURN	2011		1,642	OPERATIONS-Non Licensed	Non Licensed	16,501	Deferred from 2019 to 2021
4141	ZERO TURN 60" DIESEL POWERED-ZD21F ZERO TURN	2012		1,682	OPERATIONS-Non Licensed	Non Licensed	15,814	Deferred from 2020 to 2021
4902	ELECTRIC POWERED UTILITY VEHICLE-CARRYALL 1	2011		944	OPERATIONS-Non Licensed	Non Licensed	15,347	
5350	FULL SIZE PICK UP-GMC SIERRA 1500	2008	15,451		MUSEM-1-Licensed	Licensed	31,485	Deferred from 2019 to 2021
6083	COMPACT VAN FWD-GRAND CARAVAN	2013	110,015		ENFOR LIC-Licensed	Licensed	25,284	
6084	COMPACT VAN FWD-GRAND CARAVAN	2013	96,027		ENFOR LIC-Licensed	Licensed	25,284	
6085	COMPACT VAN FWD-GRAND CARAVAN	2013	231,127		ENFOR LIC-Licensed	Licensed	25,712	
6093	COMPACT SUV FWD HYBRID-ESCAPE	2011	131,089		ENFOR LIC-Licensed	Licensed	45,365	Deferred from 2019 to 2021
6095	COMPACT VAN FWD-GRAND CARAVAN	2012	76,312		CLERK-1-Licensed	Licensed	26,994	Deferred from 2019 to 2021
6136	COMPACT CARGO VAN-GRAND CARAVAN	2013	193,246		ENFOR LIC-Licensed	Licensed	25,284	
6139	COMPACT SUV FWD -ESCAPE	2013	99,072		ENFOR LIC-Licensed	Licensed	28,854	
All	Operation Non Fleet < \$5,000 or Misc	2020			OPERATIONS- Operation Non Fleet < \$5,000 or Misc	Operation Non Fleet < \$5,000 or Misc	52,020	
						Total Pre-Tax	1,592,680	
						HST impact	28,031	
						Total Project Cost	1,620,712	
						Rounded Off - Project Cost	1,620,700	



2021 PROJECT FUNDING REQUEST FORM

Number: 21177

Project Cost: \$1,557,100

Project Name: Corporate Capital Contingency

Commission: Corporate Wide

New Asset/Expansion

Department: Corporate Wide

Useful Life: 0

Pre Approval: ☒

Project Mgr:

Category: Major

Ward(s): CW ☒ 1 ☐ 2 ☐ 3 ☐ 4

Cost Validation: Other(specify in Notes)

5 ☐ 6 ☐ 7 ☐ 8 ☐

Requirement Validation: Other(specify in Notes)

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Total amount of contingency for 2021 applicable capital projects.

BUILDING MARKHAM'S FUTURE TOGETHER:

PROJECT COSTS (\$)	2021	Future Phases	NOTES
Cost/Quote:	1,557,093	0	Other Internal funding breakdown:
Internal Charges:	0	0	\$8,960 Non-DC Growth, \$3,800 Waterworks reserve, \$2,510
External Consulting:	0	0	Development fee reserve
Sub Total:	1,557,093	0	
HST Impact:	0	0	
Total Project Cost:	1,557,100	0	

SOURCE(S) OF FUNDING (\$)	Components						Future Phases
Funding Type	Budget					TOTAL	
DCA	1,206,461	0	0	0	0	0	0
Gas Tax	182,400	0	0	0	0	0	0
Operating Funded Life Cycle	77,600	0	0	0	0	0	0
Other Internal	15,270	0	0	0	0	0	0
Parks Cash-in-Lieu	70,169	0	0	0	0	0	0
Tax	5,200	0	0	0	0	0	0
TOTAL FUNDING	1,557,100					0	0

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

<u>DCA</u>	<u>Year</u>	<u>Amount</u>	<u>Amount in Study</u>	<u>Life Cycle</u>
Name				Amount in Study: <input type="text"/> Amount Incl HST <input type="text"/> Year in the study <input type="text"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost: <div style="border: 1px solid black; height: 100px; width: 100%;"></div>				



Report to: General Committee

Meeting Date: Oct 5, 2020

SUBJECT: Contract Extension for Wide Area Network (WAN)
Connectivity and Internet Services

PREPARED BY:
Sugun Rao, Ext. 4868
Rosemarie Patano, Ext. 2990

RECOMMENDATION:

1. That the report entitled “Contract Extension for Wide Area Network (WAN) Connectivity and Internet Services” be received;
2. That the contract for WAN Services and Internet Services be extended for two (2) years (October 1, 2020 - September 30, 2022) to Rogers Communications at 11.6% discounted rate, in the amount of \$577,814.44, inclusive of HST, broken down as follows;

• October 1, 2020 – December 31, 2020	\$ 72,226.81
• January 1, 2021 – December 31, 2021	\$288,907.22
• January 1, 2022 – September 30, 2022	<u>\$216,680.41</u>
Total (2 years)	\$577,814.44
3. That the contract for Internet Services with higher bandwidth (increasing from 500Mbps to 600Mbps) be extended for two years (October 1, 2020 - September 30, 2022) to Bell Canada at the existing 2019 rate, in the amount of \$79,006.46 inclusive of HST, broken down as follows;

• October 1, 2020 – December 31, 2020	\$ 9,875.81
• January 1, 2021 – December 31, 2021	\$ 39,503.23
• January 1, 2022 – September 30, 2022	<u>\$ 29,627.42</u>
Total (2 years)	\$ 79,006.46
4. That the WAN Services from Rogers and the two Internet Services from Rogers and Bell to be funded from operating budget account# 400-404-5108 in amount of \$656,820.90 (inclusive of HST) over a two (2) year period;
5. That the tendering process be waived in accordance with Purchasing Bylaw 2017-8, Part II, Section 7 (1) (c) which states “when the extension of an existing contract would prove more cost-effective or beneficial”;
6. AND THAT Staff be authorized and directed to do all things necessary to give effect to this resolution.

