



# 2020 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$223,900

Project Name: Theatre-Courtyard Replacement (Upper & Lower)

Commission: Development Services

Repair/Replace

Department: Theatre

Useful Life: 25 Pre Approval:

Project Mgr: Andrew Rosenfarb

Category: Major

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):**

Remove interlock brick from the theatre's main entrance and 2 courtyards located in between the Theatre and Unionville High School and replace with concrete. Existing interlock was installed during theatre construction in 1985.

**BUILDING MARKHAM'S FUTURE TOGETHER:** Safe & Sustainable Community

<b>PROJECT COSTS (\$)</b>	<b>2020</b>	<b>Future Phases</b>
Cost/Quote:	200,000	0
Internal Charges:	0	0
External Consulting:	20,000	0
Sub Total:	220,000	0
HST Impact:	3,872	0
<b>Total Project Cost:</b>	<b>223,900</b>	<b>0</b>

**NOTES**

This project aims to make the courtyard areas on City owned property more usable & attractive for events and most importantly to fix issues such as unlevelled ground, water drainage issues, missing stones and open ground where trees have been removed. Work would take place in the summer months to have minimal impact on programs. Amount requested is consistent with the 2019 Life Cycle reserve study update.

<b>SOURCE(S) OF FUNDING (\$)</b>	<b>Components</b>						<b>TOTAL</b>	<b>Future Phases</b>
	<b>Funding Type</b>	<b>Budget</b>						
Operating Funded Life Cycle	223,900	0	0	0	0	0	0	
<b>TOTAL FUNDING</b>	<b>223,900</b>					<b>0</b>	<b>0</b>	

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

**DCA/LIFE CYCLE DETAILS**

<b>DCA Name</b>	<b>Year</b>	<b>Amount</b>	<b>Amount in Study</b>	<b>Life Cycle</b>
				Amount in Study: <input type="text" value="1,100,900"/>
				Amount Incl HST <input type="text" value="223,900"/>
				Year in the study <input type="text" value="2020"/>

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

2019 life cycle includes HVAC Quantity Survey (\$10k), Theatrical Lighting Fixture Replacement (\$195k), Building Maint. (\$42k), Dressing Room Refurbishment (\$291k), Courtyard Replacement (\$224k), Parking Lot Swing Gates (\$15k), Stage Equipment & Maint. (\$20k). Amount available in 2020 life cycle is \$1,101k. Amount requested is \$797k. Difference is primarily due to the deferral of the auditorium interior painting & LED house light conversion (\$251k) and other components based on assessment.





# 2020 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$290,700

Project Name: Theatre-Dressing Room Refurbishment

Commission: Development Services

Repair/Replace

Department: Theatre

Useful Life: 10 Pre Approval:

Project Mgr: Andrew Rosenfarb

Category: Major

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

Cost Validation: External peer review

Requirement Validation: Condition assessment

### DETAILED DESCRIPTION (SCOPE OF PROJECT):

Redesign & refurbishment of 6 dressing rooms including replacement of flooring, countertops, shower stalls, ceramic tiles, plumbing fixtures, toilets, partitions, mirrors, chairs, costume racks, painting and replacement of incandescent lighting with LED.

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

<b>PROJECT COSTS (\$)</b>	<b>2020</b>	<b>Future Phases</b>
Cost/Quote:	245,700	0
Internal Charges:	0	0
External Consulting:	40,000	0
Sub Total:	285,700	0
HST Impact:	5,028	0
<b>Total Project Cost:</b>	<b>290,700</b>	<b>0</b>

### NOTES

Last refurbished over 12 years ago, the venue's dressing rooms are showing their age and several components have visible damage. Dressing rooms are used by both our professional artists from around the world and members of our community. For some, these rooms are one of the only few impressions they get of the Theatre and City of Markham. The theatre is requesting to refurbish these spaces to better serve our clients and community. Amount consistent with the 2019 life cycle reserve study update.

<b>SOURCE(S) OF FUNDING (\$)</b>	<b>Components</b>						<b>TOTAL</b>	<b>Future Phases</b>
	<b>Funding Type</b>	<b>Budget</b>						
Operating Funded Life Cycle	290,700	0	0	0	0	0	0	
<b>TOTAL FUNDING</b>	<b>290,700</b>					<b>0</b>	<b>0</b>	

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

### DCA/LIFE CYCLE DETAILS

<b>DCA</b>	<b>Year</b>	<b>Amount</b>	<b>Amount in Study</b>	<b>Life Cycle</b>
<b>Name</b>				Amount in Study: <input type="text" value="1,100,900"/>
				Amount Incl HST <input type="text" value="290,700"/>
				Year in the study <input type="text" value="2020"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				
2019 life cycle includes HVAC Quantity Survey (\$10k), Theatrical Lighting Fixture Replacement (\$195k), Building Maint. (\$42k), Dressing Room Refurbishment (\$291k), Courtyard Replacement (\$224k), Parking Lot Swing Gates (\$15k), Stage Equipment & Maint. (\$20k). Amount available in 2020 life cycle is \$1,101k. Amount requested is \$797k. Difference is primarily due to the deferral of the auditorium interior painting & LED house light conversion (\$251k) and other components based on assessment.				





# 2020 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$10,200

Project Name: Theatre-HVAC Quantity Survey

Studies/Pilot Programs

Commission: Development Services

Useful Life: 30 Pre Approval:

Department: Theatre

Category: Minor

Project Mgr: Jason Vasilaki & Andrew Rosenfarb

Cost Validation: Third party estimate

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

Requirement Validation: Documentation of life cycle years

**DETAILED DESCRIPTION (SCOPE OF PROJECT):**

Quantity surveyor consultation for the replacement of the Theatre's HVAC system scheduled for 2021.

**BUILDING MARKHAM'S FUTURE TOGETHER:** Safe & Sustainable Community

<b>PROJECT COSTS (\$)</b>	<b>2020</b>	<b>Future Phases</b>
Cost/Quote:	0	1,500,000
Internal Charges:	0	0
External Consulting:	10,000	0
Sub Total:	10,000	1,500,000
HST Impact:	176	26,400
<b>Total Project Cost:</b>	<b>10,200</b>	<b>1,526,400</b>

**NOTES**

Recommendation from sustainability & asset management department to engage a professional cost estimation consultant for the HVAC replacement project. The 2021 construction project (current estimate included as future phases) will be adjusted based on the consultant's recommendation.

