



2019 PROJECT FUNDING REQUEST FORM

Number: **19007**Project Name: **Facility & Stage Maintenance**Project Cost: **\$45,300**Commission: Development ServicesRepair/ReplaceDepartment: TheatreUseful Life: 10Project Mgr: Andrew RosenfarbPre Approval: ☒

Ward(s):

CW ☒ 1 ☐ 2 ☐ 3 ☐ 4 ☐
5 ☐ 6 ☐ 7 ☐ 8 ☐Category: MinorCost Validation: Third party estimateRequirement Validation: Condition assessment**DETAILED DESCRIPTION (SCOPE OF PROJECT):**

Replacement of malfunctioning accessible automatic door opener. Replacement of sound absorption panels inside the auditorium, replacement of holiday lobby display, addition of fire safety magnetic door holders and replacement of removable dance floor.

BUILDING MARKHAM'S FUTURE TOGETHER: Describe how this project/initiative advances the objectives of BMFT.Primary Objective: Safe & Sustainable Community

The primary objective of all capital projects is to support the principle to position the theatre as a centre of excellence for performing arts; sustain competitive edge in infrastructure, public spaces and equipment and to grow and sustain rental business.

PROJECT COSTS (\$)

	<u>2019</u>	<u>Future Phases</u>
Cost/Quote:	44,500	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	44,500	0
HST Impact:	783	0
Total Project Cost:	45,300	0

NOTES

Automatic Door Opener (\$2,500) Sound Absorption System (\$20,000), Dance Floor (\$11,000) Lobby Display (\$2,000) Fire Safety Magnetic Door Holders (\$9,000) Life Cycle for various items ranges from 5-25 years. There is no expected incremental operating budget impact.

PROPOSED SOURCE(S) OF FUNDING (\$)

<u>Funding Type</u>	<u>Components</u>						<u>Future Phases</u>
	<u>Budget</u>				<u>TOTAL</u>		
Operating Funded Life Cycle	45,300	0	0	0	0	0	0
TOTAL FUNDING	45,300				0		0

OPERATING BUDGET IMPACT

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

Project Name: Facility & Stage Maintenance

DCA

Name

Year

Amount

**Amount in
Study**

Life Cycle

Amount in Study:

Amount Incl HST

Year in the study

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

Dance Floor is identified for replacement in the Reserve Study for 2020 but needs to be accelerated to 2019 based on condition assessment and requirement of shows in the 2019 professional season.

Cash Flow Estimates:

Quarter 1: \$0

Quarter 2: \$45,300

Quarter 3: \$0

Quarter 4: \$0

Year 1 Total Cash Flow: \$45,300

Year 2: \$0

Year 3 + beyond: \$0

Total All Years: \$45,300

Procurement Plan:

RFP/Tender Submission to Purchasing:

RFP/Tender Award by:

Estimated Project Completion Date:

Estimated 2019 Deliverables

Procurement involvement is not required as no project component is over \$25K.

Business Case - Rationale for project submission

i) Project Class:

ii) What is the rationale for this project? Comment on Service Level.

Exterior automatic door opener requires replacement based on condition assessment. Sound absorption panels inside the auditorium original to the building have degraded and new technology available allows for better sound absorption and a much better aesthetic. Holiday display for lobby is broken and requires replacement. Removable dance floor used for every dance recital & competition, which attributes for a very large percentage of revenue for the theatre's rental contracts requires replacement based on condition assessment. Fire safety door holders to properly hold doors open in major thoroughfares.

iii) What are the implications of this project not being approved?

A malfunction of the automatic door opener will not meet City's obligation to fulfill accessibility requirements. Sound absorption panels-aesthetically unpleasing if current panels are not replaced. Lobby Holiday Display-the inability to setup a holiday display which coincides with all of our holiday entertainment. Dance Floor-not providing a safe non slip surface for thousands of dancers annually. Fire Door Holders-limits traffic flow as fire doors will remain closed.

iv) What alternatives were considered?

None.



2019 PROJECT FUNDING REQUEST FORM

Number: 19023

Project Cost: \$305,300

Project Name: Secondary Plans

Studies/Pilot Programs

Commission: Development Services

Useful Life: 0

Department: Planning

Pre Approval: ☐

Project Mgr: Biju Karumanchery

Category: Major

Ward(s):

CW ☐ 1 ☐ 2 ☐ 3 ☒ 4 ☒5 ☒ 6 ☒ 7 ☐ 8 ☐

Cost Validation: Recent awards

Requirement Validation: Other(specify in Notes)

DETAILED DESCRIPTION (SCOPE OF PROJECT):

The 2014 Official Plan requires a secondary plan to be prepared for the Unionville, Markham Road/Mount Joy and Markville intensification areas. Current development pressures necessitate the timely development and adoption of the plan.

BUILDING MARKHAM'S FUTURE TOGETHER: Describe how this project/initiative advances the objectives of BMFT.

Primary Objective: Safe & Sustainable Community

This study implements the requirements of the 2014 Official Plan, particularly the development of secondary plans within intensification areas to accommodate growth to 2031.

PROJECT COSTS (\$)

	2019	Future Phases
Cost/Quote:	0	0
Internal Charges:	0	0
External Consulting:	300,000	0
Contingency%: 0	0	0
Sub Total:	300,000	0
HST Impact:	5,280	0
Total Project Cost:	305,300	0

NOTES

Consultants will be retained to undertake the studies. This request is for planning and urban design services only. Cost estimate is based on other similar secondary plan studies.

PROPOSED SOURCE(S) OF FUNDING (\$)

Funding Type	Budget	Components				TOTAL	Future Phases
		Unionville	Markham/Mount Joy	Markville			
DCA	274,770	45,810	114,480	114,480	0	274,770	0
Development Fees	30,530	5,090	12,720	12,720	0	30,530	0
TOTAL FUNDING	305,300					305,300	0

OPERATING BUDGET IMPACT

Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
\$0	\$0	\$0	\$0

Project Name: Secondary Plans

DCA

Name

Year

Amount

Amount in

Study

Life Cycle

General Government - Various Studies

2019

274,770

1,593,063

Amount in Study:

TOTAL FUNDING

274,770

1,593,063

Amount Incl HST

Year in the study

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

Funds are included in the studies section of the DC Background Study.

Cash Flow Estimates:

Quarter 1: \$0

Quarter 2: \$0

Quarter 3: \$70,920

Quarter 4: \$80,920

Year 1 Total Cash Flow: \$151,840

Year 2: \$153,460

Year 3 + beyond: \$0

Total All Years: \$305,300

Procurement Plan:

RFP/Tender Submission to Purchasing:

9/30/2019

RFP/Tender Award by:

10/31/2019

Estimated Project Completion Date:

6/30/2021

Estimated 2019 Deliverables

Council adopted secondary plans.

Business Case - Rationale for project submission

i) **Project Class:** New Project – Maintain Service Level

ii) **What is the rationale for this project? Comment on Service Level.**

This project is required to implement the 2014 Official Plan and to address development pressures in the area.

iii) **What are the implications of this project not being approved?**

It will delay updating the policy framework required to achieve the City and Regional growth projections and will result in Council making decisions on applications without an updated context.

iv) **What alternatives were considered?**

Staff initiating the secondary plans; however staff resources are not available.



2019 PROJECT FUNDING REQUEST FORM

Number: **19066**Project Cost: **\$302,200**Project Name: **Facility Energy Management Program**

New Asset/Expansion

Commission: **Corporate Services**Department: **Sustainability Office**Project Mgr: **Amanda Martin/Aaron Cheung**Useful Life: **15**Pre Approval: ☒

Ward(s):

CW ☒ 1 ☐ 2 ☐ 3 ☐ 4 ☐
5 ☐ 6 ☐ 7 ☐ 8 ☐Category: **Major**Cost Validation: **Internal peer review**Requirement Validation: **Other(specify in Notes)**

DETAILED DESCRIPTION (SCOPE OF PROJECT):

This is an annual project requesting funding to support Markham's citywide energy-efficiency improvements with respect to facility retrofits, awareness & training programs, feasibility studies, technical & operational support, and strategic automation system planning, standardization, and optimization. The improvements planned for 2019 are estimated to save \$188,000 annually in utility & billing cost starting in 2020. Additionally, there will be a one-time utility incentives of \$26,000 in 2019, resulting in a payback of 1.5 years [\$300,000 - \$26,000 / \$188,000]. This is an annual program and will be requested every year.

BUILDING MARKHAM'S FUTURE TOGETHER: Describe how this project/initiative advances the objectives of BMFT.

Primary Objective: **Safe & Sustainable Community**

Energy conservation and efficiency decrease annual utility costs and environmental harm. Aligns with corporate goals to achieve the Municipal Energy Plan, Net-Zero Energy Emissions, and Greenprint objectives of net-zero, energy, water, waste and emissions by 2050. The projects planned for 2019 were identified and prioritized in the 2014 Corporate Energy Management Plan (CEMP), which is a 5-year plan designed to meet the Green Energy Act's O'Reg 397/11 criteria. The CEMP will be updated in 2019.

PROJECT COSTS (\$)

	2019	Future Phases
Cost/Quote:	124,000	0
Internal Charges:	176,000	0
External Consulting:	0	0
Contingency %:	0	0
Sub Total:	300,000	0
HST Impact:	2,182	0
Total Project Cost:	302,200	0

NOTES

E3: Estimated annual savings of at least \$188,000 starting 2020: \$45,000 through LED lighting improvements; \$75,000 through metering & bill analysis, awareness programs, and operational improvements; \$58,000 through building automation improvements; and \$10,000 through energy-efficient Lifecycle upgrades (refrigeration, HVAC, pumps). Staff identified that using internal staff positions are more cost-effective and increase service quality relative to outsourcing the same work, as these positions are able to continuously improve operational excellence, develop best practices, and complete other projects and services.
Funding source: Corporate Energy Program balance sheet

PROPOSED SOURCE(S) OF FUNDING (\$)

Funding Type	Components					TOTAL	Future Phases
	Budget	Internal Charge	Energy Conservation Projects				
Other Internal	302,200	176,000	126,200	0	0	302,200	0
TOTAL FUNDING	302,200					302,200	0

OPERATING BUDGET IMPACT

Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
\$0	-\$188,000	\$0	-\$188,000

Project Name: Facility Energy Management Program

DCA

Name

Year

Amount

**Amount in
Study**

Life Cycle

Amount in Study:

Amount Incl HST

Year in the study

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

Cash Flow Estimates:

Quarter 1:	\$0
Quarter 2:	\$75,000
Quarter 3:	\$75,000
Quarter 4:	\$75,000
Year 1 Total Cash Flow:	\$225,000
Year 2:	\$77,200
Year 3 + beyond:	\$0
Total All Years:	\$302,200

Procurement Plan:

RFP/Tender Submission to Purchasing:

RFP/Tender Award by:

Estimated Project Completion Date:

10/30/2020

Estimated 2019 Deliverables

Deliver energy retrofits, awareness programs, automation, technical support, studies, and improved energy monitoring and reporting. Procurement not required - all expenditures are under 25K.

Business Case - Rationale for project submission

i) **Project Class:**

ii) **What is the rationale for this project? Comment on Service Level.**

This project focuses on identifying energy saving opportunities, reducing utility operating cost, maximizing utility incentives, and steering the building management system portfolio towards a standardized environment, which reduces training costs and increases service level. The project also identifies and implements cost-effective opportunities using existing systems/tools to enhance operational excellence. Markham is proudly recognized as a leader in Sustainability, and has an ambitious goal of achieving net-zero energy and emission by 2050. This project is critical in assisting Markham facilities to achieve those goals and operate the facilities as efficiently as possible.

iii) **What are the implications of this project not being approved?**

Our ability to maximize incentives, renewable energy revenue, project support, and conservation & efficiency opportunities will be limited. Loss of internal subject matter resources to coordinate existing and future planned system replacements as well as in-house support for front line staff, system admin, and financial and operational efficiency. High dependency on outsourced vendors, which will not yield consistency and increases O&M costs.

iv) **What alternatives were considered?**

Not funding the project will result in missed opportunities for energy savings, revenue, and incentives as well as increasing utility costs. Heavy reliance on external vendors/consultants, which are not neutrally-positioned to steer the design direction of the City's energy and automation infrastructure. The risks are decreased service levels and increased vendor costs.