PURPOSE:

To exercise the option to extend contract 339-R-09 for Dual Redundant Internet Services and Wide Area Network (WAN) for an additional two (2) year term (October 01, 2020 to September 30, 2022) with Rogers Communications and Bell Canada.

BACKGROUND:

In 2009, the City of Markham awarded Internet Services and Wide Area Network (WAN) Connectivity via contract 339-R-09 to Rogers Communications and Bell Canada with Staff recommendations for 40 Mbps Internet Services (which was later upgraded to 200Mbps) and a managed 1 Gigabit Fibre connectivity solution to connect 34 City and Library sites, as well as a managed 10 Gigabit Fibre connectivity between the Civic Centre and 8100 Warden Avenue with Rogers Communications, and 500 Mbps Internet Services with Bell Canada. The fibre WAN connectivity provides the architectural and technical viability needed in order to meet the demands of delivering services for the City's residents from all City facilities. Accordingly, it has enabled the City to deploy key business applications across the network such as Voice over Internet Protocol (VoIP) for telecommunication, serving enterprise Geographic Information System applications over the internet, Closed Circuit Television (CCTV) and Supervisory Control and Data Acquisition (SCADA) capabilities for Waterworks, automated software deployment across the city, and for Automated Vehicle Location (AVL) for City fleet.

In addition, the City has been and will continue to provide enhanced self-service capability through the portal including recreation program registration, audio (and content) streaming of all Committee and Council meetings to the public, and free wireless public internet access in selected City facilities, among others. As City staff need to access higher bandwidth on a day-to-day basis to perform their duties (while on site or working from home) and the City continues to provide increased access to services through technology, the reliability and affordability of the technology infrastructure becomes increasingly important.

OPTIONS/ DISCUSSION:

The WAN is a vital component of the City's data network and access to fast and reliable internet connectivity continues to be a key priority to support virtual recreation programs and remote workers during the COVID pandemic. Staying with the current supplier would ensure the continued supply of a proven and reliable solution in this critical area and the avoidance of considerable disruption in the event of replacement.

In order to minimize the risk of internet outage from using a single provider, for redundancy and service provider diversity, the City also uses Bell Canada services as a second line of internet connection and staff recommend the contract with Bell Canada for these services to be renewed at the existing rate.

Staff concluded that it is in the best interest of the City to renew internet and WAN Services with Rogers Communications, and with both Rogers Communications and Bell Canada for internet services due to the following reasons:

1. Both Rogers Communications and Bell Canada are the only two vendors that provide the fibre connectivity in Markham. Both vendors continue to remain competitive with other service providers in the market;
2. The recommended contract extension pricing includes:
 - A negotiated 11.6% monthly rate reduction with Rogers Communications for the WAN connectivity and Internet services, for a net savings of \$38,090.40 per year;
 - A negotiated internet bandwidth increase from 500 Mbps to 600 Mbps for public wireless access at same rate.
3. Both Bell Canada and Rogers Communications have a proven track record with the City, and have provided satisfactory customer services during the current Term of 2010 – 2020.

It is recommended that the WAN and internet service contracts be extended for additional two (2) years with both Rogers and Bell. The cost for this service renewal is contained within the existing ITS operating budget.

FINANCIAL CONSIDERATIONS

The annual service fee for WAN and Internet Services will be paid from operating account 400-404-5108 as part of annual budget approved by Council.

	Total Cost of Award 2021 - 2022	Cost of Award by Year		
		Oct - Dec 2020	Jan to Dec 2021	Jan - Sep 2022
Rogers	\$ 577,815	\$ 72,227	\$ 288,908	\$ 216,680
Bell	<u>79,006</u>	<u>9,876</u>	<u>39,503</u>	<u>29,627</u>
Subtotal	656,821	82,103	328,411	246,307

	Total Cost of Award 2021 - 2022	Cost of Award by Year		
		Oct - Dec 2020	Jan to Dec 2021	Jan - Sep 2022
Rogers	\$ 577,815	\$ 72,227	\$ 288,908	\$ 216,680
Bell	<u>79,006</u>	<u>9,876</u>	<u>39,503</u>	<u>29,627</u>
Subtotal	656,821	82,103	328,411	246,307

2020 Budget Impact		
Budget for Oct to Dec 2020	\$ 91,626	(A)
Cost of Award	<u>82,103</u>	(B)
Savings for 2020	9,523	(C) = (A) - (B)

2021 Budget Impact		
Current Annual Budget	\$ 366,501	(D)
Cost of Award	<u>328,411</u>	(E)
Savings for 2021	38,090	(F) = (D) - (E)

Savings from October - December 2020 (C) in the amount of \$9,523 will be included in the 2020 year-end operating results of the City.

The 2021 operating budget will be reduced by \$38,090.

HUMAN RESOURCES CONSIDERATIONS

Not applicable

ALIGNMENT WITH STRATEGIC PRIORITIES:

Not applicable

BUSINESS UNITS CONSULTED AND AFFECTED:

Not applicable

RECOMMENDED BY:

Nasir Kenea
Chief Information Officer, ITS

Trinela Cane
Commissioner, Corporate Services



Report to: General Committee

Meeting Date: October 5, 2020

SUBJECT: Contract # 043-S-20 To Operate and Maintain the Combined Heat and Power System at Angus Glen Community Centre

PREPARED BY: Jason Vasilaki, Project Manager, Ext. 2845
Flora Chan, Senior Buyer, Ext. 3189

RECOMMENDATION:

1. THAT the report entitled “Contract # 043-S-20 To Operate and Maintain the Combined Heat and Power System at Angus Glen Community Centre” be received and,
2. THAT the Operation and Maintenance of the Angus Glen Combined Heat and Power System be awarded to Markham District Energy Inc. (“MDE”) to an annual upset limit of \$167,904.00 inclusive of HST impact for a period of five (5) years (2020 – 2024), totaling \$839,520.00 inclusive of HST impact (excluding adjustment to CPI) over that five (5) year period and,
3. THAT years 2 – 5 (2021-2024) be adjusted based on the Consumer Price Index (CPI) Ontario All-Items (January to January) and,
4. THAT the 2020 award be funded from operating budget account 504-921-5314 “Service Agreements Facility Maintenance” and,
5. THAT the tendering process be waived in accordance with Purchasing By-Law 2017-8, Part II, Section 11.1 (h), which states “where it is in the best interests of the City to acquire non-standard items or Professional Services from a supplier who has a proven track record with the City in terms of pricing, quality and service;” and,
6. THAT the Mayor and Clerk be authorized to execute the agreement with Markham District Energy Inc, in a form approved by CAO and the City Solicitor and,
7. THAT the CAO be authorized to extend the contract for an additional five (5) years (2025-2029) subject to Council’s approval of the annual operating budget
8. AND THAT Staff be authorized and directed to do all things necessary to give effect to this resolution.

PURPOSE:

The purpose of this report is to seek Council’s authorization for a non-competitive award to Markham District Energy Inc. (“MDE”) to operate the Combined Heat and Power (CHP) system at Angus Glen Community Centre & Library and for associated maintenance advisory and maintenance co-ordination services on behalf of the City.

BACKGROUND:

The City recently installed a Combined Heat and Power (CHP) system at Angus Glen Community Centre & Library (AGCC&L). Commissioning is currently ongoing.

The CHP system utilizes a heat engine (a natural gas powered generator) to generate electricity. The facility uses this electricity in lieu of power from the electrical utility (grid), at a lower overall cost. A typical generator creates heat as a by-product, which is usually released to the environment as waste heat. The CHP process reclaims such waste heat and reuses it in the facility, thereby further creating even more savings in utility costs. At Angus Glen, this waste heat is used to supplementally heat the building's interior space, the domestic water and the water in the pools. As a result AGCC&L will see a reduction in overall operating costs as the utility savings are greater than the costs to operate the CHP (including this contract).

Markham District Energy Inc. (MDE) is an internationally recognized district energy company providing heating and cooling services to nearly 12 million square feet of private and public buildings in Markham with 15.5 MW (megawatts) of combined heat and power equipment in their system.

MDE is wholly owned by the City of Markham and provides heating and cooling services to City facilities including; Civic Centre, FLATO Markham Theatre, 8100 Warden, Pan Am Centre, Cornell CC&L and Fire Station 99.

OPTIONS/ DISCUSSION:

Retaining an experienced CHP operator would ensure maximum operational efficiency and energy savings are achieved. Staff recommends a non-competitive contract award to MDE based on following rationale:

Technical expertise

MDE has owned and operated CHP equipment since 2001. As part of the service agreement, MDE will provide the following services:

- CHP design and integration reviews
- Assisting with start-up and commissioning activities
- Establishing vendor maintenance contracts and reviews in conjunction with the City representative
- Managing warranty and vendor guarantees
- Management and ongoing review of CHP Vendor Service
- Management of any third-party service or repair firms
- Review and advise on natural gas contracts with Enbridge
- Updates to the City with respect to industry awareness, changing rules, regulation and advocacy
- Updates and assistance to the City with respect to Ontario Energy Board matters, LDC rules, electricity regulations specific to CHP
- Regular reporting to the City (daily, monthly and annual performance reports)

Efficiency and cost savings

This agreement is structured to ensure overall up-time (target of 8,400 hours per year) on the CHP equipment to ensure the City achieves the maximum annual utility cost savings from this capital investment.

In Staff's due diligence during business case development in 2018, we consulted with other municipalities that had already installed CHP units in recreation facilities and found that operational issues due to lack of expertise and availability of parts and service negatively impacted their ability to achieve base case targets or stretch targets. To maximize operational efficiencies, Staff sought out and have received advice and support from MDE during the scoping and construction of the CHP at AGCC&L. A performance based payment is recommended as part of the agreement, to act as an additional incentive for MDE to operate the CHP favourably and minimize downtime, thereby maximizing the energy savings to the City, as detailed in the Financial Considerations section. Such performance incentive payment clauses are common in the energy savings industry (e.g., building automation systems with a 50/50 split savings between the building owner and Energy Savings Company/provider), where revenue generated is highly impacted based on performance. Performance based contracting has been a successful model for procuring energy efficiency retrofits in the public sector for over twenty years.

MDE has experienced staff and resources and is located only 5.8 km from the CHP site to efficiently and effectively carry out operational services. As part of the service agreement, MDE's operating engineers will provide remote monitoring and control services 24 hours a day, 365 days a year. Alternative operators would take hours to respond to site issues and would be unavailable outside normal business hours.

MDE will be the first responder to site when abnormal or shut-down conditions occur for initial diagnosis and restart. MDE will then liaise with third-party technicians as required in order to minimize unnecessary dispatch services.

The overall intent is for MDE to be the one-stop shop, where MDE will take on full responsibility to operate and maintain the CHP system as if it was a MDE-owned asset.

The alternative would be for the City to hire another third party or its own technical expert to join our staff complement. By partnering with MDE the City is able to achieve enterprise synergies with a business we own, that is an expert CHP operator, and a company with which we have significant experience as a satisfied customer.

Staff Analysis

Staff tested the market and confirmed that pricing in the agreement is reasonable and competitive. The performance based incentive will serve to maximize operational efficiencies and savings to the City.

We believe this agreement provides the expected value to the City and staff will undertake a detailed review of performance results with MDE at the end of the second year of the contract.

Year one will be under warranty, therefore a second full year outside of warranty is necessary for a true measure of performance. The outcome of that review may result in continuation of the contract, cancellation or agreed to modifications.

FINANCIAL CONSIDERATIONS:

Award Breakdown

The total payment to MDE is comprised of 3 components: (1) an operating base fee, (2) a maintenance services fee and (3) a performance-based incentive; and will be paid from the reduction in the utility costs at AGCC&L.