<b>SOURCE(S) OF FUNDING (\$)</b>	<b>Components</b>						<b>TOTAL</b>	<b>Future Phases</b>
	<b>Funding Type</b>	<b>Budget</b>						
Operating Funded Life Cycle	10,200	0	0	0	0	0	1,526,400	
<b>TOTAL FUNDING</b>	<b>10,200</b>					<b>0</b>	<b>1,526,400</b>	

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

**DCA/LIFE CYCLE DETAILS**

<b>DCA Name</b>	<b>Year</b>	<b>Amount</b>	<b>Amount in Study</b>	<b>Life Cycle</b>
				Amount in Study: <input type="text" value="1,100,900"/>
				Amount Incl HST <input type="text" value="10,200"/>
				Year in the study <input type="text" value="2020"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				
2019 life cycle includes HVAC Quantity Survey (\$10k), Theatrical Lighting Fixture Replacement (\$195k), Building Maint. (\$42k), Dressing Room Refurbishment (\$291k), Courtyard Replacement (\$224k), Parking Lot Swing Gates (\$15k), Stage Equipment & Maint. (\$20k). Amount available in 2020 life cycle is \$1,101k. Amount requested is \$797k. Difference is primarily due to the deferral of the auditorium interior painting & LED house light conversion (\$251k) and other components based on assessment.				





# 2020 PROJECT FUNDING REQUEST FORM

Number: 20053

Project Cost: \$750,200

Project Name: E-Ticketing and Payment System Platform Replacement

Commission: Corporate Services

Repair/Replace

Department: ITS

Useful Life: 10 Pre Approval:

Project Mgr: Michael Killingsworth

Category: Major

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

Cost Validation: Other(specify in Notes)

Requirement Validation: Other(specify in Notes)

**DETAILED DESCRIPTION (SCOPE OF PROJECT):**

In 2015, the City implemented an Administrative Monetary Penalty System (AMPs) for by-law prosecutions. The current e-ticketing and payment system platform is used to produce penalty notices, notice letters, schedule screenings and hearings and to process AMPs fines that have gone into default to Ministry of Transportation license plate denial. The current e-ticketing, online and phone payment system (ParkSmart) is over 10 years old and at end of life. The City was recently notified by ParkSmart that it will no longer be supporting this platform as of July 2019. It is currently used only for parking violations, which generates approximately \$3M annually in parking violation revenues for the City; however, to scale up to full implementation of AMPs, the City requires updating of the current system to accommodate prosecution of all regulatory by-laws. Municipalities have had provincial court time reduced in the past two years. Markham is down to 6 days/yr of court time. A new e-ticket platform will allow the City to issue all notices, collect fine revenue and will permit online screening which is a significant customer service improvement. A new system will also provide improved analytics and data collection to optimize current resources. Not replacing the current system will create the risk of a complete program shut-down. All electronic processes currently facilitated through the platform will have to revert back to manual methods, including the issuance of penalty notices. This method will require significant additional human resources to manually input and track approximately 4000 penalty notices per month and facilitate all of the required administrative tasks associated with the prosecution of offences.

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

PROJECT COSTS (\$)	2020	Future Phases
Cost/Quote:	565,000	0
Internal Charges:	175,300	0
External Consulting:	0	0
Sub Total:	740,300	0
HST Impact:	9,944	0
<b>Total Project Cost:</b>	<b>750,200</b>	<b>0</b>

**NOTES**

The cost validation for this project is based on a business proposal and quote received from a potential vendor for initial start up and \$75,000 annually thereafter for maintenance fees for software, hosting and consumables. \$175,300 has been added for 1 contract resource for 1.5 years for project management.

SOURCE(S) OF FUNDING (\$)	Components						TOTAL	Future Phases
	Budget							
Operating Funded Life Cycle	750,200	0	0	0	0	0		
<b>TOTAL FUNDING</b>	<b>750,200</b>					<b>0</b>		

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$75,000	\$0	\$75,000

**DCA/LIFE CYCLE DETAILS**

**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 cost:



# 2020 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$183,200

Project Name: Enterprise Scheduling Software Solution

Commission: Corporate Services

New Asset/Expansion

Department: ITS

Useful Life: 5 Pre Approval:

Project Mgr: Ned Sirry

Category: Major

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

Cost Validation: Third party estimate

Requirement Validation: Other(specify in Notes)

### DETAILED DESCRIPTION (SCOPE OF PROJECT):

A scheduling software solution would allow for a streamlined and efficient approach to maintaining both the daily assignment of duties and weekly, bi-weekly, monthly schedules for Citywide uses. It would ensure appropriate coverage and support the allocation of staffing resources across the City. This would be an enterprise solution with provisions to meet requirements for all BU's that require it and planned intergration into existing HRIS systems (ADP). This project supports the City's strategy under Stewardship of Money & Resources. This would increase customer satisfaction, operational excellence, and staff engagement.

**BUILDING MARKHAM'S FUTURE TOGETHER:** Stewardship of Money & Resources

PROJECT COSTS (\$)	2020	Future Phases
Cost/Quote:	180,000	0
Internal Charges:	0	0
External Consulting:	0	0
Sub Total:	180,000	0
HST Impact:	3,168	0
<b>Total Project Cost:</b>	<b>183,200</b>	<b>0</b>

### NOTES

Several BU's have made requests for a scheduling software solution for their individual area - this would result in multiple point solutions, make support difficult, and result in muliple integration points. An Enterprise solution consolidates the point solutions into a corporate standard ensuring consistency across the City of Markham, a single support point, and single integration point with HRIS systems. ADP consultancy is expected for integration needs. (160K software + 20K integration)

SOURCE(S) OF FUNDING (\$)	Components						Future Phases
	Budget				TOTAL		
Operating Funded Life Cycle	183,200	0	0	0	0	0	
<b>TOTAL FUNDING</b>	<b>183,200</b>				<b>0</b>	<b>0</b>	

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$15,000	\$0	\$15,000

### DCA/LIFE CYCLE DETAILS

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

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





# 2020 PROJECT FUNDING REQUEST FORM

11

Number: 20023

Project Cost: \$550,000

Project Name: 160 Dudley Avenue Playground and Parking

Commission: Corporate Services

New Asset/Expansion

Department: Asset Management

Useful Life: 25 Pre Approval:

Project Mgr: Renee England

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):**

This project is to remove the existing and extensive paving, replace it with a new accessible junior and senior playground, install a reduced amount of paving, sod the remainder and install some new landscaping at the front of the building.