2019 PROJECT FUNDING REQUEST FORM

Number: **19085**Project Name: **Roofing Repairs & Replacement Projects**Project Cost: **\$1,069,600**Commission: Corporate Services

Repair/Replace

Department: Asset Management

Useful Life: 20

Project Mgr: Michael RyanPre Approval: ☒

Ward(s):

CW ☒ 1 ☐ 2 ☐ 3 ☐ 4 ☐
5 ☐ 6 ☐ 7 ☐ 8 ☐Category: MajorCost Validation: Internal peer reviewRequirement Validation: Condition assessment**DETAILED DESCRIPTION (SCOPE OF PROJECT):**

This project includes roofing and accessories replacement works at various locations throughout the City based on condition assessment.

BUILDING MARKHAM'S FUTURE TOGETHER: Describe how this project/initiative advances the objectives of BMFT.Primary Objective: Exceptional Services by Exceptional People

Maintaining existing facilities through the Life Cycle program in order to follow industry best practices. The Life Cycle process systematically reviews work required, using industry standard guiding principles to set priorities for each year. Where construction will be done, every effort will be made to utilize greener materials, and environmentally safe disposal of waste.

PROJECT COSTS (\$)

	<u>2019</u>	<u>Future Phases</u>
Cost/Quote:	1,011,792	0
Internal Charges:	40,000	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	1,051,792	0
HST Impact:	17,808	0
Total Project Cost:	1,069,600	0

NOTES

Work includes: Roofing repairs/ replacement at Box Grove CC, Heintzman House CC, Markham Library, Elson Miles Heritage farm house - \$571,392; Sign Shop - Metal roof replacement - \$71,400; FS 96 (5567 14th Ave), Fire Training Centre, Unionville Library, Centennial - metal roof replacement, restoration - \$301,204, Museum Collection building roof replacement - \$55,000, replacement roof design and internal charges - \$70,604. This is an annual program and will be requested every year.

PROPOSED SOURCE(S) OF FUNDING (\$)

<u>Funding Type</u>	<u>Components</u>					<u>TOTAL</u>	<u>Future Phases</u>
	<u>Budget</u>	<u>Roofing Replacements</u>	<u>Internal Chargeback & External Design</u>				
Operating Funded Life Cycle	1,069,600	998,996	70,604	0	0	1,069,600	0
TOTAL FUNDING	1,069,600					1,069,600	0

OPERATING BUDGET IMPACT

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

Project Name: Roofing Repairs & Replacement Projects

DCA

Name

Year

Amount

**Amount in
Study**

Life Cycle

Amount in Study:

Amount Incl HST

Year in the study

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

The extra \$55k is due to increase scope of roof replacement at the Museum Collection Building based on condition assessment.

Cash Flow Estimates:

Quarter 1: \$0

Quarter 2: \$50,000

Quarter 3: \$253,675

Quarter 4: \$405,880

Year 1 Total Cash Flow: \$709,555

Year 2: \$360,045

Year 3 + beyond: \$0

Total All Years: \$1,069,600

Procurement Plan:

RFP/Tender Submission to Purchasing:

RFP/Tender Award by:

Estimated Project Completion Date:

Estimated 2019 Deliverables

Business Case - Rationale for project submission

i) **Project Class:**

ii) **What is the rationale for this project? Comment on Service Level.**

High priority to avoid building damage and eliminate customer program disruption.

iii) **What are the implications of this project not being approved?**

Delaying projects may result in higher roofing maintenance costs and potential for increased building damage and customer program disruption.

iv) **What alternatives were considered?**

N/A



2019 PROJECT FUNDING REQUEST FORM

Number: **19086**Project Name: **Salt Barn**Project Cost: **\$440,400**Commission: Corporate Services

New Asset/Expansion

Department: Asset ManagementUseful Life: 75Project Mgr: Renée England/Alice LamPre Approval: ☒

Ward(s):

CW ☒ 1 ☐ 2 ☐ 3 ☐ 4 ☐
5 ☐ 6 ☐ 7 ☐ 8 ☐Category: MajorCost Validation: Third party estimateRequirement Validation: Other(specify in Notes)**DETAILED DESCRIPTION (SCOPE OF PROJECT):**

Additional salt/sand storage. This is a fabric building with concrete block to be located at Miller's Operations Yard. New storage is needed to manage winter maintenance due to DC related growth. This building can be used for many purposes such as a warehouse and for storage of salt, sand, and materials. This purchase can be relocated in the future with some sunk costs such as concrete slab base, subsurface hydro conduit and labour cost associated to installation.

BUILDING MARKHAM'S FUTURE TOGETHER: Describe how this project/initiative advances the objectives of BMFT.Primary Objective: Safe & Sustainable Community

The overall goal is to meet the Council approved winter maintenance standards and Ontario legislated requirements and ensuring public safety is protected.

PROJECT COSTS (\$)

	<u>2019</u>	<u>Future Phases</u>
Cost/Quote:	408,000	0
Internal Charges:	15,000	0
External Consulting:	10,000	0
Contingency %: 0	0	0
Sub Total:	433,000	0
HST Impact:	7,357	0
Total Project Cost:	440,400	0

NOTES

New dome will provide an area for salt/sand mixture to help with the DC related growth areas. Existing domes hold either salt or sand not a mixture.

PROPOSED SOURCE(S) OF FUNDING (\$)

<u>Funding Type</u>	<u>Components</u>						<u>TOTAL</u>	<u>Future Phases</u>
	<u>Budget</u>							
DCA	440,400	0	0	0	0	0	0	0
TOTAL FUNDING	440,400						0	0

OPERATING BUDGET IMPACT

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

Project Name: Salt Barn

DCA

Name	Year	Amount	Amount in Study	Life Cycle
Public Works - Works Yard - Expansion	2019	440,400	10,440,190	Amount in Study: <input type="text"/>
TOTAL FUNDING		<u>440,400</u>	<u>10,440,190</u>	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 an increase/decrease in cost

Identified under 2009 Operations Department Facility Master Plan. Part of overall DC for new works yard.

Cash Flow Estimates:

Quarter 1:	\$0
Quarter 2:	\$8,000
Quarter 3:	\$144,133
Quarter 4:	\$144,133
Year 1 Total Cash Flow:	\$296,266
Year 2:	\$144,134
Year 3 + beyond:	\$0
Total All Years:	\$440,400

Procurement Plan:

RFP/Tender Submission to Purchasing:

RFP/Tender Award by:

Estimated Project Completion Date:

Estimated 2019 Deliverables

Business Case - Rationale for project submission

i) Project Class:

ii) What is the rationale for this project? Comment on Service Level.

There is insufficient salt stores for the City's winter maintenance season due to DC related growth of the City. Another salt dome is required to hold the additional salt. This new dome will allow the City to manage salt stores for the winter maintenance season.

iii) What are the implications of this project not being approved?

This required funding promotes public safety and ensures properly maintaining City owned assets.

iv) What alternatives were considered?

N/A



2019 PROJECT FUNDING REQUEST FORM

Number: **19095**Project Name: **Radio Repeaters**Project Cost: **\$32,600**Commission: **Community & Fire Services**

New Asset/Expansion

Department: **Fire & Emergency Services**Useful Life: **5**Project Mgr: **Chris Nearing**Pre Approval: ☒

Ward(s):

CW ☒ 1 ☐ 2 ☐ 3 ☐ 4 ☐
5 ☐ 6 ☐ 7 ☐ 8 ☐Category: **Minor**Cost Validation: **Third party estimate**Requirement Validation: **Legislative compliance****DETAILED DESCRIPTION (SCOPE OF PROJECT):**

Purchase of 2 portable radio repeaters to improve firefighter radio communications during emergency incidents.

BUILDING MARKHAM'S FUTURE TOGETHER: Describe how this project/initiative advances the objectives of BMFT.Primary Objective: **Safe & Sustainable Community**

Provide the equipment necessary to ensure that radio transmissions during an emergency are transmitted and received.

PROJECT COSTS (\$)

	2019	Future Phases
Cost/Quote:	32,000	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	32,000	0
HST Impact:	563	0
Total Project Cost:	32,600	0

NOTES

This is a new initiative. With the continued building of high rise buildings radio communications has diminished (caused by building construction and materials). In order to maintain communications with crews inside, portable radio repeaters are required. This has been studied by Markham Fire Staff and the results include that radio transmissions when inside various high rise, industrial, commercial, parking garages etc. are not being transmitted or received. The portable radio repeaters will be taken inside of buildings to boost the signal. Project cost is based on a recent quote 2x \$16,000/unit = \$32,000 plus accessories. 2 portable radio repeaters will initially be located at Stn 92 and Stn 95.

PROPOSED SOURCE(S) OF FUNDING (\$)

Funding Type	Components						Future Phases
	Budget				TOTAL		Phases
DCA	32,600	0	0	0	0	0	0
TOTAL FUNDING	32,600				0		0

OPERATING BUDGET IMPACT

Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
\$0	\$0	\$0	\$0

Project Name: Radio Repeaters

DCA

Name	Year	Amount	Amount in Study	Life Cycle
Fire - New Fire Station - (21 firefighters) - Markham Centre	2019	32,600	143,665	Amount in Study: <input type="text"/>
TOTAL FUNDING		<u>32,600</u>	<u>143,665</u>	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 an increase/decrease in cost

Cash Flow Estimates:

Quarter 1:	\$32,600
Quarter 2:	\$0
Quarter 3:	\$0
Quarter 4:	\$0
Year 1 Total Cash Flow:	\$32,600
Year 2:	\$0
Year 3 + beyond:	\$0
Total All Years:	\$32,600

Procurement Plan:

RFP/Tender Submission to Purchasing:
RFP/Tender Award by:

Estimated Project Completion Date:

Estimated 2019 Deliverables

Business Case - Rationale for project submission

i) Project Class:

ii) What is the rationale for this project? Comment on Service Level.

Staff completed an assessment to better understand radio transmissions and reception inside many of the new high rise buildings in Markham and also attended several existing large commercial buildings including parking garages. The testing demonstrated that in the absence of radio repeaters transmissions and receipt of radio messages is not consistent and compromised. This project was initiated by the Joint Health and Safety Committee.

iii) What are the implications of this project not being approved?

Any gaps in radio transmission result in an inability to communicate effectively and direct with crews inside a building. Not providing the repeaters would likely result in the Health and Safety committee taking their concerns to Ministry of Labour.

iv) What alternatives were considered?

There is no alternatives to improve the radio transmission/receiving issues other than providing repeaters.



2019 PROJECT FUNDING REQUEST FORM

Number: **19124**Project Name: **Heintzman House Flooring Refurbishment**Project Cost: **\$9,700**Commission: **Community & Fire Services**

Repair/Replace

Department: **Recreation Services**Useful Life: **15**Project Mgr: **Martin Barrow**Pre Approval: ☒

Ward(s):

CW ☐ 1 ☒ 2 ☐ 3 ☐ 4 ☐
5 ☐ 6 ☐ 7 ☐ 8 ☐Category: **Minor**Cost Validation: **Third party estimate**Requirement Validation: **Condition assessment****DETAILED DESCRIPTION (SCOPE OF PROJECT):**

This project is to remove existing carpet, replace and refurbish the hardwood flooring on the main and second floor at Heintzman house

BUILDING MARKHAM'S FUTURE TOGETHER: Describe how this project/initiative advances the objectives of BMFT.Primary Objective: **Safe & Sustainable Community**

The City of Markham is proud to support the primary objective of Safe and Sustainable Community through the development of healthy relationships and healthy lifestyles within the Community. Completion of this project enables all programs in the Heintzman House the opportunity to continue fulfilling this mission - specifically this project provides necessary improvements to a space used for community gathering and meeting and skill development & enhancement program delivery

PROJECT COSTS (\$)

	2019	Future Phases
Cost/Quote:	9,520	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	9,520	0
HST Impact:	168	0
Total Project Cost:	9,700	0

NOTES

The existing carpet was installed in 2013. While the normal useful life of carpet is typically 10 years, due to heavy use hosting events and weddings where catering is permitted, the carpet has deteriorated at a faster rate. A condition assessment of the flooring indicates replacement is warranted. Carpet located in the main vestibule, stairs and second floor hallway is to be removed and existing underlying hardwood floors are to be refurbished by sanding and applying new finish. Main floor carpet is to be removed and replaced with 3/4' hardwood flooring.
Carpet: 1,366 sq.ft x \$ 3.50 = \$4,781
Hardwood Refurbishment: 2693 sq. ft x \$1.76 = \$4,739

PROPOSED SOURCE(S) OF FUNDING (\$)

Funding Type	Components					TOTAL	Future Phases
	Budget	Carpet Replacement	Hardwood Refurbishment				
Operating Funded Life Cycle	9,700	4,865	4,822	0	0	9,687	0
TOTAL FUNDING	9,700					9,687	0

OPERATING BUDGET IMPACT

Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
\$0	\$0	\$0	\$0

Project Name: Heintzman House Flooring Refurbishment

DCA

Name

Year

Amount

Amount in

Study

Life Cycle

Amount in Study:

Amount Incl HST

Year in the study

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

Life Cycle includes: Flooring replacement \$12,700 (reduced to \$9,700 based on recent quote), Window replacement \$58,600, Kitchen equipment replacement \$6,700

Cash Flow Estimates:

Quarter 1: \$0

Quarter 2: \$9,700

Quarter 3: \$0

Quarter 4: \$0

Year 1 Total Cash Flow: \$9,700

Year 2: \$0

Year 3 + beyond: \$0

Total All Years: \$9,700

Procurement Plan:

RFP/Tender Submission to Purchasing:

RFP/Tender Award by:

Estimated Project Completion Date:

Estimated 2019 Deliverables

Procurement involvement is not required

Business Case - Rationale for project submission

i) Project Class:

ii) What is the rationale for this project? Comment on Service Level.