Table 1: Award Breakdown:

All costs will be adjusted yearly based on Consumer Price Index (CPI) Ontario All-Items (January to January)

(1) Operating Base Fee

The annual base fee is \$45,792 inclusive of HST impact, and it includes the following:

- advisory and management services
- remote monitoring and operating services
- monthly (12) site visits and inspections per year by MDE's CHP Lead, and
- six (6) site visits per year by MDE's Operations staff for such things as manual re-starts or to enable the emergency power mode.

(2) Maintenance Services

MDE will invoice the City for costs from the CHP vendor with no markup on a transparent and open book basis. On-site operation and maintenance (O&M) services performed by MDE staff, as well as any required on-site attendance to supervise or assist the CHP vendor, will be billed on actual hours at \$71.40 per hour per person, and 1.5 times for after-hours work, plus HST impact. While the actual cost of maintenance services will fluctuate from year to year, and will be billed as incurred, MDE estimates that the average annual cost for the first 5 years of operation is expected to be approximately \$76,320, inclusive of HST impact.

(3) Performance Incentive

In the event MDE achieves utility savings on behalf of the City exceeding the base business case, such savings is shared 50/50 between the City and MDE, as a financial incentive for performance. The maximum incentive is capped at 100% of the base fee (\$45,792). On the other hand, a financial penalty is imposed in the event of negative performance below the base business case. The maximum financial penalty is a reduction of 50% in the operating fee (\$22,896). The penalty is limited because negative performance in utility savings may result from factors that are unrelated to MDE's performance (e.g. utility rate fluctuations, facility maintenance and/or deficiencies in the supply of the equipment by others) and MDE will have incurred sunk costs in fulfilling their contractual obligations.

The actual costs will be benchmarked against a Base Case financial scenario and both the positive and negative variance from the Base Case will be shared 50/50 with MDE.

Table 2: Incentive Illustration

	Base Case	Savings Above Base Case due to Low O&M Fees (Example 1)	Savings Below Base Case due to High O&M Fees (Example 2)	Savings Below Base Case due to Decrease in Hrs of Operation (Example 3)	Maximum MDE Incentive (Example 4)*
Hours of Operation	8,400	8,400	8,400	7,500	8,760
Electrical Utility Reduction	\$498,420	\$498,420	\$498,420	\$445,018	\$589,733
Natural Gas Utility Increases	(\$128,466)	(\$128,466)	(\$128,466)	(\$114,702)	(\$120,575)
Overall Utility Savings (A)	\$369,954	\$369,954	\$369,954	\$330,316	\$469,158
Maintenance Services	\$68,700	\$50,880	\$76,320	\$68,700	\$76,320
Base Fee	\$45,792	\$45,792	\$45,792	\$45,792	\$45,792
Total O&M Fees (B)	\$114,492	\$96,672	\$122,112	\$114,492	\$122,112
Net Savings (C = A - B)	\$255,462	\$273,282	\$247,842	\$215,824	\$347,046
Less: MDE Incentive (D)	\$0	\$8,910	(\$3,810)	(\$19,819)	\$45,792
Net Savings to City (E = C - D)	\$255,462	\$264,372	\$251,652	\$235,643	\$301,254
<u>Payment to MDE</u>					
Total O&M (B)	\$114,492	\$96,672	\$122,112	\$114,492	\$122,112
MDE incentive (D)	\$0	\$8,910	(\$3,810)	(\$19,819)	\$45,792
Total Payment to MDE	\$114,492	\$105,582	\$118,302	\$94,673	\$167,904

**Example 4 based on favourable fluctuations in utility rates.*

The Base Case scenario anticipates 8400 hours of operation per year at 95% availability at 2020 corporate electrical and natural gas utility budget rates. The Overall Utility Savings (A) is estimated based on utilities volume adjustment due to the CHP system. The Base Case estimates Net Savings (C) of \$255,462.

If MDE generates Net Savings (C) above or below the Base Case, the incentive will increase (Example 1) or decrease (Examples 2 and 3) the Total Payment to MDE will adjust accordingly.

In order to achieve maximum incentive, a minimum of \$347,046 in Net Savings (C) (or 35.9% above the Base Case) is required (Example 4), resulting in a net savings to the City of \$301,254.

Over the course of the first five (5) years (2020 – 2024), the award value is \$839,520.00 inclusive of HST impact (excluding adjustment to CPI) over that five (5) year period.

OPERATING BUDGET AND LIFE RESERVE IMPACT:

The capital investment, after the utilities incentive, is \$1,749,385 and is up-fronted by the Life Cycle Replacement and Capital Reserve through capital project #18083, Angus Glen Community Centre Combined Heat and Power (CHP) System. The estimated service life is 25 years and the estimated annual net cost savings according to base business case is \$255,462, upon start-up, subject to changes in actual usage, weather, facility operation, and utilities rates.

The payback period is approximately 6.8 years (\$1,749,385/\$255,462). Once the initial up-fronted costs have been fully paid back, the estimated net annual savings of \$255,462 will be split 50% (\$127,731) to the MECO account to fund other energy management initiatives and 50% (\$127,731) as a reduction to the Angus Glen Community Centre operating budget.

At the end of the 25 year life of the CHP, the project business case will be re-evaluated for re-investment based on the known benefits and costs at that time. It will not be entered into the City's Life Cycle Reserve.

LEGAL CONSIDERATIONS:

The City is subject to the following new trade agreements, which apply to public sector procurements above a certain dollar threshold: the Canada-European Union Comprehensive Economic and Trade Agreement (CETA), effective September 21, 2017; and the Canadian Free Trade Agreement (CFTA), effective July 1, 2017.

CETA and CFTA do not apply to this proposed procurement, as MDE and the City are affiliated entities.