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

<b>PROJECT COSTS (\$)</b>	<b>2020</b>	<b>Future Phases</b>
Cost/Quote:	521,800	0
Internal Charges:	19,000	0
External Consulting:	0	0
Sub Total:	540,800	0
HST Impact:	9,184	0
<b>Total Project Cost:</b>	<b>550,000</b>	<b>0</b>

**NOTES**

\$226,000 - Playground, street fence and pathway  
 \$241,770 - Parking  
 \$63,230 - Landscaping

<b>SOURCE(S) OF FUNDING (\$)</b>	<b>Components</b>					<b>TOTAL</b>	<b>Future Phases</b>
	<b>Budget</b>	<b>Playground construction</b>	<b>Parking</b>	<b>Landscaping</b>	<b>Internal Charges</b>		
DCA	220,500	203,400	0	0	17,100	220,500	0
Operating Funded Life Cycle	305,000	0	241,770	63,230	0	305,000	0
Parks Cash-in-Lieu	24,500	22,600	0	0	1,900	24,500	0
<b>TOTAL FUNDING</b>	<b>550,000</b>					<b>550,000</b>	<b>0</b>

<b>OPERATING BUDGET IMPACT</b>	<b>Personnel</b>	<b>Non Personnel</b>	<b>Revenues</b>	<b>Expenditures/(Revenues)</b>
	\$0	\$30,000	\$0	\$30,000

**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 cost:



# 2020 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$490,600

Project Name: **Parking Lot Light Replacement**

Commission: Corporate Services

Repair/Replace

Department: Asset Management

Useful Life: 25 Pre Approval:

Project Mgr: Khwaja Waker

Category: Major

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

Cost Validation: Internal peer review

Requirement Validation: Condition assessment

**DETAILED DESCRIPTION (SCOPE OF PROJECT):**

This work allows for replacement of the parking lot light poles including underground wiring and fixture at City owned properties. Poles for replacement are identified through another program (Parking Lot light Inspection) that occurs every 5 years to meet illumination standards for safety and liability. Poles and fixtures are audited once every 5 years to identify the poles/fixtures to be replaced through this program.

**BUILDING MARKHAM'S FUTURE TOGETHER:** Stewardship of Money & Resources

<u>PROJECT COSTS (\$)</u>	<u>2020</u>	<u>Future Phases</u>
Cost/Quote:	472,100	0
Internal Charges:	10,200	0
External Consulting:	0	0
Sub Total:	482,300	0
HST Impact:	8,309	0
<b>Total Project Cost:</b>	<b>490,600</b>	<b>0</b>

**NOTES**

\$480,400 Citywide parking lot light poles, fixtures and underground cable replacement, incl. Milliken Mills CC (1987)  
\$10,200 Internal Chargeback  
Amount requested is consistent with 2019 Life Cycle Reserve Study.

<u>SOURCE(S) OF FUNDING (\$)</u>	<u>Components</u>					<u>TOTAL</u>	<u>Future Phases</u>
	<u>Budget</u>	<u>Parking lot light replacement</u>	<u>Internal Chargeback</u>				
Operating Funded Life Cycle	490,600	480,400	10,200	0	0	490,600	0
<b>TOTAL FUNDING</b>	<b>490,600</b>					<b>490,600</b>	<b>0</b>

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

**DCA/LIFE CYCLE DETAILS**

<u>DCA Name</u>	<u>Year</u>	<u>Amount</u>	<u>Amount in Study</u>	<u>Life Cycle</u>
				Amount in Study: <input type="text" value="1,903,300"/>
				Amount Incl HST <input type="text" value="490,600"/>
				Year in the study <input type="text"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				
SAM LC program for 2020 is \$1.778M of \$1.903M - Corp Security \$701.7K, Parking Lot light \$490.6K, Backflow Prevention \$20.4K, Bldg. Condition Audit \$144K, Bldg Envelope \$56.1K, Accessibility \$137.7K, Designated Substances \$69.4K & PVC Salt Dome Demolition supplement \$158K.				





# 2020 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$18,100

Project Name: Heintzman House Floor Refinishing

Commission: Community & Fire Services

Repair/Replace

Department: Recreation Services

Useful Life: 12 Pre Approval:

Project Mgr: Martin Barrow

Category: Minor

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

Cost Validation: Recent awards

Requirement Validation: Condition assessment

### DETAILED DESCRIPTION (SCOPE OF PROJECT):

This project is to sand and recoat the existing hardwood flooring in the Banquet Hall, Crookshank Room, Bridal Suite, Childrens Room 2nd floor, and Grooms Room at Heintzman House. In order to preserve the floor's appearance and continue to make the space attractive to customers, staff recommends refurbishing the floor. Their will be 4,900 sq ft of floor being refurbished

**BUILDING MARKHAM'S FUTURE TOGETHER:** Safe & Sustainable Community

<b>PROJECT COSTS (\$)</b>	<b>2020</b>	<b>Future Phases</b>
Cost/Quote:	17,800	0
Internal Charges:	0	0
External Consulting:	0	0
Sub Total:	<u>17,800</u>	<u>0</u>
HST Impact:	313	0
<b>Total Project Cost:</b>	<b><u>18,100</u></b>	<b><u>0</u></b>

### NOTES

The existing wood flooring was installed in 1930 and is original to the Heintzman house. The amount requested is consistent with recent staff award plus inflation. \$3.69/sqft x 4900 sqft = \$18,100

<b>SOURCE(S) OF FUNDING (\$)</b>	<b>Components</b>						<b>TOTAL</b>	<b>Future Phases</b>
	<b>Budget</b>							
Operating Funded Life Cycle	18,100	0	0	0	0	0	0	
<b>TOTAL FUNDING</b>	<b><u>18,100</u></b>					<b><u>0</u></b>	<b><u>0</u></b>	