Heintzman House is a historic building and is used primarily for rentals by weddings and other special events throughout the year. Without proper upkeep the venue will become less desirable to potential customers.

iii) What are the implications of this project not being approved?

A deteriorated floor leads to a poor image which may result in customer decline and profit loss.

iv) What alternatives were considered?

None.



2019 PROJECT FUNDING REQUEST FORM

Number: 19126

Project Name: **Heintzman House Window Replacement**Project Cost: **\$58,600**Commission: Community & Fire ServicesRepair/ReplaceDepartment: Recreation Services

Useful Life: 20

Project Mgr: Martin BarrowPre Approval: ☒

Ward(s):

CW ☐ 1 ☒ 2 ☐ 3 ☐ 4 ☐
5 ☐ 6 ☐ 7 ☐ 8 ☐Category: MinorCost Validation: Third party estimateRequirement Validation: Condition assessment**DETAILED DESCRIPTION (SCOPE OF PROJECT):**

This project is to replace the windows in two areas of the Heintzman House: solarium and storage room

BUILDING MARKHAM'S FUTURE TOGETHER: Describe how this project/initiative advances the objectives of BMFT.Primary Objective: Safe & Sustainable Community

The City of Markham is proud to support the primary objective of Safe and Sustainable Community through the development of healthy relationships and healthy lifestyles within the Community. Completion of this project enables all programs in the Heintzman House the opportunity to continue fulfilling this mission - specifically this project provides necessary improvements to a space used for community gathering and meeting and skill development & enhancement program delivery

PROJECT COSTS (\$)**NOTES**

	2019	Future Phases
Cost/Quote:	46,700	0
Internal Charges:	0	0
External Consulting:	10,900	0
Contingency %: 0	0	0
Sub Total:	57,600	0
HST Impact:	1,014	0
Total Project Cost:	58,600	0

In 2017, a leak investigation was initiated through Asset Management and work was carried out by IRC Building Sciences Group. It was determined that water was infiltrating the building through two areas: Storage room windows and windows in the solarium. This project is to complete work to revitalize heritage windows and the solarium glazing system.

PROPOSED SOURCE(S) OF FUNDING (\$)

Funding Type	Components					TOTAL	Future Phases
	Budget	Material & Labour	Consultant				
Operating Funded Life Cycle	58,600	47,522	11,078	0	0	58,600	0
TOTAL FUNDING	58,600					58,600	0

OPERATING BUDGET IMPACT

Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
\$0	\$0	\$0	\$0

Project Name: Heintzman House Window Replacement

DCA

Name

Year

Amount

**Amount in
Study**

Life Cycle

Amount in Study:

Amount Incl HST

Year in the study

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

Life Cycle includes: Flooring replacement \$12,700 (reduced to \$9,700 based on recent quote), Window replacement \$58,600, Kitchen equipment replacement \$6,700

Cash Flow Estimates:

Quarter 1: \$58,600

Quarter 2:

Quarter 3: \$0

Quarter 4: \$0

Year 1 Total Cash Flow:

Year 2: \$0

Year 3 + beyond: \$0

Total All Years:

Procurement Plan:

RFP/Tender Submission to Purchasing:

RFP/Tender Award by:

Estimated Project Completion Date:

Estimated 2019 Deliverables

Project is to be completed before summer wedding season.

Business Case - Rationale for project submission

i) Project Class:

ii) What is the rationale for this project? Comment on Service Level.

Heintzman House is an historic house and is used primarily for rentals by weddings and other special events through the year. Without proper upkeep, the venue will become less desirable to potential customers resulting in potential revenue loss.

iii) What are the implications of this project not being approved?

Failure to stop water infiltration will result in further damage to the building.

iv) What alternatives were considered?

None.



2019 PROJECT FUNDING REQUEST FORM

Number: 19128

Project Cost: \$731,500

Project Name: Markham Village CC Refrigeration Room Construction

Repair/Replace

Commission: Community & Fire Services

Useful Life: 25

Department: Recreation Services

Pre Approval: ☒

Project Mgr: Bob Bell

Category: Minor

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

Cost Validation: Third party estimate

Requirement Validation: Condition assessment

DETAILED DESCRIPTION (SCOPE OF PROJECT):

This project is to replace refrigeration mechanical equipment and retrofit the refrigeration plant to Technical Standards and Safety Authority (TSSA) code requirements at Markham Village C.C.

BUILDING MARKHAM'S FUTURE TOGETHER: Describe how this project/initiative advances the objectives of BMFT.

Primary Objective: Safe & Sustainable Community

The City of Markham is proud to support the primary objective of Safe and Sustainable Community through the development of healthy relationships and healthy lifestyles within the Community. Completion of this project enables all programs in the Markham Village Community Centre the opportunity to continue fulfilling this mission - specifically this project provides necessary improvements to a space used for community gathering and meeting and skill development & enhancement program delivery.

PROJECT COSTS (\$)

	2019	Future Phases
Cost/Quote:	636,800	0
Internal Charges:	0	0
External Consulting:	82,000	0
Contingency %: 0	0	0
Sub Total:	718,800	0
HST Impact:	12,651	0
Total Project Cost:	731,500	0

NOTES

Markham Village refrigeration plant was built in 1994, a condition assessment of the equipment indicates replacement is warranted. Along with the mechanical equipment replacement, the refrigeration plant room needs to be retrofitted to conform to TSSA B52 Mechanical Refrigeration Code (6.2.2) requirements, which outlines for a minimum of one door that opens outwardly and is self closing and that the door shall not open to a public corridor. The current refrigeration room currently has an emergency door that opens into a public corridor. All other arena plants have emergency doors that exit to the exterior of the building. The refrigeration plant is an integral part of the building and is necessary for maintaining ice for the arena.

PROPOSED SOURCE(S) OF FUNDING (\$)

Funding Type	Components						Future Phases
	Budget					TOTAL	
Operating Funded Life Cycle	731,500	0	0	0	0	0	0
TOTAL FUNDING	731,500					0	0

OPERATING BUDGET IMPACT

Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
\$0	\$0	\$0	\$0

Project Name: Markham Village CC Refrigeration Room Construction

DCA

Name

Year

Amount

**Amount in
Study**

Life Cycle

Amount in Study:

Amount Incl HST

Year in the study

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

Life Cycle includes: Refrigeration Construction \$731,500, arena controller \$15,000

Cash Flow Estimates:

Quarter 1: \$0

Quarter 2: \$82,000

Quarter 3: \$649,500

Quarter 4: \$0

Year 1 Total Cash Flow: \$731,500

Year 2: \$0

Year 3 + beyond: \$0

Total All Years: \$731,500

Procurement Plan:

RFP/Tender Submission to Purchasing:

RFP/Tender Award by:

Estimated Project Completion Date:

Estimated 2019 Deliverables

Business Case - Rationale for project submission

i) Project Class:

ii) What is the rationale for this project? Comment on Service Level.

Replacement is recommended based on condition assessment and a recent visit by TSSA. A Compliance order was issued to the City of Markham indicating that the refrigeration plant design does not comply with the B52 Mechanical Refrigeration Code (2014) Sec, 6.2.2 as outlined within TSSA Reg, 219/45(4). TSSA Currently, all exit doors from the refrigeration room opens into the facility's public corridor, which place workers and the public at risk. To meet code requirements, Markham Village C.C. will be required to reconfigure the existing refrigeration room or provide a new building addition to encapsulate the refrigeration equipment.

iii) What are the implications of this project not being approved?

Non compliance with TSSA regulations will result in fines and a potential shut down.

iv) What alternatives were considered?

None.



2019 PROJECT FUNDING REQUEST FORM

Number: **19168**

Project Cost: **\$2,702,300**

Project Name: **Library Collections**

Repair/Replace

Commission: **Community & Fire Services**

Useful Life: **7**

Department: **Markham Public Library**

Pre Approval: ☒

Project Mgr: **Catherine Biss**

Ward(s):

Category: **Annual**

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 primary product, as confirmed in our ongoing Customer Satisfaction Survey where we have approximately 4,000 customers annually responding. On a scale of 1 – 10, customers rate the importance of collections at 9.27. All respondents felt that it was important that MPL provide books and valued borrowing materials as the #1 library service. Currency of collections is key to library users who expect current best-sellers, materials in multiple languages, materials suitable to the print disabled, online databases, eBooks and periodicals, etc.

BUILDING MARKHAM'S FUTURE TOGETHER: Describe how this project/initiative advances the objectives of BMFT.

Primary Objective: **Integrated Leisure Master Plan/Public Safety**

The Master Plan includes the provision of Library services for the Markham Community. Collections are a core service of the Library that are required to maintain operations.

PROJECT COSTS (\$)

	2019	Future Phases
Cost/Quote:	2,655,599	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	2,655,599	0
HST Impact:	46,739	0
Total Project Cost:	2,702,300	0

NOTES

This is an annual program and funding will be requested each year. Preliminary allocations (includes processing) are as follows: Books & Subscriptions \$970K / Audio visuals \$365K/ French Books \$25K/ Multilingual materials \$300K/ Microfilms \$3.3K / Periodicals \$100K/ Electronic Resources \$710K/ Processing Supplies \$229K. (These figures are subject to revision based on material availability, customer needs and final Library review.) Excluding processing costs, 25% of funding devoted to non-English language materials (i.e., Multilingual Materials and French Books). The cost for replacement of existing Electronic Resources (when invoiced in USD) will be based on the exchange rate @1.28. Request is consistent with 2018 budget plus inflation.

PROPOSED SOURCE(S) OF FUNDING (\$)

Funding Type	Budget	Components					TOTAL	Future Phases
Operating Funded Life Cycle	2,702,300	0	0	0	0	0	0	0
TOTAL FUNDING	2,702,300						0	0

OPERATING BUDGET IMPACT

Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
\$0	\$0	\$0	\$0

Project Name: Library Collections

DCA

Name

Year

Amount

Amount in

Study

Life Cycle

Amount in Study:

Amount Incl HST

Year in the study

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

Cash Flow Estimates:

Quarter 1: \$675,575

Quarter 2: \$675,575

Quarter 3: \$675,575

Quarter 4: \$675,575

Year 1 Total Cash Flow: **\$2,702,300**

Year 2: \$0

Year 3 + beyond: \$0

Total All Years: \$2,702,300

Procurement Plan:

RFP/Tender Submission to Purchasing:

RFP/Tender Award by:

Estimated Project Completion Date:

Estimated 2019 Deliverables

This purchase will be completed by year-end. Procurement involvement will be required for new RFQ.

Business Case - Rationale for project submission

i) **Project Class:**

ii) **What is the rationale for this project? Comment on Service Level.**

Library collections are a core service of the library required to maintain operations. This project will ensure that residents have access to collections that are in high demand and meet the needs of the community.

iii) **What are the implications of this project not being approved?**

Service levels will be negatively impacted as the Library will be unable to offer new materials to the public.

iv) **What alternatives were considered?**

No alternative available. This is the Library's ongoing program to provide current materials required by the community.