ALIGNMENT WITH STRATEGIC PRIORITIES:

This project aligns with Building Markham's Future Together goals of:

1. Safe, Sustainable and Complete Community: The CHP unit is configured to provide back up power so Angus Glen CC&L can act as an emergency reception centre in the event of a prolonged power outage.
2. Stewardship of Money and Resources: The unit will provide substantial annual utility cost savings for one of our largest facilities for its service life of 25 years.

BUSINESS UNITS CONSULTED AND AFFECTED:

The Recreation, Legal, and Finance Departments have been consulted and their comments have been incorporated.

RECOMMENDED BY:

Graham Seaman, P. Eng, LEED AP, CEM
Director, Sustainability & Asset Management

Trinela Cane
Commissioner, Corporate Services



Report to: General Committee

Meeting Date: October 5, 2020

SUBJECT: World Council on City Data ISO 37120 Certification
PREPARED BY: Raj Raman, Ext. 7522

RECOMMENDATION:

- 1) That the report dated October 5, 2020 titled “World Council on City Data, ISO 37120 Certification” be received, and,
- 2) That the formal virtual presentation of the World Council on City Data (WCCD), ISO 37120 Platinum Certification to the City of Markham be received.

PURPOSE:

This report is to inform Council of the receipt of the World Council on City Data (WCCD) ISO 37120 platinum certification for the City’s data for the year ended December 31, 2018.

BACKGROUND:

The World Council on City Data (WCCD) was founded in 2014 to help communities of all sizes - in Canada and across the globe - to embrace standardized, independently verified, and globally comparable city data to become more sustainable, resilient, prosperous inclusive and smart.

Since its founding, the WCCD has been working with 100 cities worldwide and has helped these cities to adopt ISO 37120, the first international standard for city data. The WCCD and ISO 37120 are a truly “Made in Canada” initiative – with their ultimate creation primarily spearheaded by Canadian urban thinkers and city leaders. The standard includes 104 indicators across 19 themes and standardizes data to measure progress on city services and quality of life. ISO 37120 provides cities with quantitative, globally comparable and independently verified local-level data enabling any city, of any size, to measure and compare its social, economic, and environmental progress internally year over year, and also in relation to other peer cities locally and globally. The WCCD Global Network includes one hundred cities across more than thirty countries.

The WCCD is now implementing three international standards referred to as the ISO 37120 Series – that includes ISO 37120 as the base document and two new standards: ISO 37122 – Indicators for Smart Cities and ISO 37123 – Indicators for Resilient Cities.

OPTIONS/ DISCUSSION:

In July 2019, the Government of Canada - Ministry of Infrastructure and Communities announced the “[Data for Canadian Cities Pilot Project](#)” (DCCPP). This project is a three year initiative to support WCCD to work with fifteen selected municipalities across Canada to help collect globally standardized data set that measures the quality of life and delivery of city services at a municipal level. These fifteen municipalities (refer Appendix A) will join a group of cities across the country that have subscribed to ISO 37120 – the first international standard on city data.

The DCCPP will help the participating cities become certified for three years under ISO 37120, the world’s first international standard for city data. As the project continues into years two and three, a significant focus will be placed on assisting the participating municipalities in using the data to improve city services and quality of life for citizens. With the City achieving WCCD ISO 37120 Certification, it is now eligible to apply for both ISO 37122 (Smart Cities) & ISO 37123 (Resilient Cities) Certification.

What is ISO 37120?

WCCD has been working with cities worldwide to develop a set of globally comparable indicators for City Services and Quality of Life. While the first international standard on city data, was published in May 2014 by the International Organization for Standardization (ISO), this new international standard was developed using the framework of the Global City Indicators. ISO 37120 defines and establishes definitions and methodologies for the set of indicators to steer and measure the performance of city services and quality of life.

The standard includes a comprehensive set of 104 indicators (56 core 59 supporting) – (refer Appendix B) across 19 themes that measures a city's social, economic, and environmental performance in areas such as, Economy, Education, Energy, Environment, Finance, Governance, Health, Housing, Population and Social Conditions, Recreation, Safety, Solid Waste, Sports and Culture, Telecommunication, Transportation, Urban /Local agriculture and food security, Urban Planning, Wastewater and Water. Reporting over 90 indicators including all core indicators will result in obtaining the WCCD ISO 37120 Platinum Certification. Cities can obtain different levels of certification, platinum being the highest based on the number of indicators reported and verified according to ISO 37120. Each annual certification under ISO 37120 and registration in the WCCD Global Cities Registry for the City is in effect and valid for one year.

WCCD supported City staff both remotely and through in person meetings to help the City achieve Platinum certification the highest level of WCCD ISO 37120 certification (refer Appendix C) WCCD also assisted the City in obtaining data for indicators relating to services rendered by other levels of government (e.g. Education, Health, and Telecommunication). Through the DCCPP, the City of Markham now joins 30 Canadian cities and over 100 cities in more than 30 countries worldwide that have been certified for ISO 37120.

FINANCIAL CONSIDERATIONS

The Data for Canadian Cities Pilot Project (DCCPP) announced by the Government of Canada waives the annual WCCD certification fee of \$10k for two years and the City will pay the fee for an additional year.

HUMAN RESOURCES CONSIDERATIONS

N/A

ALIGNMENT WITH STRATEGIC PRIORITIES:

Receipt of this certification aligns with the City's leadership in all data transparency and sharing which is one of the goals of the Digital Strategy.