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

### DCA/LIFE CYCLE DETAILS

<b>DCA</b>	<b>Year</b>	<b>Amount</b>	<b>Amount in Study</b>	<b>Life Cycle</b>
<b>Name</b>				Amount in Study: <input type="text" value="58,800"/>
				Amount Incl HST <input type="text" value="18,100"/>
				Year in the study <input type="text" value="2020"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				
Life Cycle includes: Boiler \$24k, Fireplace \$7.8k (reduced from \$8k), Floor refinishing \$19.9k, Kitchen Stove \$8.1k				





# 2020 PROJECT FUNDING REQUEST FORM

17

Number:

Project Cost: \$597,100

Project Name: Milliken Mills C.C. Lobby Enhancement

Commission: Community & Fire Services

Repair/Replace

Department: Recreation Services

Useful Life: 15 Pre Approval:

Project Mgr: Ryan Hanna

Category: Minor

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

Cost Validation: Internal peer review

Requirement Validation: Condition assessment

**DETAILED DESCRIPTION (SCOPE OF PROJECT):**

This project is to add accessibility improvements and enhanced features and amenities to the main lobby and library areas at Milliken Mills C.C.. All features and amenities in the main lobby and library entrance area are original and were installed in 1989. The facility is outdated and its features and amenities need to be redesigned and replaced. Staff have experienced numerous issues with replacing and repairing parts and components (IE: Tiles), many of which are no longer in production. This project will also add additional accessibility improvements to support community needs.

**BUILDING MARKHAM'S FUTURE TOGETHER:** Safe & Sustainable Community

PROJECT COSTS (\$)	2020	Future Phases
Cost/Quote:	586,746	0
Internal Charges:	0	0
External Consulting:	0	0
Sub Total:	586,746	0
HST Impact:	10,327	0
<b>Total Project Cost:</b>	<b>597,100</b>	<b>0</b>

**NOTES**

To update the main lobby area, this project includes the redesign of the main lobby area, replace existing quarry tile, paint main lobby, replace library entrance with accessible doors and update existing washrooms. These features and amenities were installed in 1989. A condition assessment on these items in the lobby and library area indicate replacement is warranted. The amount requested was validated by an internal peer review conducted by Asset Management.

SOURCE(S) OF FUNDING (\$)	Components					TOTAL	Future Phases
	Budget	Quarry tile	Consulting	Permits			
Gas Tax	526,600	0	0	0	0	0	0
Operating Funded Life Cycle	70,500	48,500	12,000	10,000	0	70,500	0
<b>TOTAL FUNDING</b>	<b>597,100</b>					<b>70,500</b>	<b>0</b>

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

**DCA/LIFE CYCLE DETAILS**

DCA Name	Year	Amount	Amount in Study	Life Cycle
				Amount in Study: <input type="text" value="1,483,700"/>
				Amount Incl HST <input type="text" value="70,500"/>
				Year in the study <input type="text" value="2020"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				
Life Cycle includes: Scoreboard \$15.4k, Floor Machine \$22.5k, Heat Exchanger \$14.8k, Bleacher Heaters \$24.4k, Arena Foundation \$901.9k, Arena Board \$223.9k, Arena Paint \$8k, Furnace \$103.8k, Bleachers Seating \$29.2k, Flooring \$119.7k, Mixing Values \$4k (deferred), Filter Pump \$3k (deferred), Life Safety Monitor \$5k (deferred), Kitchen Equipment \$8k (deferred)				





# 2020 PROJECT FUNDING REQUEST FORM

19

Number:

Project Cost: \$250,600

Project Name: **Recreation Lighting Project Replacement**

Commission: Community & Fire Services

Repair/Replace

Department: Recreation Services

Useful Life: 10 Pre Approval:

Project Mgr: Ryan Hanna

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 lighting in the Library at Angus Glen C.C, the gymnasium and pool change room at Cornell C.C, the pool change rooms at Centennial C.C, the interior and exterior lighting at the Pingle House.

**BUILDING MARKHAM'S FUTURE TOGETHER:** Safe & Sustainable Community

<b>PROJECT COSTS (\$)</b>	<b>2020</b>	<b>Future Phases</b>
Cost/Quote:	246,300	0
Internal Charges:	0	0
External Consulting:	0	0
Sub Total:	246,300	0
HST Impact:	4,335	0
<b>Total Project Cost:</b>	<b>250,600</b>	<b>0</b>

**NOTES**

A condition assessment of the lighting indicates replacement is warranted. E3: This replacement will result in annual cost savings in 2021, Cornell \$14,322, Centennial \$5,041, Angus Glen \$33,562 for a total of \$52,926. In 2020, annual savings will be : Centennial \$ 2,520, Angus Glen \$ 16,781, Cornell \$ 14,322 for a total of \$33,623. Payback for Centennial 2.5 yrs, Cornell 3.3 yrs, Angus Glen 4.9 yrs. The cost is consistent with recent staff award plus inflation.

<b>SOURCE(S) OF FUNDING (\$)</b>	<b>Components</b>						<b>Future Phases</b>
	<b>Budget</b>	<b>Cornell</b>	<b>Centennial</b>	<b>Angus Glen</b>	<b>Pingle House</b>	<b>TOTAL</b>	
Operating Funded Life Cycle	250,600	47,590	15,000	151,200	36,810	250,600	0
<b>TOTAL FUNDING</b>	<b>250,600</b>					<b>250,600</b>	<b>0</b>

<b>OPERATING BUDGET IMPACT</b>	<b>Personnel</b>	<b>Non Personnel</b>	<b>Revenues</b>	<b>Expenditures/(Revenues)</b>
	\$0	-\$33,623	\$0	-\$33,623

**DCA/LIFE CYCLE DETAILS**

<b>DCA Name</b>	<b>Year</b>	<b>Amount</b>	<b>Amount in Study</b>	<b>Life Cycle</b>
				Amount in Study: <input type="text" value="2,470,400"/>
				Amount Incl HST <input type="text" value="250,600"/>
				Year in the study <input type="text" value="2020"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				
Life Cycle Statement: Cornell \$47,590, Centennial \$15,000, Angus Glen \$151,200, Pingle House \$36,810.				