2019 PROJECT FUNDING REQUEST FORM

Number: **19179**Project Name: **Localized Repairs - Curb & Sidewalk**Project Cost: **\$886,600**Commission: **Community & Fire Services**

Repair/Replace

Department: **Operations - Roads**Useful Life: **20**Project Mgr: **John Hoover**Pre Approval: ☐

Ward(s):

CW ☒ 1 ☐ 2 ☐ 3 ☐ 4 ☐
5 ☐ 6 ☐ 7 ☐ 8 ☐Category: **Annual**Cost Validation: **Recent awards**Requirement Validation: **Condition assessment**

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Maintenance repairs to sidewalks, curbs, and catch basins throughout the City as identified by staff. Ensure that deficient sections are repaired to minimize trip and fall incidents and reduce associated liability to the City. The purpose of concrete curb is to channel storm water into the storm sewer system.

BUILDING MARKHAM'S FUTURE TOGETHER: Describe how this project/initiative advances the objectives of BMFT.

Primary Objective: **Safe & Sustainable Community**

Program ensures roads and boulevards are made safe for all cyclists, pedestrians and vehicular traffic. Program removes hazards, deficiencies, and reduces risk to the City by replacing with new concrete. This program promotes safety, reduces liability and encourages walkability within the community.

PROJECT COSTS (\$)

	<u>2019</u>	<u>Future Phases</u>
Cost/Quote:	871,300	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	871,300	0
HST Impact:	15,335	0
Total Project Cost:	<u>886,600</u>	<u>0</u>

NOTES

Specific locations to be determined upon completion of condition audit in 2018. A backlog of \$369k was identified in 2018 of which \$69k is being addressed in 2018 through existing budgets. The remaining \$300k is included in the 2019 request. These funds will be requested each year. The backlog exists as a fulsome inspection program continues to identify deficiencies in the sidewalk maintenance program. The backlog was identified after the Q1 2018 winter season due to colder temperatures. The additional funding request will address the known backlog at this time.

PROPOSED SOURCE(S) OF FUNDING (\$)

<u>Funding Type</u>	<u>Components</u>					<u>TOTAL</u>	<u>Future Phases</u>
	<u>Budget</u>	<u>Regular Program</u>	<u>Backlog</u>				
Operating Funded Life Cycle	886,600	581,400	305,200	0	0	886,600	0
TOTAL FUNDING	<u>886,600</u>					<u>886,600</u>	<u>0</u>

OPERATING BUDGET IMPACT

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

Project Name: Localized Repairs - Curb & Sidewalk

DCA

Name

Year

Amount

**Amount in
Study**

Life Cycle

Amount in Study:

Amount Incl HST

Year in the study

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

Funding request is higher than the amount in the Life Cycle Reserve Study to address the current backlog.

Cash Flow Estimates:

Quarter 1: \$0

Quarter 2: \$0

Quarter 3: \$886,600

Quarter 4: \$0

Year 1 Total Cash Flow: \$886,600

Year 2: \$0

Year 3 + beyond: \$0

Total All Years: \$886,600

Procurement Plan:

RFP/Tender Submission to Purchasing:

RFP/Tender Award by:

Estimated Project Completion Date:

Estimated 2019 Deliverables

Business Case - Rationale for project submission

i) **Project Class:**

ii) **What is the rationale for this project? Comment on Service Level.**

Addresses minor repair locations of curb and sidewalk failures in order to extend the Life Cycle. Identified in the Life Cycle Reserve Study.

iii) **What are the implications of this project not being approved?**

Addresses risk management issues relative to pedestrian traffic as well as the storm sewer system.

iv) **What alternatives were considered?**

n/a



2019 PROJECT FUNDING REQUEST FORM

Number: **19180**Project Cost: **\$257,000**Project Name: **Localized Repairs - Parking Lots**

Repair/Replace

Commission: **Community & Fire Services**Useful Life: **8**Department: **Operations - Roads**Pre Approval: ☐Project Mgr: **John Hoover**

Ward(s):

CW ☒ 1 ☐ 2 ☐ 3 ☐ 4 ☐
5 ☐ 6 ☐ 7 ☐ 8 ☐Category: **Minor**Cost Validation: **Recent awards**Requirement Validation: **Condition assessment**

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Ongoing maintenance and repairs of municipal parking lots throughout the City. Includes repairs to concrete and asphalt infrastructure, maintenance holes and catchbasin adjustments and asphalt resurfacing.

BUILDING MARKHAM'S FUTURE TOGETHER: Describe how this project/initiative advances the objectives of BMFT.

Primary Objective: **Safe & Sustainable Community**

Program recognizes AODA guidelines and aligns these guidelines to all City parking lots. Program calls for consideration of recycled construction materials. Current strategies recognize reduced energy costs/emissions are a direct result of using recycled asphalt.

PROJECT COSTS (\$)

	<u>2019</u>	<u>Future Phases</u>
Cost/Quote:	252,600	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	252,600	0
HST Impact:	4,446	0
Total Project Cost:	257,000	0

NOTES

2019 locations: Miller Yard, Centennial CC, Fincham Park, Morgan Park. This is an annual program and these funds will be requested each year. There is no substantial backlog in this program.

PROPOSED SOURCE(S) OF FUNDING (\$)

<u>Funding Type</u>	<u>Components</u>					<u>TOTAL</u>	<u>Future Phases</u>
	<u>Budget</u>	<u>Miller Yard</u>	<u>Others</u>				
Operating Funded Life Cycle	257,000	140,000	117,000	0	0	257,000	0
TOTAL FUNDING	257,000					257,000	0

OPERATING BUDGET IMPACT

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

Project Name: Localized Repairs - Parking Lots

DCA

Name

Year

Amount

**Amount in
Study**

Life Cycle

Amount in Study:

Amount Incl HST

Year in the study

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

Miller Ave was identified in lifecycle for total rehab but only localized repair are required \$140,000 funding from parking lot rehabilitation life cycle is being used to carry out maintenance on 555 Miller Yard parking lot.

Cash Flow Estimates:

Quarter 1:	\$0
Quarter 2:	\$0
Quarter 3:	\$257,000
Quarter 4:	\$0
Year 1 Total Cash Flow:	\$257,000
Year 2:	\$0
Year 3 + beyond:	\$0
Total All Years:	\$257,000

Procurement Plan:

RFP/Tender Submission to Purchasing:

RFP/Tender Award by:

Estimated Project Completion Date:

Estimated 2019 Deliverables

Business Case - Rationale for project submission

i) **Project Class:**

ii) **What is the rationale for this project? Comment on Service Level.**

This project is an annual program, and is required to maintain existing services levels.

iii) **What are the implications of this project not being approved?**

This required funding promotes public safety and ensures properly maintaining City owned assets.

iv) **What alternatives were considered?**

n/a



2019 PROJECT FUNDING REQUEST FORM

Number: **19192**Project Name: **Pathways Resurfacing**Project Cost: **\$137,100**Commission: **Community & Fire Services**

Repair/Replace

Department: **Operations - Parks**Useful Life: **15**Project Mgr: **Scott Grieves**Pre Approval: ☐

Ward(s):

CW ☒ 1 ☐ 2 ☐ 3 ☐ 4 ☐
5 ☐ 6 ☐ 7 ☐ 8 ☐Category: **Minor**Cost Validation: **Recent awards**Requirement Validation: **Visual inspection****DETAILED DESCRIPTION (SCOPE OF PROJECT):**

Paving and repairs of pathways at various parks and locations. These locations are prone to wear and tear and washouts following heavy rain and flooding. Paving will help to alleviate this problem. Locations will be assessed and determined based on condition assessment in spring. Staff will investigate environmental options for future considerations.

BUILDING MARKHAM'S FUTURE TOGETHER: Describe how this project/initiative advances the objectives of BMFT.Primary Objective: **Safe & Sustainable Community**

The paving of pathways will maintain safe access to the parks so residents can interact with members of their community while enjoying the opportunity to walk, run or cycle, maintaining an active lifestyle. This project allows for a safe positive social activity by providing well maintained access to parks, community centers and path systems. Hard surfaces provide greater accessibility for all park users.

PROJECT COSTS (\$)

	2019	Future Phases
Cost/Quote:	134,700	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	134,700	0
HST Impact:	2,371	0
Total Project Cost:	137,100	0

NOTES

Locations subject to condition assessment. 2019 Locations include Milne Dam, Elson Park and Austin Park. There is no substantial backlog and the pathways are in a state of good repair.

PROPOSED SOURCE(S) OF FUNDING (\$)

Funding Type	Components					TOTAL	Future Phases
	Budget	Milne Dam	Elson Park	Austin Park			
Operating Funded Life Cycle	137,100	4,500	12,600	120,000	0	137,100	0
TOTAL FUNDING	137,100					137,100	0

OPERATING BUDGET IMPACT

Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
\$0	\$0	\$0	\$0

Project Name: Pathways Resurfacing

DCA

Name

Year

Amount

**Amount in
Study**

Life Cycle

Amount in Study: 137,100

Amount Incl HST 137,100

Year in the study

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

Cash Flow Estimates:

Quarter 1: \$0

Quarter 2: \$0

Quarter 3: \$137,100

Quarter 4: \$0

Year 1 Total Cash Flow: \$137,100

Year 2: \$0

Year 3 + beyond: \$0

Total All Years: \$137,100

Procurement Plan:

RFP/Tender Submission to Purchasing: 3/11/2019

RFP/Tender Award by: 4/15/2019

Estimated Project Completion Date: 12/31/2019

Estimated 2019 Deliverables

Business Case - Rationale for project submission

i) Project Class: Recurring Project – Maintain/Increase Service Level and no change in funding

ii) What is the rationale for this project? Comment on Service Level.

Paving granular pathways that washout, address hazards caused by erosion and stairways repairs further enhances accessibility for park patrons.

iii) What are the implications of this project not being approved?

This required funding promotes public safety and ensures properly maintaining City owned assets.

iv) What alternatives were considered?

Continued maintenance costs of granular surfaces.



2019 PROJECT FUNDING REQUEST FORM

Number: **19194**Project Name: **Playstructure Replacement**Project Cost: **\$943,700**Commission: **Community & Fire Services**

Repair/Replace

Department: **Operations - Parks**Useful Life: **17**Project Mgr: **Scott Grieve**Pre Approval: ☐

Ward(s):

CW ☒ 1 ☐ 2 ☐ 3 ☐ 4 ☐
5 ☐ 6 ☐ 7 ☐ 8 ☐Category: **Minor**Cost Validation: **Internal peer review**Requirement Validation: **Condition assessment****DETAILED DESCRIPTION (SCOPE OF PROJECT):**

Replacement of playground equipment, as required, to maintain the current standards (CSA -Canadian Standards Association CAN/CSA-Z614-07"Children's Playspaces and Equipment").

BUILDING MARKHAM'S FUTURE TOGETHER: Describe how this project/initiative advances the objectives of BMFT.Primary Objective: **Safe & Sustainable Community**

The playgrounds provide an opportunity for residents to interact with members of their community. This project allows for positive social activity for all in a safe environment while utilizing municipal playground equipment.

PROJECT COSTS (\$)

	2019	Future Phases
Cost/Quote:	927,400	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	927,400	0
HST Impact:	16,322	0
Total Project Cost:	943,700	0

NOTES

Locations are subject to change based on condition assessment. Funding amount changes every year based on life cycle replacement of specific playstructures. Funding may be reallocated within the components of the project. There is no substantial backlog upon completion of the 2018 project. Assets are in a state of good repair.

PROPOSED SOURCE(S) OF FUNDING (\$)

Funding Type	Components						TOTAL	Future Phases
	Budget							
Operating Funded Life Cycle	943,700	0	0	0	0	0	0	0
TOTAL FUNDING	943,700						0	0

OPERATING BUDGET IMPACT

Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
\$0	\$0	\$0	\$0

Project Name: Playstructure Replacement

DCA

Name

Year

Amount

**Amount in
Study**

Life Cycle

Amount in Study:

Amount Incl HST

Year in the study

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

Cash Flow Estimates:

Quarter 1:	\$0
Quarter 2:	\$0
Quarter 3:	\$0
Quarter 4:	\$471,850
Year 1 Total Cash Flow:	\$471,850
Year 2:	\$471,850
Year 3 + beyond:	\$0
Total All Years:	\$943,700

Procurement Plan:

RFP/Tender Submission to Purchasing:

RFP/Tender Award by:

Estimated Project Completion Date:

Estimated 2019 Deliverables

Business Case - Rationale for project submission

i) **Project Class:**

ii) **What is the rationale for this project? Comment on Service Level.**

These structures require replacement based on condition assessment and do not meet the CSA guidelines (Z614-07 Children's Playspaces and Equipment).

iii) **What are the implications of this project not being approved?**

Legislative requirements are not being met and the backlog will increase.

iv) **What alternatives were considered?**

Continue to repair the structures.