BUSINESS UNITS CONSULTED AND AFFECTED:

N/A

RECOMMENDED BY:

Andy Taylor, CAO

Trinela Cane, Commissioner,
Corporate Services

Arvin Prasad, Commissioner, Development Services

ATTACHMENTS:

List of Cities Participating in the DCCP project - Appendix A

List of Indicators – Appendix B

WCCD Certification – Appendix C

Appendix A

List of Cities participating in the DCCP project

1. City of Brampton, Ontario
2. City of Charlottetown, PEI
3. City of Corner Brook, Newfoundland and Labrador
4. County of Brant, Ontario
5. City of Edmonton, Alberta
6. City of Greater Sudbury, Ontario
7. City of Kitchener, Ontario
8. City of Markham, Ontario
9. City of Mount Pearl, Newfoundland and Labrador
10. Town of Richmond Hill, Ontario
11. City of Saskatoon, Saskatchewan
12. City of Selkirk, Manitoba
13. City of St. John's, Newfoundland and Labrador
14. City of Waterloo, Ontario
15. City of Yellowknife, Northwest Territories

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APPENDIX B

City of Markham
List of Indicators
ISO 37120 Certification

Theme	Indicator		Description	Verified Value	Sourced By	Source
	Core	Supporting				
Economy	5.1		City's unemployment rate	7.26%	WCCD	2016 Census-Statistics Canada
		5.2	Assessed value of commercial and industrial properties as a % of total assessed value of all properties	12.76%	WCCD	Markham Financial Information Return
		5.3	% of persons in full employment	52.25%	WCCD	2016 Census-Statistics Canada
		5.4	Youth unemployment rate	20.92%	WCCD	2016 Census-Statistics Canada
		5.5	Number of business per 100k Population	3,094	WCCD	Markham Employment Survey
		5.6	Number of new patents per 100k population	90	WCCD	United States Patent Office
		5.7	Annual number of visitor stays (overnight) per 100k population	130,673	City	Economic Development Department
		5.8	Commercial air connectivity (number of non stop commercial air destinations)	345,011	WCCD	Statistics Canada
Education						
	6.1		% of female school aged population enrolled in schools	93.13%	WCCD	Ministry of Education, Ontario (Markham)
	6.2		% of students completing primary education survival rate	100%	WCCD	Ministry of Education, Ontario (Markham)
	6.3		% of students completing secondary education survival rate	90.70%	WCCD	Ministry of Education, Ontario (York)
	6.4		Primary education students/teacher ratio	12.95	WCCD	Ministry of Education, Ontario (Markham)
		6.5	% of school aged population enrolled in schools	93.14%	WCCD	Ministry of Education, Ontario (Markham)
		6.6	Number of higher education degrees per 100k population	47,160	WCCD	2016 Census-Statistics Canada
Energy						
	7.1		Total end use energy consumption per capita (GJ/year)	95	City	City of Markham Municipal Energy Plan
	7.2		% of total end use derived from renewable sources	32.45%	WCCD	Independent Electricity System Operator (Ontario)
	7.3		% of city population with authorized electrical service	99.31%	City	Sustainability and Asset Management
	7.4		Number of gas distribution service connections per 100k population	81,222	City	Sustainability and Asset Management
	7.5		Final energy consumption of public buildings per year (GJ/Cu.M)	1.86	City	Sustainability and Asset Management
		7.6	Electricity consumption of public street lighting per km of lighted street (kwh/year)	12,500	City	Operations Department
		7.7	Average annual number of electrical service interruptions per household (in hours)	Not reporting		
Environment						
	8.1		Fine particulate matter (PM 2.5) concentration (microgram/m³)	7.35	WCCD	Ministry of the Environment and Climate Change
	8.2		Particulate matter (PM 10) concentration	Not reporting		

Finance	8.3	GHG emissions measured in tonnes per capita	5.7	City	City of Markham Municipal Energy Plan
	8.4	% of areas designated for natural protection	32.39%	City	Planning & Urban Design
	8.5	Nitrogen dioxide (NO2) concentration (microgram/m³)	19.73	WCCD	Ministry of the Environment and Climate Change
	8.6	Sulphur dioxide (SO2) concentration (microgram/m³)	1.21	WCCD	Ministry of the Environment and Climate Change
	8.7	Ozone concentration (microgram/m3)	48.32	WCCD	Ministry of the Environment and Climate Change
	8.8	Noise pollution	Not reporting		
	8.9	% change in number of native species	Not reporting		
	9.1	Debt Service Ratio	0.29%	WCCD	Markham Financial Information Return
	9.2	Capital spending as a % of total expenditures	12.22%	WCCD	Markham Financial Information Return
	9.3	Own source revenues as a % of total revenue	67.58%	WCCD	Markham Financial Information Return
	9.4	Tax collected as a % of tax billed	97.33%	WCCD	Markham Financial Information Return
	10.1	Women as a % of total elected to city-level office	23.08%	WCCD	City of Markham Website
	10.2	# of convictions for corruption and/or bribery by city officials per 100k population	0	City	Clerks Department
	10.3	Number of registered voters as a % of the voting age population	Not reporting		
	10.4	Voter participation in last municipal election (as a % of total voters)	38.26%	City	Clerks Department
Health	11.1	Average life expectancy (years)	85.3	WCCD	York Region Seniors Strategy Report
	11.2	Number of in patient hospital beds per 100k population	120	WCCD	Markham Economic Profile
	11.3	Number of physicians per 100k population	155	WCCD	Ontario Physician Human Resources Data Centre
	11.4	Under age five mortality per 1,000 live births	5.3	WCCD	Statistics Canada (Ontario)
	11.5	Number of nursing and midwifery personnel per 100k population	508	WCCD	Canadian Institute for Health Information (York Region)
	11.6	Suicide rate per 100k population	5.72	WCCD	Ontario Coroner's Office
Housing					
	12.1	% of city population living in inadequate housing	2.52%	WCCD	Statistics Canada, Core Housing Need
	12.2	% of population living in affordable housing	65.71%	WCCD	Statistics Canda-2016 Census
	12.3	Number of homeless per 100k population	32.65	WCCD	icount: York Region 2018 Homeless Count Report
	12.4	% of households that exist without registered legal titles	Not reporting		
Population & Social Conditions					
	13.1	% of city population living below international poverty line	0%	WCCD	Assumed for all Canadian cities
	13.2	% of city population living below the national poverty line	12.24%	WCCD	Statistics Canada-2016 Census
	13.3	Gini coefficient of inequality	0.37	WCCD	Calculated by WCCD analysts from Statistics Canada figures