**2020 PROJECT FUNDING REQUEST FORM**

Number:

Project Cost: \$2,796,600

Project Name: Library Collections

Commission: Community & Fire Services

Repair/Replace

Department: Markham Public Library

Useful Life: 7 Pre Approval:

Project Mgr: Catherine Biss

Category: Annual

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

Cost Validation: Recent awards

Requirement Validation: Condition assessment

**DETAILED DESCRIPTION (SCOPE OF PROJECT):**

Collections are the Library's main product and are used heavily by the public, which expects currency. This requires ongoing acquisition of new materials, including those in print and non-print formats and non-English language materials, which are in high demand in Markham. In a 2016 survey of 1,400 residents, 97% indicated that it was important that MPL provides books and valued borrowing materials as the #1 Library service.

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

<b>PROJECT COSTS (\$)</b>	<b>2020</b>	<b>Future Phases</b>
Cost/Quote:	2,748,208	0
Internal Charges:	0	0
External Consulting:	0	0
Sub Total:	<u>2,748,208</u>	<u>0</u>
HST Impact:	48,368	0
<b>Total Project Cost:</b>	<b><u>2,796,600</u></b>	<b><u>0</u></b>

**NOTES**

Preliminary allocations (includes processing) as follows: Books & Subscriptions \$970K / Audio-visual \$365K / French \$25K / Multilingual \$300K / Microfilms \$3.6K / Periodicals \$100K / Electronic Resources \$760K / Processing Supplies \$230K. (Figures subject to revision based on material availability, customer needs and final Library review.) 25% of funding (excl. processing costs) devoted to non-English materials (i.e. Multilingual, French). Cost for replacement of existing E-Resources (when invoiced in USD) based on exchange rate of 1.35.

<b>SOURCE(S) OF FUNDING (\$)</b>		<b>Components</b>				<b>Future Phases</b>
<b>Funding Type</b>	<b>Budget</b>	<b>Collection</b>			<b>TOTAL</b>	<b>Phases</b>
Operating Funded Life Cycle	2,796,600	2,796,600	0	0	2,796,600	0
<b>TOTAL FUNDING</b>	<b><u>2,796,600</u></b>				<b><u>2,796,600</u></b>	<b><u>0</u></b>

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

**DCA/LIFE CYCLE DETAILS**

<b>DCA Name</b>	<b>Year</b>	<b>Amount</b>	<b>Amount in Study</b>	<b>Life Cycle</b>
				Amount in Study: <input type="text" value="2,753,400"/>
				Amount Incl HST <input type="text" value="2,796,600"/>
				Year in the study <input type="text" value="2020"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				
The life cycle amount is based on the latest Library collections contract and is consistent with the 2019 Life Cycle Reserve Study; USD exchanged rate updated from 1.30 to 1.35 based on June 2019 forecast.				





# 2020 PROJECT FUNDING REQUEST FORM

23

Number: 20197

Project Cost: \$1,017,600

Project Name: Block Pruning Initiative - Year 1 of 3

Commission: Community & Fire Services

Repair/Replace

Department: Operations - Parks

Useful Life: 0 Pre Approval:

Project Mgr: Miles Peart

Category: Major

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

Cost Validation: Third party estimate

Requirement Validation: Visual inspection

### DETAILED DESCRIPTION (SCOPE OF PROJECT):

3 year capital project to prune City trees proactively to improve storm damage resistance and reduce residents complaints which currently are over 2,700 per year.

**BUILDING MARKHAM'S FUTURE TOGETHER:** Safe & Sustainable Community

<b>PROJECT COSTS (\$)</b>	<b>2020</b>	<b>Future Phases</b>
Cost/Quote:	1,000,000	2,000,000
Internal Charges:	0	0
External Consulting:	0	0
Sub Total:	<u>1,000,000</u>	<u>2,000,000</u>
HST Impact:	17,600	35,200
<b>Total Project Cost:</b>	<b><u>1,017,600</u></b>	<b><u>2,035,200</u></b>

### NOTES

The City owns approximately 100,000 street trees. This program will address proactive street tree pruning of 23,333 trees per year through contracted services. Once the 70,000 trees have been pruned the remaining 30,000 trees will be addressed as part of the regular operating budget, which will need to be increased by \$150,000 starting 2023. Currently, the tree inventory is not in a state of good repair & backlog led to this proactive approach to updating the asset.

<b>SOURCE(S) OF FUNDING (\$)</b>	<b>Components</b>						<b>TOTAL</b>	<b>Future Phases</b>
	<b>Funding Type</b>	<b>Budget</b>						
Tax	1,017,600	0	0	0	0	0	2,035,200	
<b>TOTAL FUNDING</b>	<b><u>1,017,600</u></b>					<b><u>0</u></b>	<b><u>2,035,200</u></b>	

<b>OPERATING BUDGET IMPACT</b>	<b>Personnel</b>	<b>Non Personnel</b>	<b>Revenues</b>	<b>Expenditures/(Revenues)</b>
	\$0	\$150,000	\$0	\$150,000

### DCA/LIFE CYCLE DETAILS

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

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





**2020 PROJECT FUNDING REQUEST FORM**

Number: 20209

Project Cost: \$139,800

Project Name: Pathways Resurfacing

Repair/Replace

Commission: Community & Fire Services

Useful Life: 15 Pre Approval:

Department: Operations - Parks

Category: Minor

Project Mgr: Scott Grieve

Cost Validation: Recent awards

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

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:** Safe & Sustainable Community

<b>PROJECT COSTS (\$)</b>	<b>2020</b>	<b>Future Phases</b>
Cost/Quote:	137,400	0
Internal Charges:	0	0
External Consulting:	0	0
Sub Total:	137,400	0
HST Impact:	2,418	0
<b>Total Project Cost:</b>	<b>139,800</b>	<b>0</b>

**NOTES**

Locations subject to condition assessment.  
2020 Locations include Cricklewood Park, Huntington Park and Markham Green Golf Club.  
There is no substantial backlog and the pathways are in a state of good repair.  
Amount requested is consistent with the 2019 Life Cycle Reserve Study update.