2019 PROJECT FUNDING REQUEST FORM

Number: **19195**Project Name: **Playstructure Rubberized Surface Replacement**Project Cost: **\$55,100**Commission: Community & Fire Services

Repair/Replace

Department: Operations - Parks

Useful Life: 15

Project Mgr: Scott GrievePre Approval: ☐

Ward(s):

CW ☐ 1 ☒ 2 ☐ 3 ☐ 4 ☐
5 ☐ 6 ☐ 7 ☐ 8 ☐Category: MinorCost Validation: Internal peer reviewRequirement Validation: Condition assessment**DETAILED DESCRIPTION (SCOPE OF PROJECT):**

Replacement of playstructure rubberized surface to maintain the current standards (CSA -Canadian Standards Association CAN/CSAZ614-07"Children's Playspaces and Equipment").

BUILDING MARKHAM'S FUTURE TOGETHER: Describe how this project/initiative advances the objectives of BMFT.Primary Objective: Safe & Sustainable Community

The playstructure rubberized safety surface, as a component of the overall playground structure, provides an opportunity of all ages to interact with members of their community. This project allows for positive social activity for all in a safe environment.

PROJECT COSTS (\$)

	<u>2019</u>	<u>Future Phases</u>
Cost/Quote:	54,122	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	54,122	0
HST Impact:	953	0
Total Project Cost:	55,100	0

NOTES

Playstructure rubberized surface replacement at 1 location (Bayview Lane Park) subject to condition assessment. There are 27 City-wide rubberized surfaces and they have either a water feature or AODA compliant playground. Funding amount changes every year based on life cycle replacement of specific safety surface.

PROPOSED SOURCE(S) OF FUNDING (\$)

<u>Funding Type</u>	<u>Components</u>						<u>Future Phases</u>
	<u>Budget</u>				<u>TOTAL</u>		<u>Phases</u>
Operating Funded Life Cycle	55,100	0	0	0	0	0	0
TOTAL FUNDING	55,100				0		0

OPERATING BUDGET IMPACT

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

Project Name: Playstructure Rubberized Surface Replacement

DCA

Name

Year

Amount

**Amount in
Study**

Life Cycle

Amount in Study:

Amount Incl HST

Year in the study

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

Cash Flow Estimates:

Quarter 1: \$0

Quarter 2: \$0

Quarter 3: \$0

Quarter 4: \$55,100

Year 1 Total Cash Flow: \$55,100

Year 2: \$0

Year 3 + beyond: \$0

Total All Years: \$55,100

Procurement Plan:

RFP/Tender Submission to Purchasing:

RFP/Tender Award by:

Estimated Project Completion Date:

Estimated 2019 Deliverables

Business Case - Rationale for project submission

i) **Project Class:**

ii) **What is the rationale for this project? Comment on Service Level.**

This safety surface requires replacement based on condition assessment and does not meet the new CSA guidelines.

iii) **What are the implications of this project not being approved?**

Legislative requirements will not be met.

iv) **What alternatives were considered?**

Continue to repair the surface.



2019 PROJECT FUNDING REQUEST FORM

Number: **19199**Project Name: **Replacement/New Boulevard/Park Trees**Project Cost: **\$385,000**Commission: **Community & Fire Services**

Repair/Replace

Department: **Operations - Parks**Useful Life: **50**Project Mgr: **David Plant**Pre Approval: ☐

Ward(s):

CW ☒ 1 ☐ 2 ☐ 3 ☐ 4 ☐
5 ☐ 6 ☐ 7 ☐ 8 ☐Category: **Annual**Cost Validation: **Recent awards**Requirement Validation: **Condition assessment****DETAILED DESCRIPTION (SCOPE OF PROJECT):**

Boulevard/Park replacement tree planting is an annual program which enables the City to replace a total of 700 dead, diseased or damaged trees. Cost per tree is approximately \$400 to plant and \$100 to grind the remaining stump.

BUILDING MARKHAM'S FUTURE TOGETHER: Describe how this project/initiative advances the objectives of BMFT.Primary Objective: **Safe & Sustainable Community**

This program will allow for the growth and installation of trees. Increased planting will help rebuild the urban forest to enhance environmental, biological and health benefits.

PROJECT COSTS (\$)

	2019	Future Phases
Cost/Quote:	378,375	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	378,375	0
HST Impact:	6,659	0
Total Project Cost:	385,000	0

NOTES

This program and funding will be requested each year to address tree loss through damage, accidents and normal mortality. This program may be revisited subject to the outcomes of the 2018 Parks Forestry Review. The current backlog of vacant street tree sites is 2,681.
Unit price is consistent with recent award plus inflation.

PROPOSED SOURCE(S) OF FUNDING (\$)

Funding Type	Components					TOTAL	Future Phases
	Budget	Tree Planting	Stumping (Spring 2020)				
Operating Funded Life Cycle	385,000	345,000	40,000	0	0	385,000	0
TOTAL FUNDING	385,000					385,000	0

OPERATING BUDGET IMPACT

Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
\$0	\$0	\$0	\$0

Project Name: Replacement/New Boulevard/Park Trees

DCA

Name

Year

Amount

**Amount in
Study**

Life Cycle

Amount in Study:

Amount Incl HST

Year in the study

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

Updated cost of \$385k includes \$345k life cycle and \$40k stump grinding for spring planting in 2020 (approx. 400 stumps).

Cash Flow Estimates:

Quarter 1: \$0

Quarter 2: \$192,500

Quarter 3: \$192,500

Quarter 4: \$0

Year 1 Total Cash Flow: \$385,000

Year 2: \$0

Year 3 + beyond: \$0

Total All Years: \$385,000

Procurement Plan:

RFP/Tender Submission to Purchasing:

RFP/Tender Award by:

Estimated Project Completion Date:

Estimated 2019 Deliverables

Business Case - Rationale for project submission

i) Project Class:

ii) What is the rationale for this project? Comment on Service Level.

Due to many environmental factors including normal mortality, we lose trees citywide on an annual basis which require replacement in order to achieve the Regional urban forest canopy target of 30%.

iii) What are the implications of this project not being approved?

Increasing backlog, resident dissatisfaction and the inability to achieve the 30% target.

iv) What alternatives were considered?

There are no suitable alternatives.



2019 PROJECT FUNDING REQUEST FORM

Number: **19218**Project Name: **Civic Centre Gateway Project**Project Cost: **\$574,200**Commission: **Community & Fire Services**

New Asset/Expansion

Department: **Operations - Business & Technical Services**Useful Life: **0**Project Mgr: **Tanya Lewinberg**Pre Approval: ☒

Ward(s):

CW ☒ 1 ☐ 2 ☐ 3 ☐ 4 ☐
5 ☐ 6 ☐ 7 ☐ 8 ☐Category: **Major**Cost Validation: **Internal peer review**Requirement Validation: **Other(specify in Notes)****DETAILED DESCRIPTION (SCOPE OF PROJECT):**

Markham's Public Realm is a long term program to create dynamic, beautiful public spaces that reflect our diverse social and cultural identity. Project include enhancements that promote community engagement, beautification, and sustainability.

BUILDING MARKHAM'S FUTURE TOGETHER: Describe how this project/initiative advances the objectives of BMFT.Primary Objective: **Safe & Sustainable Community**

The Civic Centre Gateway projects main goal is to animate and beautify the community by identifying and resolving buprojectsilt form issues in a sustainable creative way.

PROJECT COSTS (\$)

	2019	Future Phases
Cost/Quote:	564,300	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	564,300	0
HST Impact:	9,932	0
Total Project Cost:	574,200	0

NOTES

Anthony Roman Centre Gateway Project - (\$394k - City portion - 67%). The City has applied to York Region for a grant to fund 33% of the total cost of the gateway project. If the grant application is unsuccessful the project will be fully funded from Section 37 funds. Anthony Roman Centre Pathway Culvert Project - (\$150k), Civic Centre Pathway Paving (\$30k). Reserves: Section 37

PROPOSED SOURCE(S) OF FUNDING (\$)

Funding Type	Components					TOTAL	Future Phases
	Budget	Civic Centre Gateway	Civic Centre Path	Paving			
Other External	130,020	130,020	0	0	0	130,020	0
Reserves	444,180	264,180	150,000	30,000	0	444,180	0
TOTAL FUNDING	574,200					574,200	0

OPERATING BUDGET IMPACT

Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
\$0	\$0	\$0	\$0

Project Name: Civic Centre Gateway Project

DCA

Name

Year

Amount

**Amount in
Study**

Life Cycle

Amount in Study:

Amount Incl HST

Year in the study

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

Cash Flow Estimates:

Quarter 1: \$0

Quarter 2: \$0

Quarter 3: \$430,650

Quarter 4: \$143,550

Year 1 Total Cash Flow: \$574,200

Year 2: \$0

Year 3 + beyond: \$0

Total All Years: \$574,200

Procurement Plan:

RFP/Tender Submission to Purchasing:

RFP/Tender Award by:

Estimated Project Completion Date:

Estimated 2019 Deliverables

Business Case - Rationale for project submission

i) Project Class:

ii) What is the rationale for this project? Comment on Service Level.

The Anthony Roman Centre Gateway project will proceed in conjunction with the Anthony Roman Centre Pathway Culvert Project, to enhance and provide an active transportation entry into the Anthony Roman Centre Lands. It will create a recognizable gateway feature at the corner of Warden Avenue and Highway 7.

iii) What are the implications of this project not being approved?

A missed opportunity for the City to enhance the Anthony Roman Centre Lands, while highlighting active transportation.

iv) What alternatives were considered?

None



2019 PROJECT FUNDING REQUEST FORM

Number: **19221**Project Name: **Bridges and Culverts - Condition Inspection**Project Cost: **\$66,000**Commission: Community & Fire Services

Studies/Pilot Programs

Department: ES - Infrastructure

Useful Life: 0

Project Mgr: Shipra SinghPre Approval: ☒

Ward(s):

CW ☒ 1 ☐ 2 ☐ 3 ☐ 4 ☐
5 ☐ 6 ☐ 7 ☐ 8 ☐Category: AnnualCost Validation: Recent awardsRequirement Validation: Multiple(specify)**DETAILED DESCRIPTION (SCOPE OF PROJECT):**

Hire a consultant to inspect vehicular bridges (12), pedestrian bridges (37) and culverts (32) greater than 3m span as mandated by Public Transportation and Highway Act - Regulation 104/97. In addition, the consultant will inspect culverts less than 3m span (29) to ensure public safety. This program ensures inspections take place within the regulated timelines. Refer to attached exhibit for inventory of structures and inspection frequency.

BUILDING MARKHAM'S FUTURE TOGETHER: Describe how this project/initiative advances the objectives of BMFT.Primary Objective: Safe & Sustainable Community

Effective structures inspection program improves overall transportation accessibility, public safety, creates jobs through project implementation, recycle construction materials and supports City's vision for a sustainable community.

PROJECT COSTS (\$)

	<u>2019</u>	<u>Future Phases</u>
Cost/Quote:	0	0
Internal Charges:	0	0
External Consulting:	64,900	0
Contingency %: 0	0	0
Sub Total:	64,900	0
HST Impact:	1,142	0
Total Project Cost:	66,000	0

NOTES

This is an annual program and funding requirements will be requested each year. There is no backlog and structures are in a state of good repair.

Requirement validations: Visual Inspection and Legislative Compliance.

Operations is responsible for preventative maintenance on bridges/culverts such as minor grading, patching, sealing of bridge approaches and decks, and siltation removal from culverts, while Env. Services is responsible for its inspection/rehabilitation and replacement.

Unit cost is consistent with recent award plus inflation.