Recreation	14.1	Sq. m of public indoor recreation space per capita	0.33	City	Recreation
	14.2	Sq. m of public outdoor recreation space per capita	18.36	City	Recreation
Safety					
	15.1	Number of firefighters per 100k population	69	City	Fire & Emergency Services
	15.2	Number of fire related deaths per 100k population	0.58	City	Fire & Emergency Services
	15.3	Number of natural hazard related deaths per 100k population	0	WCCD	Ontario Coroner's Office
	15.4	Number of police officers per 100k population	131	WCCD	Statistics Canada
	15.5	Number of homicides per 100k population	0.96	WCCD	Statistics Canada
	15.6	Number of volunteer and part-time firefighters per 100k population	0	City	Markham Financial Information Return
	15.7	Response time for emergency response services from initial call (minutes and seconds)	9.7	WCCD	Ministry of Health and Long-Term Care Land Ambulance Program (Ambulance and Fire Only)
	15.8	Crime against property per 100k population	1,693	WCCD	Statistics Canada
	15.9	Number of deaths caused by industrial accidents per 100k	Not reporting		
Solid Waste	15.10	Number of violent crime against women per 100k population	Not reporting		
	16.1	% of city population with regular waste collection (residential)	98.09%	City	Environmental Services
	16.2	Total collected municipal solid waste tonnes per capita	0.24	City	Environmental Services
	16.3	% of the city's solid waste that is recycled	31.08%	City	Environmental Services
	16.4	% of city's solid waste that is disposed of in a sanitary landfill	2.54%	City	Environmental Services
	16.5	% of solid waste that is treated in energy from waste plants	15.59%	City	Environmental Services
	16.6	% of city's solid waste that is biologically treated and used as compost or biogas	50.79%	City	Environmental Services
	16.7	% of city's solid waste that is disposed of in an open dump	0%	City	Environmental Services
	16.8	% of city's solid waste that is disposed of by other means	0%	City	Environmental Services
Sports & Culture	16.9	Hazardous waste generation per capita (tonnes)	0	City	Environmental Services
	16.10	% of city's hazardous waste that is recycled	76%	City	Environmental Services
	17.1	Number of cultural institutions and sporting facilities per 100k population	157	City	Culture
Telecommunications	17.2	% of municipal budget allocated to cultural and sporting facilities	20.36%	WCCD	Markham Financial Information Return
	17.3	Annual number of cultural events per 100k population (e.g. exhibitions, festivals, concerts)	Not reporting		
Transportation	18.1	Number of internet connections per 100k population	86,000	WCCD	Communication Monitoring Report (Ontario)
	18.2	Number of mobile connections per 100k population	89,700	WCCD	Communication Monitoring Report (Ontario)
	19.1	Km of public transport system per 100k population	277	City	Engineering
	19.2	Annual number of public transport trips per capita	48	City	Engineering
	19.3	% of commuters using a travel mode to work other than a personal vehicle	14%	City	Engineering
	19.4	Km of bicycle paths and lanes per 100k population	56.5	City	Engineering
	19.5	Transportation deaths per 100k population	1.44	City	Engineering
	19.6	% of population living within 0.5km of public transit running at least every 20 min during peak periods	63%	City	Engineering
	19.7	Average commute time (in minutes)	37	WCCD	Statistics Canada

Urban/local agriculture and food security

20.1		Total urban agricultural area per 100k population Planning	1,610.76	City	Planning & Urban Design
	20.2	Amount of food produced locally as a % of total food supplied to the City	2%	WCCD	Ontario Ministry of Agriculture, Food, and Rural Affairs
	20.3	% of city population undernourished	Not reporting		
	20.4	% of city population that is overweight or obese – Body Mass Index (BMI)	Not reporting		
Urban Planning	21.1	Green area (hectares) per 100k population	1,387	City	Planning & Urban Design
	21.2	Area size of informal settlements as a % of city area	Not reporting		
	21.3	Jobs/housing ratio	Not reporting		
	21.4	Basic service proximity	34.48%	City	Planning & Urban Design
Wastewater	22.1	% of city population served by wastewater collection	98.57%	City	Environmental Services
	22.2	% of city’s wastewater receiving centralized treatment	100%	City	Environmental Services
	22.3	% of population with access to improved sanitation	100%	City	Environmental Services
	22.4	Compliance rate of wastewater treatment	100%	City	Environmental Services
Water	23.1	% of city population with potable water supply service	99.24%	City	Environmental Services
	23.2	% of city population with sustainable access to an improved water source	100%	City	Environmental Services
	23.3	Total domestic water consumption per capita (litres/day)	186	City	Environmental Services
	23.4	Compliance rate of drinking water quality	99.86%	City	Environmental Services
	23.5	Total water consumption per capita (litres/day)	235	City	Environmental Services
	23.6	Average annual hours of water service interruption per household	Not reporting		
	23.7	% of water loss (unaccounted for water)	10.80%	City	Environmental Services

ISO 37120



**WORLD COUNCIL
ON CITY DATA**

Certificate Of Registration

**ISO 37120 Sustainable Development of Communities:
Indicators for City Services and Quality of Life**

The World Council on City Data certifies that:

MARKHAM

**Has reported indicators in conformity
with ISO 37120 at the**

Platinum Level - ISO 37120

And has been added to the WCCD Global Cities Registry™

Reporting Year: 2019

Certificate Registration Number: 2019-P-0137

Certificate Expiry Date: March 31st, 2021

A handwritten signature in black ink, appearing to read "P. McCarney", written over a horizontal line.

Patricia McCarney
President and CEO
World Council on City Data



Intelligent Community Forum (ICF)

Update on ICF Top7 Evaluation Process

October 5, 2020



Intelligent Community Forum (ICF)

- A global network and think tank connecting hundreds of cities and regions on five continents
- Promotes research and collaboration on economic development and the exchange of expertise and information to drive excellence and progress in the digital age

The ICF Framework

- A guiding methodology based on six indicator areas which determine a community's competitiveness and contribute to its success in the digital economy:
 - Connectivity
 - Knowledge Workforce
 - Digital Inclusion
 - Sustainability
 - Engagement
 - Innovation



ICF Intelligent Community Awards

- A yearly awards program which ranks communities from around the world based on their progress and achievement in the 6 indicator areas
- Recognizes readiness and performance in the development of inclusive prosperity, social health and cultural richness on a foundation of information and communications technology



Markham's ICF Awards Journey

- Markham staff prepared comprehensive and detailed awards submissions highlighting Markham's strengths, key projects, collaborations, innovations and crucial success factors
- The submissions involved active engagement of key Markham business leaders including General Motors, IBM and AMD, and York University, Seneca College, University of Toronto and ventureLab
- The City successfully progressed through the first and second levels of the awards:
 - Smart21 Communities of the Year
 - Top7 Intelligent Communities of 2020
- Markham is the first York Region municipality to reach the Top7 level
- Markham is competing for the top honour, ICF Intelligent Community of 2020, along with:
 - Hamilton, Ontario; Hudson, Ohio; Westerville, Ohio; Tallinn, Estonia; Sunshine Coast, Australia; Adelaide, Australia



The ICF Virtual Site Visit (September 9 and 10, 2020)

- ICF adjudicators validated and assessed Markham's achievements as a key part of the Intelligent Community of the Year evaluation process
- Two half-day Zoom sessions were held instead of a physical visit due to COVID-19 – (Agenda attached as Appendix A))
- Comprehensive presentations were made by Mayor Scarpitti, Markham Staff, business leaders and other partners, along with interactive discussions and questions. These highlighted our successes and demonstrated why Markham should be selected Intelligent Community of the Year
- Copies of the presentations have been posted on Checkmark
- A recording of the two half day sessions, including the evaluator's questions and related responses by presenters will be posted on Checkmark within the next two weeks



ICF Awards Next Steps

- The ICF adjudicators will report their findings from Markham's virtual site visit to an international ICF jury for evaluation and selection of the winner.
- The ICF Intelligent Community of the Year will be announced at the virtual ICF Global Summit on Thursday, October 29 at 12:45pm.



ICF Virtual Global Summit (October 21 – 29, 2020)

Markham has the opportunity to showcase its achievements before a global audience through participation in several events at ICF's annual conference:

- **Top7 Conversation, Markham**
 - Markham's representatives will participate in a 20 minute pre-recorded interview to highlight the City's Intelligent Community successes as a Top7 finalist
- **CIO Roundtable**
 - Municipal CIOs and private-sector executives discuss and debate the challenges of IT infrastructure and services for the public
- **Collaborative Leadership From Council to Community**
 - A panel of Mayors and City Managers share case studies and exchange ideas for building shared understanding and agreement on action
- **Intelligent Community Awards Announcement**
 - Should Markham be selected as Intelligent Community of the Year, a City representative will give a brief acceptance speech



Recommendation:

THAT the presentation entitled “Update on the ICF Top7 Evaluation Process” be received.



Appendix A: ICF Virtual Site Visit Agenda

Markham *for* Intelligent Community of the year

Agenda Day One – Wednesday, September 9, 2020

Time	Topic	Presenters
1:00pm – 2:00pm	60 min. Community Overview Presentation	-Mayor Frank Scarpitti -MC – Trinela Cane
2:00pm – 2:15pm	15 min. ICF Co-Founder Presentation	-Robert Bell, ICF Co-Founder
2:15pm – 2:45pm	Engagement (30 min.)	-Nasir Kenea (Digital Markham Strategy) – 15 min. -Andrea Berry (Community Engagement Initiatives) – 15 min.
2:45pm – 3:15pm	Sustainability (30 min.)	-Graham Seaman (Sustainability in Markham) – 30 min.
3:15pm – 3:50pm	Connectivity (35 min.)	-Nasir Kenea (Fibre to Home, YorkNet) – 10 min. -Kimberley Kitteringham (Online Voting) – 25 min.
3:50pm – 4:00pm	10 min. Open Conversation – Day 1 Conclusion, Questions	-MC – Trinela Cane



Appendix A: ICF Virtual Site Visit Agenda

Markham *for* Intelligent Community of the year

Agenda Day Two – Thursday, September 10, 2020

Time	Topic	Presenters
9:00am – 9:10am	10 min. – Day 2 Introduction/Recap/Questions	-MC – Trinela Cane
9:10am – 9:35am	Digital Inclusion (25 min.)	-Andrea Cecchetto, Jennifer North, Markham Public Library (MPL) – (Digital Literacy, Makerspaces)
9:35am – 10:10am	Knowledge Workforce (35 min.)	-Christina Kakaflikas (Educational Collaboration, Talent) – 10 min. -Chris Dudley (Seneca HELIX program) – 10 min. -Introduction by Claudia Storto: -David Zambrano (MPL – STEAM program) – 15 min.
10:10am – 11:05am	Innovation (55 min.)	-Nasir Kenea (Markham Portal, City Innovations) – 10 min. -Introduction by Arvin Prasad: -Stephanie Di Perna (ePLAN) – 10 min. -Christina Kakaflikas (Markham Enables Innovation) – 10 min. -Melissa Chee (ventureLAB - Mission, Programs, Successes) – 25 min.
11:05am – 11:55am	50 min. Open Conversation – Panel Discussion (ICF and Community leaders)	-Moderator: Andy Taylor, CAO -Panel Participants: <ul style="list-style-type: none"> • Steven Astorino, IBM • Sara LeBlanc, GM • Rhonda Lenton, York University • Kevin O'Neil, AMD • Andrew Sjogren, Mattamy Homes
11:55am – 12:00pm	5 min. – Day 2 Conclusion/Wrap-up Remarks	-Andy Taylor