<b>SOURCE(S) OF FUNDING (\$)</b>	<b>Components</b>						<b>TOTAL</b>	<b>Future Phases</b>
	<b>Funding Type</b>	<b>Budget</b>						
Operating Funded Life Cycle	139,800	0	0	0	0	0	0	
<b>TOTAL FUNDING</b>	<b>139,800</b>					<b>0</b>	<b>0</b>	

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

**DCA/LIFE CYCLE DETAILS**

<b>DCA</b>	<b>Year</b>	<b>Amount</b>	<b>Amount in Study</b>	<b>Life Cycle</b>
<b>Name</b>				Amount in Study: <u>139,800</u>
				Amount Incl HST <u>139,800</u>
				Year in the study <u>2020</u>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				





# 2020 PROJECT FUNDING REQUEST FORM

27

Number: **20210**

Project Cost: **\$841,900**

Project Name: **Playstructure Replacement**

Commission: Community & Fire Services

Repair/Replace

Department: Operations - Parks

Useful Life: 17 Pre Approval:

Project Mgr: Scott Grieve

Category: Minor

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

Cost Validation: Recent awards

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"). There are 15 locations to be replaced in 2020 (see attached schedule).

**BUILDING MARKHAM'S FUTURE TOGETHER:** Safe & Sustainable Community

PROJECT COSTS (\$)	2020	Future Phases
Cost/Quote:	827,300	0
Internal Charges:	0	0
External Consulting:	0	0
Sub Total:	827,300	0
HST Impact:	14,560	0
<b>Total Project Cost:</b>	<b>841,900</b>	<b>0</b>

### 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 2020 project. Assets are in a state of good repair. Milliken Mills playground structure will be accelerated to 2021 to coincide with the Milliken Mills rubberized surface which has been deferred to 2021 from 2020. Amount requested is consistent with the 2019 Life Cycle Reserve

SOURCE(S) OF FUNDING (\$)	Components						TOTAL	Future Phases
	Budget							
Operating Funded Life Cycle	841,900	0	0	0	0	0	0	
<b>TOTAL FUNDING</b>	<b>841,900</b>					<b>0</b>	<b>0</b>	

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

### DCA/LIFE CYCLE DETAILS

DCA Name	Year	Amount	Amount in Study	Life Cycle
				Amount in Study: <input type="text" value="841,900"/>
				Amount Incl HST <input type="text" value="841,900"/>
				Year in the study <input type="text" value="2020"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				





# 2020 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$330,400

Project Name: German Mills Meadow Environmental Monitoring Program

Commission: Community & Fire Services

Repair/Replace

Department: Operations - Utility Inspection & Survey

Useful Life: 0 Pre Approval:

Project Mgr: Robert Marinzell

Category: Major

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

Cost Validation: Recent awards

Requirement Validation: Legislative compliance

### DETAILED DESCRIPTION (SCOPE OF PROJECT):

Hire a consultant for the management of the German Mills Meadow and Natural Habitat includes condition assesment, monitoring systems to ensure that appropriate protection is provided to abutting properties and German Mills Creek. This request is to hire a consultant to monitor for 3 years (2020-2023) to ensure methane gas concentrations are below MOE (Ministry of Environment) compliance levels and German Mills Creek is not adversely affected by the leachate.

**BUILDING MARKHAM'S FUTURE TOGETHER:** Safe & Sustainable Community

<u>PROJECT COSTS (\$)</u>	<u>2020</u>	<u>Future Phases</u>
Cost/Quote:	0	0
Internal Charges:	0	0
External Consulting:	324,700	0
Sub Total:	324,700	0
HST Impact:	5,715	0
<b>Total Project Cost:</b>	<b>330,400</b>	<b>0</b>

**NOTES**  
This project is required every 3 years. Amount requested is consistent with the 2019 Life Cycle Reserve Study update.

<u>SOURCE(S) OF FUNDING (\$)</u>	<u>Components</u>						<u>Future Phases</u>
<u>Funding Type</u>	<u>Budget</u>					<u>TOTAL</u>	<u>Phases</u>
Operating Funded Life Cycle	330,400	0	0	0	0	0	0
<b>TOTAL FUNDING</b>	<b>330,400</b>					<b>0</b>	<b>0</b>

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

**DCA/LIFE CYCLE DETAILS**

<u>DCA Name</u>	<u>Year</u>	<u>Amount</u>	<u>Amount in Study</u>	<u>Life Cycle</u>
				Amount in Study: <input type="text" value="330,400"/>
				Amount Incl HST: <input type="text" value="330,400"/>
				Year in the study: <input type="text" value="2020"/>

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





**2020 PROJECT FUNDING REQUEST FORM**

Number:

Project Cost: \$2,190,800

Project Name: Streetlight Poles & Cable Replacement (Varley Village)

Commission: Community & Fire Services

Repair/Replace

Department: ES - Infrastructure

Useful Life: 60 Pre Approval:

Project Mgr: Prathapan Kumar

Category: Major

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

Cost Validation: Recent awards

Requirement Validation: Condition assessment

**DETAILED DESCRIPTION (SCOPE OF PROJECT):**

Replacement of aged underground streetlight cables and non-standard galvanized short street poles in Varley Village Area (refer to attached map).

**BUILDING MARKHAM'S FUTURE TOGETHER:** Safe & Sustainable Community

<b>PROJECT COSTS (\$)</b>	<b>2020</b>	<b>Future Phases</b>
Cost/Quote:	1,790,957	0
Internal Charges:	0	0
External Consulting:	362,000	0
Sub Total:	2,152,957	0
HST Impact:	37,892	0
<b>Total Project Cost:</b>	<b>2,190,800</b>	<b>0</b>

**NOTES**

This project includes replacement of aged underground streetlight cables and non-standard short galvanized streetlight poles (approx. 120-140 poles based on design outcome). Unit cost is consistent with recent award plus inflation. Amount requested is consistent with 2019 Life Cycle Reserve Study Update. Energy savings due to LED fixtures is \$7,260/year.