PROPOSED SOURCE(S) OF FUNDING (\$)

<u>Funding Type</u>	<u>Components</u>						<u>TOTAL</u>	<u>Future Phases</u>
	<u>Budget</u>							
Operating Funded Life Cycle	66,000	0	0	0	0	0	0	0
TOTAL FUNDING	66,000						0	0

OPERATING BUDGET IMPACT

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

Project Name: Bridges and Culverts - Condition Inspection

DCA

Name

Year

Amount

**Amount in
Study**

Life Cycle

Amount in Study: 66,000

Amount Incl HST 66,000

Year in the study 2019

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

Cash Flow Estimates:

Quarter 1: \$0

Quarter 2: \$5,000

Quarter 3: \$30,000

Quarter 4: \$31,000

Year 1 Total Cash Flow: \$66,000

Year 2: \$0

Year 3 + beyond: \$0

Total All Years: \$66,000

Procurement Plan:

RFP/Tender Submission to Purchasing: 1/2/2019

RFP/Tender Award by: 2/1/2019

Estimated Project Completion Date: 12/31/2019

Estimated 2019 Deliverables

Business Case - Rationale for project submission

i) Project Class: Recurring Project – Maintain/Increase Service Level and no change in funding

ii) What is the rationale for this project? Comment on Service Level.

All structures must undergo visual inspection within the regulated time lines as mandated by Public and Highway Transportation Act - Regulation 104/97 to ensure public safety. Based on the inspection recommendations, a cost-effective structures capital / maintenance program will be updated.

iii) What are the implications of this project not being approved?

In violation of legislative requirements.

iv) What alternatives were considered?

None.



2019 PROJECT FUNDING REQUEST FORM

Number: **19223**Project Name: **Large Culverts Rehab (5 Structures) - Design & Const.**Project Cost: **\$1,107,800**Commission: Community & Fire ServicesRepair/ReplaceDepartment: ES - InfrastructureUseful Life: 15Project Mgr: Prathapan KumarPre Approval: ☒

Ward(s):

CW ☐ 1 ☒ 2 ☐ 3 ☐ 4 ☒
5 ☐ 6 ☒ 7 ☒ 8 ☐Category: MajorCost Validation: Third party estimateRequirement Validation: Condition assessment**DETAILED DESCRIPTION (SCOPE OF PROJECT):**

This project includes rehabilitation works for 5 culverts:

C072: 19th Ave 150m W/McCowan Rd, C082: Edward Jefferys Ave. 55m W/Petunia; C085: Eastvale Dr 360m N/ Steeles Ave E; C088: Wilfrid Murison Ave 230m W/Bridle Walk and C247: Huntington Pathway 380m/ E Bayview Ave & 100m S/ Hwy 407 (Refer to attached map).

BUILDING MARKHAM'S FUTURE TOGETHER: Describe how this project/initiative advances the objectives of BMFT.Primary Objective: Safe & Sustainable Community

Effective structures rehabilitation program improves overall transportation accessibility, public safety, creates jobs through project implementation, recycle waste and supports City's vision for a sustainable community.

PROJECT COSTS (\$)

	<u>2019</u>	<u>Future Phases</u>
Cost/Quote:	762,020	0
Internal Charges:	0	0
External Consulting:	326,580	0
Contingency %: 0	0	0
Sub Total:	1,088,600	0
HST Impact:	19,159	0
Total Project Cost:	1,107,800	0

NOTES

Total culvert inventory: 232. Cost is based on consultant's preliminary estimate. These culverts are greater than 900 mm diameter. There is no backlog. Culverts are in a state of good repair. Operations is responsible for preventative maintenance on bridges/culverts such as minor grading, patching, sealing of bridge approaches and decks, and siltation removal from culverts, while Env. Services is responsible for its inspection/rehabilitation and replacement.

PROPOSED SOURCE(S) OF FUNDING (\$)

<u>Funding Type</u>	<u>Components</u>					<u>TOTAL</u>	<u>Future Phases</u>
	<u>Budget</u>	<u>Design + CA</u>	<u>Construction</u>				
Operating Funded Life Cycle	1,107,800	332,330	775,470	0	0	1,107,800	0
TOTAL FUNDING	1,107,800					1,107,800	0

OPERATING BUDGET IMPACT

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

Project Name: Large Culverts Rehab (5 Structures) - Design & Const.

DCA

Name

Year

Amount

**Amount in
Study**

Life Cycle

Amount in Study:

Amount Incl HST

Year in the study

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

Cash Flow Estimates:

Quarter 1: \$0
Quarter 2: \$50,000
Quarter 3: \$50,000
Quarter 4: \$30,000

Year 1 Total Cash Flow: \$130,000

Year 2: \$977,800

Year 3 + beyond: \$0

Total All Years: \$1,107,800

Procurement Plan:

RFP/Tender Submission to Purchasing:

RFP/Tender Award by:

Estimated Project Completion Date:

Estimated 2019 Deliverables

Completion of design is subject to TRCA approval.

Business Case - Rationale for project submission

i) **Project Class:**

ii) **What is the rationale for this project? Comment on Service Level.**

2016/2017 visual inspection indicated that rehabilitation is required for these structures to prevent further deterioration and to ensure public safety.

iii) **What are the implications of this project not being approved?**

All 5 culverts need to be rehabilitated. If this is not carried out in a timely manner, then structures will continue to degrade.

iv) **What alternatives were considered?**

None.



2019 PROJECT FUNDING REQUEST FORM

Number: 19225

Project Name: Storm and Sanitary Sewers CCTV Inspection Program

Project Cost: \$260,600

Commission: Community & Fire Services

Studies/Pilot Programs

Department: ES - Infrastructure

Useful Life: 0

Project Mgr: Shipra Singh

Pre Approval: ☒

Ward(s):

Category: Major

CW ☒ 1 ☐ 2 ☐ 3 ☐ 4 ☐

Cost Validation: Recent awards

5 ☐ 6 ☐ 7 ☐ 8 ☐

Requirement Validation: Condition assessment

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Program to determine the condition of the storm and sanitary sewer pipes using closed circuit television (CCTV) inspection. Pipe rehabilitation/ replacement programs will be developed based on the condition inspection results.

BUILDING MARKHAM'S FUTURE TOGETHER: Describe how this project/initiative advances the objectives of BMFT.

Primary Objective: Safe & Sustainable Community

Regular storm and sanitary sewers preventive maintenance improves the health and safety of Markham residents in terms of flood protection and reduction in basement flooding risks.

PROJECT COSTS (\$)

	2019	Future Phases
Cost/Quote:	206,100	0
Internal Charges:	0	0
External Consulting:	50,000	0
Contingency %: 0	0	0
Sub Total:	256,100	0
HST Impact:	4,507	0
Total Project Cost:	260,600	0

NOTES

This is an annual program and funding will be requested each year. Realigned for storm and sanitary into one project. 2019 Program: (a) 50 km storm sewers out of 920 km (Operating life cycle funded) (b) 50 km sanitary sewers out of 919 km (Waterworks funded) Storm CCTV was previously carried out by Operations (Capital Budget Request) and Sanitary CCTV was previously carried out through the Waterworks Operating Budget. Since this is now capital funded, the Waterwork operating budget will be reduced accordingly. External consultant is retained to identify deficiencies on CCTV inspection. Sanitary /storm sewer CCTV programs are being re-evaluated. Unit cost is consistent with recent award plus inflation.

PROPOSED SOURCE(S) OF FUNDING (\$)

Funding Type	Components					TOTAL	Future Phases
	Budget	Contractor	Consultant				
Operating Funded Life Cycle	108,000	108,000	0	0	0	108,000	0
Waterworks	152,600	101,700	50,900	0	0	152,600	0
TOTAL FUNDING	260,600					260,600	0

OPERATING BUDGET IMPACT

Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
\$0	-\$114,000	\$0	-\$114,000

Project Name: Storm and Sanitary Sewers CCTV Inspection Program

DCA

<u>Name</u>	<u>Year</u>	<u>Amount</u>	<u>Amount in Study</u>
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Life Cycle

Amount in Study:

Amount Incl HST

Year in the study

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

Cash Flow Estimates:

Quarter 1:	\$51,925
Quarter 2:	\$51,925
Quarter 3:	\$51,925
Quarter 4:	\$31,925
Year 1 Total Cash Flow:	\$187,700
Year 2:	\$22,000
Year 3 + beyond:	\$0
Total All Years:	\$209,700

Procurement Plan:

RFP/Tender Submission to Purchasing:

RFP/Tender Award by:

Estimated Project Completion Date:

Estimated 2019 Deliverables

Business Case - Rationale for project submission

i) Project Class:

ii) What is the rationale for this project? Comment on Service Level.

Regular inspection of the storm and sanitary sewer systems will identify problems (for example: collapsed pipe, tree root incursion, debris build up, infiltration, cross connection and calcified deposits build up) in addition to determine the cleaning frequency.

iii) What are the implications of this project not being approved?

Regular inspection of storm and sanitary sewer pipes will identify the defective pipes which can be repaired on time before a catastrophic failure.

iv) What alternatives were considered?

None



2019 PROJECT FUNDING REQUEST FORM

Number: **19229**Project Name: **Streetlights - Underground Cable Replacement**Project Cost: **\$1,295,800**Commission: **Community & Fire Services**

Repair/Replace

Department: **ES - Infrastructure**Useful Life: **55**Project Mgr: **Prathapan Kumar**Pre Approval: ☒

Ward(s):

CW ☐ 1 ☒ 2 ☐ 3 ☐ 4 ☒
5 ☐ 6 ☐ 7 ☐ 8 ☐Category: **Major**Cost Validation: **Recent awards**Requirement Validation: **Condition assessment****DETAILED DESCRIPTION (SCOPE OF PROJECT):**

Replacement of the underground streetlight cables in older areas based on condition assessment.

BUILDING MARKHAM'S FUTURE TOGETHER: Describe how this project/initiative advances the objectives of BMFT.Primary Objective: **Safe & Sustainable Community**

Maintaining existing assets through life cycle program in order to improve the service levels.

PROJECT COSTS (\$)

	2019	Future Phases
Cost/Quote:	1,158,400	0
Internal Charges:	0	0
External Consulting:	115,000	0
Contingency %: 0	0	0
Sub Total:	1,273,400	0
HST Impact:	22,412	0
Total Project Cost:	1,295,800	0

NOTES

The service life of existing streetlight underground cable is estimated to be 55 years. 120 km of streetlight cable was inspected in 2015. The recommendation from this condition inspection report was to replace 28 km cable within next 5 years. 18 km was replaced through 2016 cable replacement program and balance 10 km will be replaced through this budget request (Refer to attached map). Design in 2019 and construction in 2020.

There is no substantial backlog. Streetlight underground cables are in a state of good repair. Unit cost is consistent with recent award plus inflation.

PROPOSED SOURCE(S) OF FUNDING (\$)

Funding Type	Components					TOTAL	Future Phases
	Budget	Design + CA	Construction				
Operating Funded Life Cycle	1,295,800	117,025	1,178,775	0	0	1,295,800	0
TOTAL FUNDING	1,295,800					1,295,800	0

OPERATING BUDGET IMPACT

Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
\$0	\$0	\$0	\$0

Project Name: Streetlights - Underground Cable Replacement

DCA

Name

Year

Amount

**Amount in
Study**

Life Cycle

Amount in Study:

Amount Incl HST

Year in the study

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

Cash Flow Estimates:

Quarter 1: \$10,000
Quarter 2: \$15,000
Quarter 3: \$15,000
Quarter 4: \$10,000

Year 1 Total Cash Flow: \$50,000

Year 2: \$1,245,800

Year 3 + beyond: \$0

Total All Years: \$1,295,800

Procurement Plan:

RFP/Tender Submission to Purchasing:

RFP/Tender Award by:

Estimated Project Completion Date:

Estimated 2019 Deliverables

Business Case - Rationale for project submission

i) Project Class:

ii) What is the rationale for this project? Comment on Service Level.

As the City's infrastructure ages, it is necessary to replace the cable sections which are prone to frequent faults. Replacement of the cable will reduce the operational maintenance cost.

iii) What are the implications of this project not being approved?

If not replaced with new cables, the City will incur more maintenance costs due to frequent faults in cables.

iv) What alternatives were considered?

None.