<b>SOURCE(S) OF FUNDING (\$)</b>	<b>Components</b>					<b>TOTAL</b>	<b>Future Phases</b>
	<b>Budget</b>	<b>Design + CA</b>	<b>Construction</b>				
Operating Funded Life Cycle	2,190,800	368,371	1,822,429	0	0	2,190,800	0
<b>TOTAL FUNDING</b>	<b>2,190,800</b>					<b>2,190,800</b>	<b>0</b>

<b>OPERATING BUDGET IMPACT</b>	<b>Personnel</b>	<b>Non Personnel</b>	<b>Revenues</b>	<b>Expenditures/(Revenues)</b>
	\$0	-\$7,260	\$0	-\$7,260

**DCA/LIFE CYCLE DETAILS**

<b>DCA</b>	<b>Year</b>	<b>Amount</b>	<b>Amount in Study</b>	<b>Life Cycle</b>
<b>Name</b>				Amount in Study: <input type="text" value="2,190,900"/>
				Amount Incl HST <input type="text" value="2,190,900"/>
				Year in the study <input type="text" value="2026"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				
These streetlight poles and cables were originally scheduled for replacement between 2026-2032. However, it has been accelerated due to condition assessment. 2020 Life Cycle will be updated to reflect the changes.				





# 2020 PROJECT FUNDING REQUEST FORM

33

Number:

Project Cost: \$607,200

Project Name: Structures Rehabilitation (5 Structures) - Design & Const.

Commission: Community & Fire Services

Repair/Replace

Department: ES - Infrastructure

Useful Life: 15 Pre Approval:

Project Mgr: Prathapan Kumar

Category: Major

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

Cost Validation: Multiple(specify)

Requirement Validation: Condition assessment

**DETAILED DESCRIPTION (SCOPE OF PROJECT):**

Design and construction for rehabilitation of 5 structures (4 pedestrian bridges and 1 culvert). P005: Pomona Mills Park 95m W/Park Brook Rd; P012: Markham Civic Centre 15m W/Warden Ave; P083: Apple Creek North Park 60m NW/ Hoodview Ct.; P091: Toogood Pond 140m S/ Normandale Rd and Delhi Cres.; C089: Bur Oak Ave 245m E/Hwy 48. See attached map for locations.

**BUILDING MARKHAM'S FUTURE TOGETHER:** Safe & Sustainable Community

PROJECT COSTS (\$)	2020	Future Phases
Cost/Quote:	446,700	0
Internal Charges:	0	0
External Consulting:	150,000	0
Sub Total:	596,700	0
HST Impact:	10,502	0
<b>Total Project Cost:</b>	<b>607,200</b>	<b>0</b>

**NOTES**

This project includes rehabilitation of 5 structures (P005, P012, P083, P091, C089). 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.  
Cost Validation: Recent award and external reviews.  
Amount requested is consistent with 2019 life Cycle reserve Study Update.

SOURCE(S) OF FUNDING (\$)	Components					TOTAL	Future Phases
	Budget	Design + CA	Construction				
Operating Funded Life Cycle	607,200	152,640	454,560	0	0	607,200	0
<b>TOTAL FUNDING</b>	<b>607,200</b>					<b>607,200</b>	<b>0</b>

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

**DCA/LIFE CYCLE DETAILS**

DCA Name	Year	Amount	Amount in Study	Life Cycle
				Amount in Study: <input type="text" value="607,200"/>
				Amount Incl HST <input type="text" value="607,200"/>
				Year in the study <input type="text" value="2020"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				





# 2020 PROJECT FUNDING REQUEST FORM

Number: 20252

Project Cost: \$10,868,900

Project Name: West Thornhill Flood Control Implementation - Ph 3A Cons.

Commission: Community & Fire Services

Repair/Replace

Department: ES - Stormwater

Useful Life: 100 Pre Approval:

Project Mgr: Jawaid Khan

Category: Major

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

Cost Validation: External peer review

Requirement 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 3A area. Program is as follows:

- Est. West Thornhill program cost - \$77.9M (as of June 2014)
- Previous budget approved (up to Phase 2D) represents up to \$56.1M which is 72% of the West Thornhill program cost (planned completion by 2025).

**BUILDING MARKHAM'S FUTURE TOGETHER:** Safe & Sustainable Community

PROJECT COSTS (\$)	2020	Future Phases
Cost/Quote:	10,100,000	7,115,850
Internal Charges:	392,221	1,850,956
External Consulting:	195,497	1,748,400
Sub Total:	10,687,718	10,715,206
HST Impact:	181,201	156,011
<b>Total Project Cost:</b>	<b>10,868,900</b>	<b>10,871,200</b>

### NOTES

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 City will receive 40% (\$4.19M) through a Federal Grant (see life cycle section for more details). Net cost to the City will be \$6.29M (60%).

SOURCE(S) OF FUNDING (\$)	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	8,868,900	198,938	8,277,741	392,221	0	8,868,900	10,871,200
<b>TOTAL FUNDING</b>	<b>10,868,900</b>					<b>10,868,900</b>	<b>10,871,200</b>

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

### DCA/LIFE CYCLE DETAILS

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

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

\$2M is funded through gas tax and remaining \$8.9M is funded through stormwater fee. 40% of the cost (excluding internal charges) will be reimbursed through Disaster Mitigation and Adaptation Fund (DMAF) received from the Federal Government (\$48.64M) over 10 years for:

- West Thornhill Flood Control Implementation – Phases 3 & 4 (Project cost: \$62.5M)
- Don Mills Channel (Project cost: \$56.0M)
- Thornhill Community Centre (\$1.1M) and Gynwood Storm Sewer Upgrades (Project cost: \$2.0M)





# 2020 PROJECT FUNDING REQUEST FORM

37

Number: 20256

Project Cost: \$437,100

Project Name: CI Watermain Rehabilitation - Design

Commission: Community & Fire Services

Repair/Replace

Department: ES - Waterworks

Useful Life: 0 Pre Approval:

Project Mgr: Jawaid Khan

Category: Minor

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

Cost Validation: Recent awards

Requirement Validation: Condition assessment

### DETAILED DESCRIPTION (SCOPE OF PROJECT):

Detailed design for rehabilitation of cast iron (CI) watermain with CIPP (Cured-in-place pipe) liner at various locations (refer to attached map). CIPP relining is considered for this section as John Street is a heavy traffic street and the watermain is located close to the curb line.