2019 PROJECT FUNDING REQUEST FORM

Number: **19232**Project Name: **Erosion Restoration Program**Project Cost: **\$863,900**Commission: Community & Fire Services

Repair/Replace

Department: ES - StormwaterUseful Life: 0Project Mgr: Alan ManlucuPre Approval: ☒

Ward(s):

CW ☒ 1 ☐ 2 ☐ 3 ☐ 4 ☐
5 ☐ 6 ☐ 7 ☐ 8 ☐Category: MajorCost Validation: Recent awardsRequirement Validation: Condition assessment**DETAILED DESCRIPTION (SCOPE OF PROJECT):**

Erosion restoration at sites that require immediate restoration to protect the lands and/or infrastructure from failure.

BUILDING MARKHAM'S FUTURE TOGETHER: Describe how this project/initiative advances the objectives of BMFT.Primary Objective: Safe & Sustainable Community

Provides service that is responsive to client needs based on service delivery priorities (erosion restoration)

PROJECT COSTS (\$)

	<u>2019</u>	<u>Future Phases</u>
Cost/Quote:	738,700	0
Internal Charges:	0	0
External Consulting:	110,300	0
Contingency %: 0	0	0
Sub Total:	849,000	0
HST Impact:	14,942	0
Total Project Cost:	863,900	0

NOTES

Budget request every other year to set aside funding to restore 6-8 erosion sites since 2017. Total cost includes design, construction, contract administration and approval agency costs.

The Downstream Improvement Works Program is an annual program managed by Engineering Dept. that implements erosion restoration based on the Erosion Master Study, which is updated every 5 years and identifies restoration implementation plan for the top 30 sites. The Erosion Restoration Program on the other hand is managed by Environmental Services and restores erosion sites that require immediate attention due to storm events.

PROPOSED SOURCE(S) OF FUNDING (\$)

<u>Funding Type</u>	<u>Components</u>					<u>TOTAL</u>	<u>Future Phases</u>
	<u>Budget</u>	<u>Design + CA</u>	<u>Construction</u>				
DCA	561,600	72,956	488,644	0	0	561,600	0
Operating Funded Life Cycle	302,300	39,284	263,016	0	0	302,300	0
TOTAL FUNDING	863,900					863,900	0

OPERATING BUDGET IMPACT

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

Project Name: Erosion Restoration Program

DCA

Name

Year

Amount

**Amount in
Study**

Life Cycle

Amount in Study:

Amount Incl HST

Year in the study

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

2018 DC study includes \$18.6M for City Watercourses - Erosion Control. Out of this, \$561,600 is for this request.

Cash Flow Estimates:

Quarter 1: \$0

Quarter 2: \$10,000

Quarter 3: \$25,000

Quarter 4: \$396,900

Year 1 Total Cash Flow: **\$431,900**

Year 2: \$432,000

Year 3 + beyond: \$0

Total All Years: \$863,900

Procurement Plan:

RFP/Tender Submission to Purchasing:

RFP/Tender Award by:

Estimated Project Completion Date:

Estimated 2019 Deliverables

Based on emergency requirements.

Business Case - Rationale for project submission

i) Project Class:

ii) What is the rationale for this project? Comment on Service Level.

Erosion restoration will protect the lands and/or infrastructure from failure.

iii) What are the implications of this project not being approved?

If timely rehabilitation is not carried out, it will result in unsafe channel banks and pose risks.

iv) What alternatives were considered?

None.



2019 PROJECT FUNDING REQUEST FORM

Number: **19236**Project Name: **SWM Pond Cleaning - Ponds ID#43 & ID#70**Project Cost: **\$969,000**Commission: Community & Fire Services

Repair/Replace

Department: ES - StormwaterUseful Life: 20Project Mgr: Alan ManlucuPre Approval: ☒

Ward(s):

CW ☐ 1 ☐ 2 ☒ 3 ☒ 4 ☐5 ☐ 6 ☐ 7 ☐ 8 ☐Category: MajorCost Validation: Recent awardsRequirement Validation: Multiple(specify)**DETAILED DESCRIPTION (SCOPE OF PROJECT):**

Sediment cleaning, maintenance and repairs to 2 stormwater management (SWM) ponds: Pond #43: Civic Centre Pond and Pond #70: Carlton Village Pond

SWM Ponds require maintenance to function efficiently. Sediment levels need to be monitored and when the percentage of accumulated sediment is above regulatory limits (varies depending on the pond design), ponds need to be cleaned to ensure that the approved quality control function of the pond is maintained.

BUILDING MARKHAM'S FUTURE TOGETHER: Describe how this project/initiative advances the objectives of BMFT.Primary Objective: Safe & Sustainable Community

Sediment cleaning maintains the downstream water quality, preserves the fish habitat and contributes to a sustainable healthy ecosystem that is in line with City's Greenprint initiative. It also helps in retaining original design functionality of the pond.

PROJECT COSTS (\$)

	<u>2019</u>	<u>Future Phases</u>
Cost/Quote:	740,025	0
Internal Charges:	0	0
External Consulting:	212,229	0
Contingency %: 0	0	0
Sub Total:	952,254	0
HST Impact:	16,760	0
Total Project Cost:	969,000	0

NOTES

Requirement Validation: Condition assessment & Legislative compliance (Section 53 of Ontario Water Resources Act). Location (refer to attached map)

- Pond #43: Civic Centre Pond (Current sediment level - 76%) - Ward 2
- Pond #70: Carlton Village Pond (Current sediment level - 86%) - Ward 3.

Operations is responsible for minor above ground maintenance on SWM ponds while Environmental Services is responsible for all other aspects including inspection, sediment cleaning, rehabilitation and flood control strategies

Unit cost is consistent with recent award plus inflation.

PROPOSED SOURCE(S) OF FUNDING (\$)

<u>Funding Type</u>	<u>Components</u>					<u>TOTAL</u>	<u>Future Phases</u>
	<u>Budget</u>	<u>Design + CA</u>	<u>Construction</u>				
Operating Funded Life Cycle	969,000	215,964	753,036	0	0	969,000	0
TOTAL FUNDING	969,000					969,000	0

OPERATING BUDGET IMPACT

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

Project Name: SWM Pond Cleaning - Ponds ID#43 & ID#70

DCA

Name

Year

Amount

Amount in

Study

Life Cycle

Amount in Study:

Amount Incl HST

Year in the study

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

Design cost is higher than what was anticipated in life cycle study based on a recent award.

Cash Flow Estimates:

Quarter 1: \$0

Quarter 2: \$25,000

Quarter 3: \$25,000

Quarter 4: \$30,000

Year 1 Total Cash Flow: **\$80,000**

Year 2: \$889,000

Year 3 + beyond: \$0

Total All Years: \$969,000

Procurement Plan:

RFP/Tender Submission to Purchasing:

RFP/Tender Award by:

Estimated Project Completion Date:

Estimated 2019 Deliverables

100% completion of design works.

Business Case - Rationale for project submission

i) **Project Class:**

ii) **What is the rationale for this project? Comment on Service Level.**

To satisfy the requirement of Ministry of Environment and Climate Change (MOECC) Environmental Compliance Approvals (ECAs), sediment levels need to be monitored and when the percentage of accumulated sediment exceeds the mandatory levels, the ponds need to be cleaned to ensure that the approved quality control function of the pond is maintained.

iii) **What are the implications of this project not being approved?**

The City would be in violation of MOECC requirements. Sediment will continue to build up and the capacity of the pond to store stormwater under major storms would decrease which could increase the risk of downstream flooding, erosion and water quality impairment. When minor maintenance repairs are not addressed in a timely fashion, long term capital costs will increase due to enlargement of deficiencies.

iv) **What alternatives were considered?**

None.



2019 PROJECT FUNDING REQUEST FORM

Number: **19239**Project Name: **West Thornhill Flood Control Implementation - Ph 2D Cons.**Project Cost: **\$7,836,900**Commission: Community & Fire ServicesRepair/ReplaceDepartment: ES - Stormwater

Useful Life: 100

Project Mgr: Jawaid KhanPre Approval: ☒

Ward(s):

CW ☐ 1 ☒ 2 ☐ 3 ☐ 4 ☐
5 ☐ 6 ☐ 7 ☐ 8 ☐Category: MajorCost Validation: External peer reviewRequirement Validation: Other(specify in Notes)**DETAILED DESCRIPTION (SCOPE OF PROJECT):**

To continue with the flood remediation program in the West Thornhill area based on Class EA study recommendations. This budget request is for upgrading the storm sewer pipes in Phase 2D area (Refer to attached map).

BUILDING MARKHAM'S FUTURE TOGETHER: Describe how this project/initiative advances the objectives of BMFT.Primary Objective: Safe & Sustainable Community

This project improves the health and safety of Markham residents in terms of flood protection and reduction in basement flooding risks.

PROJECT COSTS (\$)

	2019	Future Phases
Cost/Quote:	7,112,509	16,950,850
Internal Charges:	386,780	2,243,177
External Consulting:	208,721	1,943,897
Contingency %: 0	0	0
Sub Total:	7,708,010	21,137,924
HST Impact:	128,854	332,548
Total Project Cost:	7,836,900	21,470,500

NOTES

Funding Source: Stormwater Fee Reserve + Gas Tax
Req. Validation: Council direction to upgrade the storm sewer system in West Thornhill to 100 year level protection.
Internal charges include associated staff recoveries. External charges include contract administration. The Program is as follows:
• Est. West Thornhill program cost - \$77.9M (as of June 2014)
• Previous budget approved (up to Phase 2C) represents up to \$48.6M which is 62% of the West Thornhill program cost (planned completion by 2025).
• 2019 Budget request - \$7.8M (based on Consultant's estimate)
• Remaining funding - \$21.5M (To be requested until 2024).

PROPOSED SOURCE(S) OF FUNDING (\$)

Funding Type	Components					TOTAL	Future Phases
	Budget	CA	Construction	Internal staff			
Gas Tax	2,000,000	0	2,000,000	0	0	2,000,000	0
Reserve Fund	5,836,900	212,400	5,237,700	386,800	0	5,836,900	21,510,000
TOTAL FUNDING	7,836,900					7,836,900	21,510,000

OPERATING BUDGET IMPACT

Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
\$0	\$0	\$0	\$0

Project Name: West Thornhill Flood Control Implementation - Ph 2D Cons.

DCA

Name

Year

Amount

**Amount in
Study**

Life Cycle

Amount in Study:

Amount Incl HST

Year in the study

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

This is not funded by the Life cycle. \$2M is funded through gas tax and remaining \$5.8M is funded through stormwater fee.

Cash Flow Estimates:

Quarter 1:	\$0
Quarter 2:	\$2,000,000
Quarter 3:	\$3,000,000
Quarter 4:	\$2,036,900
Year 1 Total Cash Flow:	\$7,036,900
Year 2:	\$800,000
Year 3 + beyond:	\$0
Total All Years:	\$7,836,900

Procurement Plan:

RFP/Tender Submission to Purchasing:

RFP/Tender Award by:

Estimated Project Completion Date:

Estimated 2019 Deliverables

Business Case - Rationale for project submission

i) **Project Class:**

ii) **What is the rationale for this project? Comment on Service Level.**

West Thornhill area is prone to significant flooding during large storm events. In 2010, Council approved the 100 year level of flood protection. Flood control implementation needs to be continued in phases.

iii) **What are the implications of this project not being approved?**

N/A - This is a Council approved initiative

iv) **What alternatives were considered?**

None.



2019 PROJECT FUNDING REQUEST FORM

Number: **19242**Project Name: **CI Watermain Replacement - Design**Project Cost: **\$407,000**Commission: Community & Fire Services

Repair/Replace

Department: ES - Waterworks

Useful Life: 0

Project Mgr: Jawaid KhanPre Approval: ☒

Ward(s):

CW ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☒
5 ☐ 6 ☐ 7 ☐ 8 ☐Category: MinorCost Validation: Internal peer reviewRequirement Validation: Condition assessment**DETAILED DESCRIPTION (SCOPE OF PROJECT):**

Detailed design for replacement of cast iron (CI) watermain that have reached the service life.

BUILDING MARKHAM'S FUTURE TOGETHER: Describe how this project/initiative advances the objectives of BMFT.Primary Objective: Safe & Sustainable Community

Effective watermain replacement/ rehabilitation program reduces service interruptions, improves supply capacity and reliability, maintains water quality and supports City's vision for a sustainable community.

PROJECT COSTS (\$)

	2019	Future Phases
Cost/Quote:	0	0
Internal Charges:	0	0
External Consulting:	400,000	0
Contingency %: 0	0	0
Sub Total:	400,000	0
HST Impact:	7,040	0
Total Project Cost:	407,000	0

NOTES

This is annual program and funding requirements will be requested each year.
Total CI Watermain: 52.1km
As part of the cast iron watermain replacement program, aged cast iron watermain will be systematically replaced (2019 - 2032) with the PVC watermain with a service life of 90 years.
A total of 4 km of watermain is considered for design in 2019 (Refer to attached map).
Construction and Contract Administration costs will be requested through 2020 capital budget request.

PROPOSED SOURCE(S) OF FUNDING (\$)

Funding Type	Components						Future Phases
	Budget				TOTAL		
Waterworks	407,000	0	0	0	0	0	0
TOTAL FUNDING	407,000				0	0	0

OPERATING BUDGET IMPACT

Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
\$0	\$0	\$0	\$0

Project Name: CI Watermain Replacement - Design

DCA

<u>Name</u>	<u>Year</u>	<u>Amount</u>	<u>Amount in Study</u>
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Life Cycle

Amount in Study:

Amount Incl HST

Year in the study

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

Cash Flow Estimates:

Procurement Plan:

Quarter 1:	\$40,000
Quarter 2:	\$100,000
Quarter 3:	\$125,000
Quarter 4:	\$117,000
Year 1 Total Cash Flow:	\$382,000
Year 2:	\$25,000
Year 3 + beyond:	\$0
Total All Years:	\$407,000

RFP/Tender Submission to Purchasing:

RFP/Tender Award by:

Estimated Project Completion Date:

Estimated 2019 Deliverables

90% completion of design

Business Case - Rationale for project submission

i) Project Class:

ii) What is the rationale for this project? Comment on Service Level.

Replacement of the aged cast iron watermain will improve supply capacity, reliability (less risk of breaks), water quality and flows for domestic and fire demand. Based on experience, cast iron watermain are susceptible to internal and external corrosion as they age which leads to poor water quality and increased watermain breaks. The new watermain replacement material will be PVC pipe which has a service life of 90 years and is superior as it is heat resistant, chemical resistant and non-corrosive.

iii) What are the implications of this project not being approved?

Frequent watermain breaks increases maintenance cost, disruption to the community and leads to poor water quality.

iv) What alternatives were considered?

None



2019 PROJECT FUNDING REQUEST FORM

Number: **19245**Project Name: **CI Watermain Replacement - West Thornhill Ph 2D Const.**Project Cost: **\$4,454,000**Commission: Community & Fire Services

Repair/Replace

Department: ES - Waterworks

Useful Life: 90

Project Mgr: Jawaid KhanPre Approval: ☒

Ward(s):

CW ☐ 1 ☒ 2 ☐ 3 ☐ 4 ☐
5 ☐ 6 ☐ 7 ☐ 8 ☐Category: MajorCost Validation: Recent awardsRequirement Validation: Condition assessment**DETAILED DESCRIPTION (SCOPE OF PROJECT):**

Replacement of cast iron (CI) watermain that have reached end of the service life within West Thornhill Phase 2D area.

BUILDING MARKHAM'S FUTURE TOGETHER: Describe how this project/initiative advances the objectives of BMFT.Primary Objective: Safe & Sustainable Community

Effective watermain replacement/ rehabilitation program reduces service interruptions, improves supply capacity and reliability, maintains water quality and supports City's vision for a sustainable community.

PROJECT COSTS (\$)

	<u>2019</u>	<u>Future Phases</u>
Cost/Quote:	4,030,514	0
Internal Charges:	140,199	0
External Consulting:	208,721	0
Contingency %: 0	0	0
Sub Total:	4,379,434	0
HST Impact:	74,611	0
Total Project Cost:	4,454,000	0

NOTES

As part of the cast iron watermain replacement program, aged cast iron watermain will be replaced with the PVC watermain along with the West Thornhill Flood Control Implementation phases. A total of 1.9 km of watermain is considered for replacement in Phase 2D area in 2019 (Refer to attached map). Internal charge is to fund one Project Engineer (existing permanent FTE) position.

PROPOSED SOURCE(S) OF FUNDING (\$)

<u>Funding Type</u>	<u>Components</u>					<u>TOTAL</u>	<u>Future Phases</u>
	<u>Budget</u>	<u>Construction</u>	<u>CA</u>	<u>Internal</u>			
Waterworks	4,454,000	4,101,406	212,395	140,199	0	4,454,000	0
TOTAL FUNDING	4,454,000					4,454,000	0

OPERATING BUDGET IMPACT

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

Project Name: CI Watermain Replacement - West Thornhill Ph 2D Const.

DCA

Name

Year

Amount

Amount in

Study

Life Cycle

Amount in Study:

Amount Incl HST

Year in the study

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

Cash Flow Estimates:

Quarter 1:	\$0
Quarter 2:	\$1,000,000
Quarter 3:	\$2,000,000
Quarter 4:	\$1,154,000
Year 1 Total Cash Flow:	\$4,154,000
Year 2:	\$300,000
Year 3 + beyond:	\$0
Total All Years:	\$4,454,000

Procurement Plan:

RFP/Tender Submission to Purchasing:

RFP/Tender Award by:

Estimated Project Completion Date:

Estimated 2019 Deliverables

Tender will be combined with West Thornhill Ph 2D storm works.

Business Case - Rationale for project submission

i) Project Class:

ii) What is the rationale for this project? Comment on Service Level.

Replacement of the aged cast iron watermain will improve supply capacity, reliability (less risk of breaks), water quality and flows for domestic and fire demand. Based on experience, cast iron watermain are susceptible to internal and external corrosion as they age which leads to poor water quality and increased watermain breaks. The new watermain replacement material will be PVC pipe which has a service life of 90 years and is superior as it is heat resistant, chemical resistant and non-corrosive.

iii) What are the implications of this project not being approved?

Frequent watermain breaks increases maintenance cost, disruption to the community and leads to poor water quality.

iv) What alternatives were considered?

None



2019 PROJECT FUNDING REQUEST FORM

Number: **19248**Project Name: **Sanitary Sewers - Laterals Inspection**Project Cost: **\$170,800**Commission: Community & Fire ServicesStudies/Pilot ProgramsDepartment: ES - WaterworksUseful Life: 0Project Mgr: Vikas ThakurPre Approval: ☒

Ward(s):

CW ☒ 1 ☐ 2 ☐ 3 ☐ 4 ☐
5 ☐ 6 ☐ 7 ☐ 8 ☐Category: MinorCost Validation: Recent awardsRequirement Validation: Condition assessment**DETAILED DESCRIPTION (SCOPE OF PROJECT):**

Program to assess the extent of infiltration, root and other blockage problems in sanitary sewer laterals in high inflow and infiltration areas.

BUILDING MARKHAM'S FUTURE TOGETHER: Describe how this project/initiative advances the objectives of BMFT.Primary Objective: Safe & Sustainable Community

Effective sanitary sewer lateral inspection program reduces sewer backups into homes and supports City's vision for a safe and sustainable community.

PROJECT COSTS (\$)

	<u>2019</u>	<u>Future Phases</u>
Cost/Quote:	167,860	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	167,860	0
HST Impact:	2,954	0
Total Project Cost:	170,800	0

NOTES

This is an annual program and funding requirements will be requested each year.
Total inventory: 80,881
This request is to inspect 1,400 laterals in 2019 (refer to attached map).
Unit cost is consistent with recent award plus inflation.

PROPOSED SOURCE(S) OF FUNDING (\$)

<u>Funding Type</u>	<u>Components</u>						<u>Future Phases</u>
	<u>Budget</u>				<u>TOTAL</u>		
Waterworks	170,800	0	0	0	0	0	0
TOTAL FUNDING	170,800				0		0

OPERATING BUDGET IMPACT

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

Project Name: Sanitary Sewers - Laterals Inspection

DCA

Name

Year

Amount

**Amount in
Study**

Life Cycle

Amount in Study:

Amount Incl HST

Year in the study

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

Cash Flow Estimates:

Quarter 1:	\$0
Quarter 2:	\$50,000
Quarter 3:	\$80,000
Quarter 4:	\$40,800
Year 1 Total Cash Flow:	\$170,800
Year 2:	\$0
Year 3 + beyond:	\$0
Total All Years:	\$170,800

Procurement Plan:

RFP/Tender Submission to Purchasing:

RFP/Tender Award by:

Estimated Project Completion Date:

Estimated 2019 Deliverables

Business Case - Rationale for project submission

i) **Project Class:**

ii) **What is the rationale for this project? Comment on Service Level.**

Inspection program prevents sanitary sewer back-ups into homes due to root and other blockages. Also, the program identifies the infiltration.

iii) **What are the implications of this project not being approved?**

Damage to personal properties and customer dissatisfaction.

iv) **What alternatives were considered?**

Status quo. Repair only after sewer back-ups. This will lead to poor maintenance practices and poor customer service.



2019 PROJECT FUNDING REQUEST FORM

Number: **19253**Project Name: **Water Meters - Replacement Program**Project Cost: **\$802,500**Commission: Community & Fire Services

Repair/Replace

Department: ES - WaterworksUseful Life: 20Project Mgr: David HuynhPre Approval: ☒

Ward(s):

CW ☒ 1 ☐ 2 ☐ 3 ☐ 4 ☐
5 ☐ 6 ☐ 7 ☐ 8 ☐Category: MinorCost Validation: Recent awardsRequirement Validation: Condition assessment**DETAILED DESCRIPTION (SCOPE OF PROJECT):**

Replacement of Residential, Multi Residential and Industrial/ Commercial/ Institutional (ICI) water meters that have reached the service life.

BUILDING MARKHAM'S FUTURE TOGETHER: Describe how this project/initiative advances the objectives of BMFT.Primary Objective: Safe & Sustainable Community

Promotes water conservation through accurate measurement of water consumption, environmental health through prevention of water damage inside premises caused by leaking water meter.

PROJECT COSTS (\$)

	<u>2019</u>	<u>Future Phases</u>
Cost/Quote:	788,600	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	788,600	0
HST Impact:	13,879	0
Total Project Cost:	802,500	0

NOTES

This is annual program and funding will be requested each year. Program is to replace the Residential, Multi Residential and Industrial/ Commercial/Institutional (ICI) water meters that have reached their service life (20 years).
Total inventory: 82,109 (Residential: 79,613, Multi residential: 445 and ICI: 2,051). This request is to replace approx. 3,860 watermeters (3,788 residential, 29 multi residential and 43 ICI) and perform random testing of approx. 5% of new meters for accuracy per AWWA C700 (Recommendation #1 for Improvement on Metering Practices, 2015 by Region of York). There is no substantial backlog and water meters are in a state of good repair. Unit cost is consistent with recent award plus inflation.

PROPOSED SOURCE(S) OF FUNDING (\$)

<u>Funding Type</u>	<u>Components</u>					<u>TOTAL</u>	<u>Future Phases</u>
	<u>Budget</u>						
Waterworks	802,500	0	0	0	0	0	0
TOTAL FUNDING	802,500					0	0

OPERATING BUDGET IMPACT

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

Project Name: Water Meters - Replacement Program

DCA

Name

Year

Amount

**Amount in
Study**

Life Cycle

Amount in Study:

Amount Incl HST

Year in the study

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

Cash Flow Estimates:

Quarter 1: \$200,625

Quarter 2: \$200,625

Quarter 3: \$200,625

Quarter 4: \$200,625

Year 1 Total Cash Flow: **\$802,500**

Year 2: \$0

Year 3 + beyond: \$0

Total All Years: \$802,500

Procurement Plan:

RFP/Tender Submission to Purchasing:

RFP/Tender Award by:

Estimated Project Completion Date:

Estimated 2019 Deliverables

022-R-14 Contract awarded in 2015 for 3 years fixed price + 2 years at CPI index increase. Contract expires in Dec 2019. Procurement involvement is not required.

Business Case - Rationale for project submission

i) **Project Class:**

ii) **What is the rationale for this project? Comment on Service Level.**

Program is to replace the residential, multi-residential and ICI water meters that have reached their service life of 20 years.

iii) **What are the implications of this project not being approved?**

Potential increase of non-revenue water loss, customer complaints for high water consumption and increase in maintenance costs.

iv) **What alternatives were considered?**

None