**BUILDING MARKHAM'S FUTURE TOGETHER:** Safe & Sustainable Community

PROJECT COSTS (\$)	2020	Future Phases
Cost/Quote:	0	5,426,800
Internal Charges:	143,000	0
External Consulting:	289,042	0
Sub Total:	432,042	5,426,800
HST Impact:	5,087	95,512
<b>Total Project Cost:</b>	<b>437,100</b>	<b>5,522,300</b>

### NOTES

This is an annual program (Phase 3a of 15; ending in 2032). Total CI Watermain: 54.1 km. As part of the CI watermain replacement program, 92% of aged CI watermain will be replaced with PVC and 8% will be rehabilitated with CIPP liner. This request is for design of CIPP relining of 4.2 km (8%) of CI watermain. Construction and contract administration costs (Phase 3b) will be requested through 2021 capital budget request.

SOURCE(S) OF FUNDING (\$)	Components					TOTAL	Future Phases
	Budget	Design	Internal staff				
Waterworks	437,100	294,100	143,000	0	0	437,100	5,522,300
<b>TOTAL FUNDING</b>	<b>437,100</b>					<b>437,100</b>	<b>5,522,300</b>

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

### DCA/LIFE CYCLE DETAILS

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

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





# 2020 PROJECT FUNDING REQUEST FORM

Number: 20258

Project Cost: \$5,897,500

Project Name: CI Watermain Replacement-West Thornhill Ph 3A

Commission: Community & Fire Services

Repair/Replace

Department: ES - Waterworks

Useful Life: 90 Pre Approval:

Project Mgr: Jawaid Khan

Category: Major

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

Cost Validation: Recent awards

Requirement Validation: Condition assessment

### DETAILED DESCRIPTION (SCOPE OF PROJECT):

Replacement of cast iron (CI) watermain that have reached end of the service life and to upgrade the sanitary sewer (Refer to attached map). As part of the cast iron watermain replacement program, aged cast iron watermain (current age 58 years; service life 60 years) will be replaced with the PVC watermain (1.8 km) with a service life of 90 years.

**BUILDING MARKHAM'S FUTURE TOGETHER:** Safe & Sustainable Community

<b>PROJECT COSTS (\$)</b>	<b>2020</b>	<b>Future Phases</b>
Cost/Quote:	5,600,000	0
Internal Charges:	0	0
External Consulting:	195,497	0
Sub Total:	<u>5,795,497</u>	<u>0</u>
HST Impact:	102,001	0
<b>Total Project Cost:</b>	<b><u>5,897,500</u></b>	<b><u>0</u></b>

### NOTES

Total CI watermain inventory: 54.1 km as of 2019  
All CI watermain will be replaced by the year 2032. There is no backlog in the watermain replacement program.

<b>SOURCE(S) OF FUNDING (\$)</b>	<b>Components</b>					<b>TOTAL</b>	<b>Future Phases</b>
	<b>Budget</b>	<b>Construction</b>	<b>CA</b>				
Waterworks	5,897,500	5,698,562	198,938	0	0	5,897,500	0
<b>TOTAL FUNDING</b>	<b><u>5,897,500</u></b>					<b><u>5,897,500</u></b>	<b><u>0</u></b>

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

### DCA/LIFE CYCLE DETAILS

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

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





# 2020 PROJECT FUNDING REQUEST FORM

41

Number: 20265

Project Cost: \$15,300

Project Name: Wastewater System Instruments - Replacement

Commission: Community & Fire Services

Repair/Replace

Department: ES - Waterworks

Useful Life: 6 Pre Approval:

Project Mgr: Henk Bouhuyzen

Category: Minor

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

Cost Validation: Internal peer review

Requirement Validation: Other(specify in Notes)

### DETAILED DESCRIPTION (SCOPE OF PROJECT):

To replace 3 of 5 uninterrupted power supply (UPS) based on condition assessment and 5 industrial computers (IPC) with Microsoft Windows Operating systems (OS7) at the 5 pumping stations. OS7 will no longer be supported by Microsoft in 2020 and will not be producing or supplying any security patches for the operating system.

**BUILDING MARKHAM'S FUTURE TOGETHER:** Stewardship of Money & Resources

PROJECT COSTS (\$)	2020	Future Phases
Cost/Quote:	15,000	0
Internal Charges:	0	0
External Consulting:	0	0
Sub Total:	15,000	0
HST Impact:	264	0
<b>Total Project Cost:</b>	<b>15,300</b>	<b>0</b>

### NOTES

The remaining 2 UPS do not require replacement based on condition assessment.

SOURCE(S) OF FUNDING (\$)	Components					TOTAL	Future Phases
	Budget	IPCs	UPS units				
Waterworks	15,300	9,160	6,140	0	0	15,300	0
<b>TOTAL FUNDING</b>	<b>15,300</b>					<b>15,300</b>	<b>0</b>

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

### DCA/LIFE CYCLE DETAILS

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

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





**2020 PROJECT FUNDING REQUEST FORM**

**43**

Number: 20268

Project Cost: \$2,225,400

Project Name: Corporate Capital Contingency

Commission: Corporate Wide

New Asset/Expansion

Department: Corporate Wide

Useful Life: 0 Pre Approval:

Project Mgr: \_\_\_\_\_

Category: \_\_\_\_\_

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

Cost Validation: \_\_\_\_\_

Requirement Validation: \_\_\_\_\_

**DETAILED DESCRIPTION (SCOPE OF PROJECT):**

Total amount of contingency for 2020 applicable capital projects.

**BUILDING MARKHAM'S FUTURE TOGETHER:**

PROJECT COSTS (\$)	2020	Future Phases
Cost/Quote:	2,225,400	0
Internal Charges:	0	0
External Consulting:	0	0
Sub Total:	2,225,400	0
HST Impact:	0	0
<b>Total Project Cost:</b>	<b>2,225,400</b>	<b>0</b>

**NOTES**

Other External Funding breakdown:  
 \$45,900 funded from Pan Am building construction projects  
 \$19,300 Waterworks  
 \$13,700 Region of York

SOURCE(S) OF FUNDING (\$)	Components						TOTAL	Future Phases
Funding Type	Budget							
DCA	1,418,050	0	0	0	0	0	0	
Non-DC Growth	21,630	0	0	0	0	0	0	
Operating Funded Life Cycle	425,365	0	0	0	0	0	0	
Other External	160,480	0	0	0	0	0	0	
Other Internal	170,415	0	0	0	0	0	0	
Tax	29,460	0	0	0	0	0	0	
<b>TOTAL FUNDING</b>	<b>2,225,400</b>					<b>0</b>	<b>0</b>	

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

**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 cost: