



# 2021 PROJECT FUNDING REQUEST FORM

Number: **21004**

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

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

Commission: **Development Services**

Repair/Replace

Department: **Theatre**

Useful Life: **20** Pre Approval: ☐

Project Mgr: **Andrew Rosenfarb**

Category: **Minor**

Cost Validation: **Third party estimate**

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

Requirement Validation: **Condition assessment**

## DETAILED DESCRIPTION (SCOPE OF PROJECT):

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

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

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

<b>SOURCE(S) OF FUNDING (\$)</b>	<b>Components</b>						<b>Future Phases</b>
<b>Funding Type</b>	<b>Budget</b>					<b>TOTAL</b>	<b>Phases</b>
Operating Funded Life Cycle	25,400	0	0	0	0	0	0
<b>TOTAL FUNDING</b>	<b>25,400</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="2,739,100"/>
				Amount Incl HST <input type="text" value="25,400"/>
				Year in the study <input type="text" value="2021"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				



# 2021 PROJECT FUNDING REQUEST FORM

Number: 21019

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

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

Commission: Development Services

New Asset/Expansion

Department: Design

Useful Life: 25 Pre Approval: ☐

Project Mgr: Richard Fournier

Category: Major

Ward(s): CW ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐

Cost Validation: Recent awards

5 ☐ 6 ☒ 7 ☐ 8 ☐

Requirement Validation: Other(specify in Notes)

## DETAILED DESCRIPTION (SCOPE OF PROJECT):

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

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

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

SOURCE(S) OF FUNDING (\$)	Components						Future Phases
Funding Type	Budget					TOTAL	
DCA	418,680	0	0	0	0	0	0
Parks Cash-in-Lieu	46,520	0	0	0	0	0	0
<b>TOTAL FUNDING</b>	<b>465,200</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	Year	Amount	Amount in Study	Life Cycle
Name				
Parks - Berczy Beckett Neighbourhood Park	2017	418,680	661,500	Amount in Study: <input type="text"/>
<b>TOTAL FUNDING</b>		418,680	661,500	Amount Incl HST <input type="text"/>
				Year in the study <input type="text"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				
The amenities are less than anticipated in DCBS.				



# 2021 PROJECT FUNDING REQUEST FORM

Number: 21022

Project Cost: \$549,300

Project Name: Green Lane Park - Design and Construction

Commission: Development Services

New Asset/Expansion

Department: Design

Useful Life: 25 Pre Approval: ☐

Project Mgr: Richard Fournier

Category: Major

Ward(s): CW ☐ 1 ☒ 2 ☐ 3 ☐ 4 ☐

Cost Validation: Recent awards

5 ☐ 6 ☐ 7 ☐ 8 ☐

Requirement Validation: Other(specify in Notes)

## DETAILED DESCRIPTION (SCOPE OF PROJECT):

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

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

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

SOURCE(S) OF FUNDING (\$)	Components						Future Phases
Funding Type	Budget					TOTAL	
DCA	494,370	0	0	0	0	0	0
Parks Cash-in-Lieu	54,930	0	0	0	0	0	0
<b>TOTAL FUNDING</b>	<b>549,300</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	Amount in			Life Cycle
Name	Year	Amount	Study	
Parks - Yonge Canac Park	2021	494,370	696,807	Amount in Study: <input type="text"/>
<b>TOTAL FUNDING</b>		494,370	696,807	Amount Incl HST <input type="text"/>
				Year in the study <input type="text"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				



# 2021 PROJECT FUNDING REQUEST FORM

Number: **21023**

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

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

Commission: Development Services

New Asset/Expansion

Department: Design

Useful Life: 25 Pre Approval: ☐

Project Mgr: Richard Fournier

Category: Major

Ward(s): CW ☐ 1 ☒ 2 ☐ 3 ☐ 4 ☐

Cost Validation: Recent awards

5 ☐ 6 ☐ 7 ☐ 8 ☐

Requirement Validation: Other(specify in Notes)

## DETAILED DESCRIPTION (SCOPE OF PROJECT):

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

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

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

<u>SOURCE(S) OF FUNDING (\$)</u>	<u>Components</u>						<u>Future Phases</u>
<u>Funding Type</u>	<u>Budget</u>				<u>TOTAL</u>		<u>Future Phases</u>
DCA	574,110	0	0	0	0	0	0
Parks Cash-in-Lieu	63,790	0	0	0	0	0	0
<b>TOTAL FUNDING</b>	<b>637,900</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</u>			<u>Amount in</u>	<u>Life Cycle</u>
<u>Name</u>	<u>Year</u>	<u>Amount</u>	<u>Study</u>	
Parks - Yonge Devron Park	2020	574,110	613,974	Amount in Study: <input type="text"/>
<b>TOTAL FUNDING</b>		574,110	613,974	Amount Incl HST <input type="text"/>
				Year in the study <input type="text"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				



# 2021 PROJECT FUNDING REQUEST FORM

Number: **21029**

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

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

Commission: Development Services

New Asset/Expansion

Department: Engineering

Useful Life: 0 Pre Approval: ☒

Project Mgr: Alberto Lim

Category: Major

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

Cost Validation: Recent awards

Requirement Validation: Other(specify in Notes)

## DETAILED DESCRIPTION (SCOPE OF PROJECT):

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

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

<u>PROJECT COSTS (\$)</u>	<u>2021</u>	<u>Future Phases</u>
Cost/Quote:	723,270	0
Internal Charges:	80,000	0
External Consulting:	0	0
Sub Total:	803,270	0
HST Impact:	12,730	0
<b>Total Project Cost:</b>	<b>816,000</b>	<b>0</b>

## NOTES

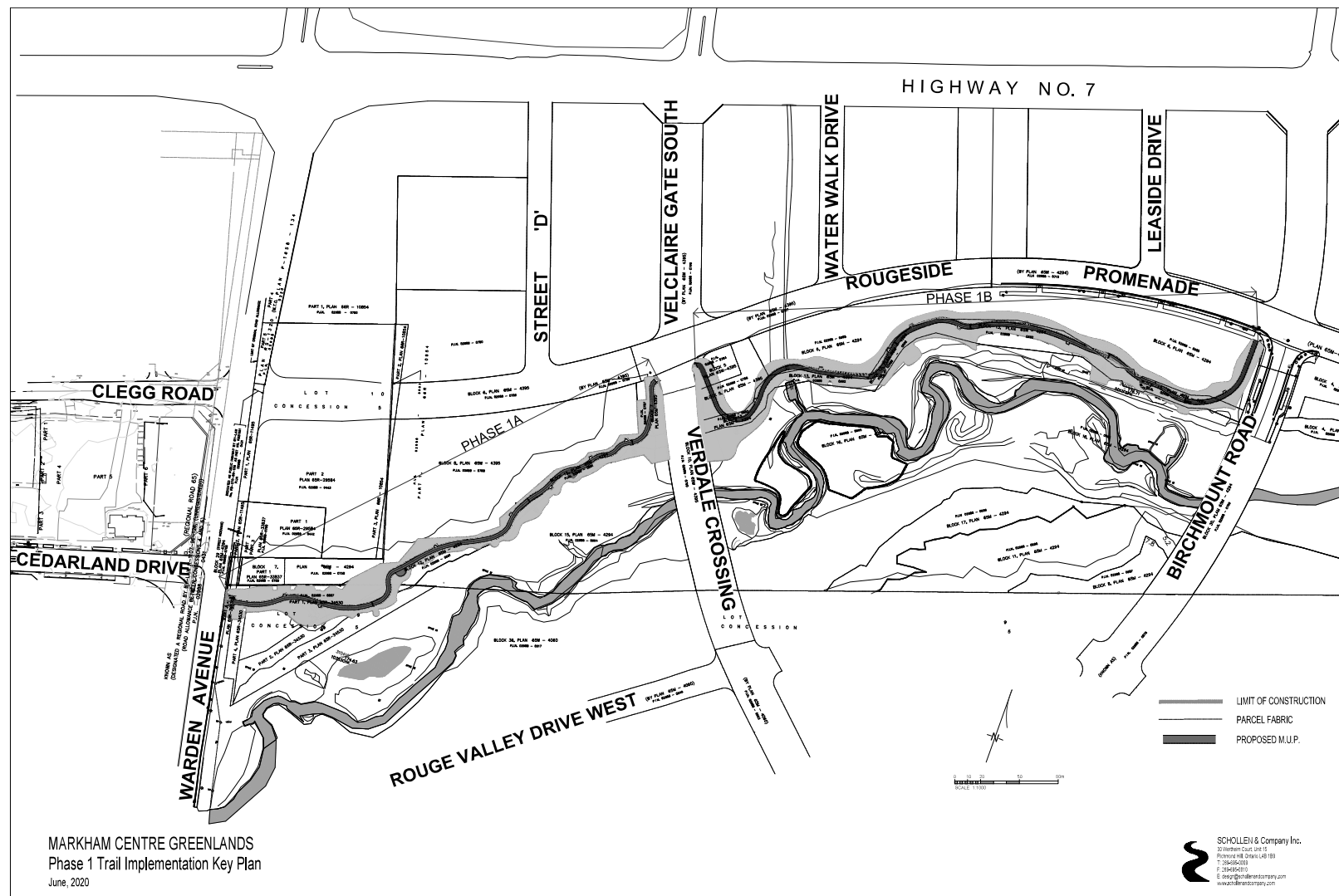
The 2020 approved budget was not sufficient to fund the entire section of phase 1 due to new requirements (i.e. tree planting south of Rouge, permeable asphalt etc.) from Environmental agencies. Other internal is section 37 funding. Operating impacts will be determined at the time of construction award.

<u>SOURCE(S) OF FUNDING (\$)</u>	<u>Components</u>						<u>Future Phases</u>
<u>Funding Type</u>	<u>Budget</u>					<u>TOTAL</u>	<u>Phases</u>
DCA	530,400	0	0	0	0	0	0
Other Internal	285,600	0	0	0	0	0	0
<b>TOTAL FUNDING</b>	<b>816,000</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</u>	<u>Year</u>	<u>Amount</u>	<u>Amount in Study</u>	<u>Life Cycle</u>
<u>Name</u>				
Hard - Special Projects - City Wide - Bike Lanes on City and Regional Land		530,400	11,325,356	Amount in Study: <input type="text"/>
<b>TOTAL FUNDING</b>		530,400	11,325,356	Amount Incl HST <input type="text"/>
				Year in the study <input type="text"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				
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# 2021 PROJECT FUNDING REQUEST FORM

Number: 21049

Project Name: Civic Centre Vestibule Repairs and/or Replacements

Project Cost: \$290,700

Commission: Corporate Services

Repair/Replace

Department: Asset Management

Useful Life: 0 Pre Approval: ☒

Project Mgr: Sameem Shah

Category: Minor

Ward(s): CW ☐ 1 ☐ 2 ☒ 3 ☐ 4 ☐

Cost Validation: Published guidelines

5 ☐ 6 ☐ 7 ☐ 8 ☐

Requirement Validation: Condition assessment

## DETAILED DESCRIPTION (SCOPE OF PROJECT):

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

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

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

SOURCE(S) OF FUNDING (\$)	Components					TOTAL	Future Phases
Funding Type	Budget	Great Hall and Milliken Vestibule					
Operating Funded Life Cycle	290,700	290,700	0	0	0	290,700	0
<b>TOTAL FUNDING</b>	<b>290,700</b>					<b>290,700</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: 868,800
				Amount Incl HST 290,700
				Year in the study 2021

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



# 2021 PROJECT FUNDING REQUEST FORM

Number: **21063**

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

Project Name: **Theatre-HVAC Replacement**

Commission: Corporate Services

Repair/Replace

Department: Asset Management

Useful Life: 30 Pre Approval: ☒

Project Mgr: Jason Vasilaki

Category: Major

Ward(s): CW ☒ 1 ☐ 2 ☐ 3 ☐ 4 ☐

Cost Validation: Third party estimate

5 ☐ 6 ☐ 7 ☐ 8 ☐

Requirement Validation: Condition assessment

## DETAILED DESCRIPTION (SCOPE OF PROJECT):

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

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

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

<u>SOURCE(S) OF FUNDING (\$)</u>	<u>Components</u>						<u>Future Phases</u>
<u>Funding Type</u>	<u>Budget</u>				<u>TOTAL</u>		<u>Future Phases</u>
Gas Tax	1,908,800	0	0	0	0	0	0
Operating Funded Life Cycle	91,200	0	0	0	0	0	0
<b>TOTAL FUNDING</b>	<b>2,000,000</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</u>	<u>Year</u>	<u>Amount</u>	<u>Amount in Study</u>	<u>Life Cycle</u>
Name				
				Amount in Study: <input type="text" value="2,739,100"/>
				Amount Incl HST <input type="text" value="91,200"/>
				Year in the study <input type="text" value="2021"/>

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





**BUILDING MARKHAM'S FUTURE TOGETHER**  
2020 – 2023 Strategic Plan





## Summary

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



## Project Details

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



## Schedule

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

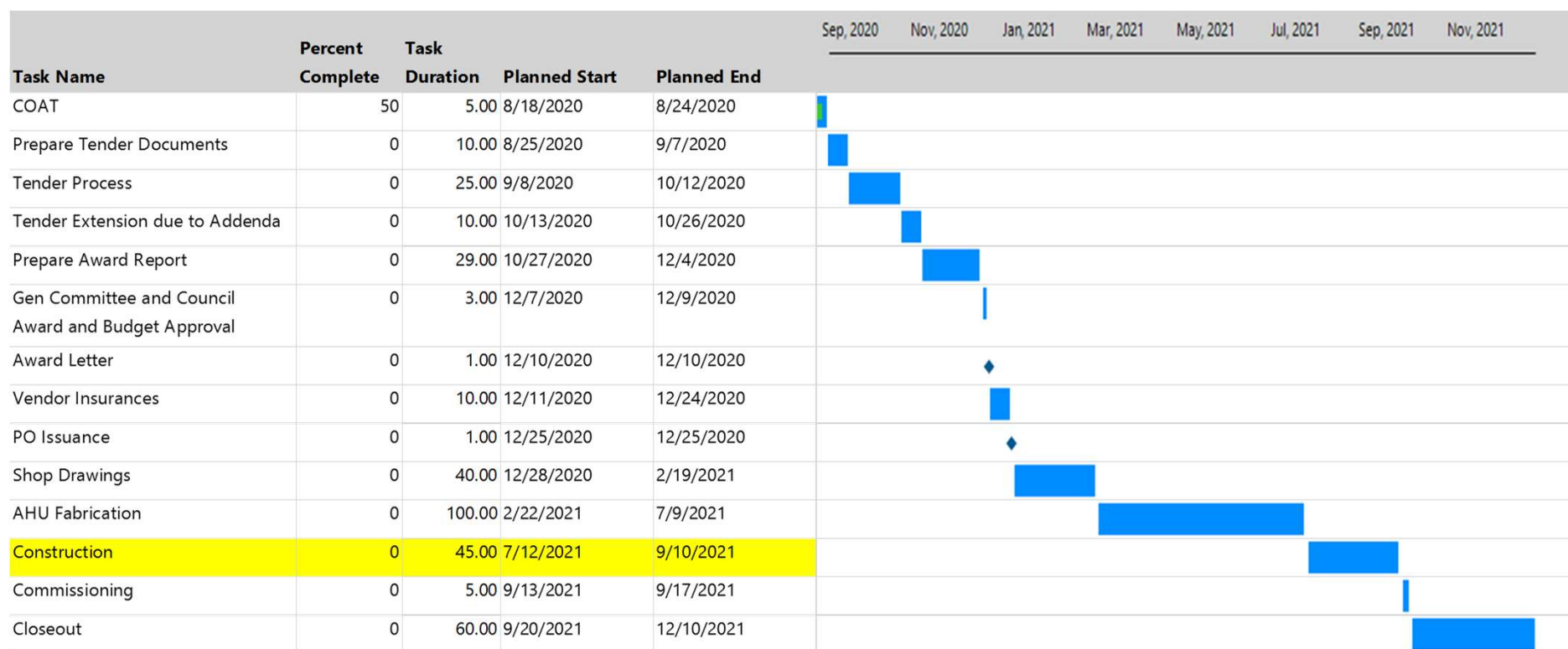
- Construction work is expected to take place beginning of July to mid-September of 2021.
- The time line above:
  - allows for sufficient factory fabrication time of the new units once procured (approximately 6 months lead time required)
  - is beneficial for moderating temperatures within the building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



## BUILDING MARKHAM'S FUTURE TOGETHER 2020 – 2023 Strategic Plan



# Potential Expedited Schedule





## Theatre Closure Impacts

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



BUILDING MARKHAM'S FUTURE TOGETHER  
2020 – 2023 Strategic Plan



## Budget

- January 2020, a design (Class A) cost estimate was conducted based on complete drawings and specifications, which this budget request is based upon.
- Cost Estimate:
 

▪ Construction -	\$ 1,806,800
▪ Consulting -	\$ 80,000
▪ HST Impact (on above) -	\$ 33,200
▪ <u>Internal Charges -</u>	<u>\$ 80,000</u>
▪ Total Project Cost	\$ 2,000,000
- \$24,400 estimated annual energy efficiency savings (21% reduction)
- \$13,000 estimated one-time energy conservation incentives



# 2021 PROJECT FUNDING REQUEST FORM

Number: 21071

Project Cost: \$63,300

Project Name: SCBA Decontamination Machine

Commission: Community & Fire Services

New Asset/Expansion

Department: Fire & Emergency Services

Useful Life: 10 Pre Approval: ☐

Project Mgr: Adam Grant

Category: Minor

Ward(s): CW ☒ 1 ☐ 2 ☐ 3 ☐ 4 ☐

Cost Validation: Third party estimate

5 ☐ 6 ☐ 7 ☐ 8 ☐

Requirement Validation: Other(specify in Notes)

## DETAILED DESCRIPTION (SCOPE OF PROJECT):

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

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

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

SOURCE(S) OF FUNDING (\$)	Components						Future Phases
Funding Type	Budget					TOTAL	
Tax	63,300	0	0	0	0	0	0
<b>TOTAL FUNDING</b>	<b>63,300</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	Year	Amount	Amount in Study	Life Cycle
Name				Amount in Study: <input type="text"/>
				Amount Incl HST <input type="text"/>
				Year in the study <input type="text"/>

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





# 2021 PROJECT FUNDING REQUEST FORM

Number: **21101**

Project Cost: **\$6,815,800**

Project Name: **Asphalt Resurfacing**

Commission: **Community & Fire Services**

Department: **Operations - Roads**

Project Mgr: **Zoyeb Vahora**

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

Repair/Replace

Useful Life: 20

Pre Approval: ☒

Category: **Minor**

Cost Validation: **Recent awards**

Requirement Validation: **Condition assessment**

## DETAILED DESCRIPTION (SCOPE OF PROJECT):

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

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

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

<u>SOURCE(S) OF FUNDING (\$)</u>	<u>Components</u>						<u>Future Phases</u>
<u>Funding Type</u>	<u>Budget</u>				<u>TOTAL</u>		<u>Future Phases</u>
Gas Tax	6,331,600	0	0	0	0	0	0
Operating Funded Life Cycle	484,200	0	0	0	0	0	0
<b>TOTAL FUNDING</b>	<b>6,815,800</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</u>	<u>Year</u>	<u>Amount</u>	<u>Amount in Study</u>	<u>Life Cycle</u>
Name				Amount in Study: <input type="text" value="6,815,800"/>
				Amount Incl HST <input type="text" value="6,815,800"/>
				Year in the study <input type="text" value="2021"/>

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

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

2021 Road Rehabilitation Program

<u>Street Name</u>	<u>Road-Segment ID</u>	<u>From</u>	<u>To</u>	<u>Length</u>	<u>Width</u>
Captain Francis Drive	01473 - 001,002,003	Entirety		872	8
Colonel Marr Road	02028 - 001,002	Entirety		388.85	8
Bliss Court	00949 - 001	Entirety		50	8.5
Forester Crescent	10693 - 001 to 007	Entirety		1145	8.5
Rachel Crescent	10685 - 001 to 005			594	10.5
Ritter Crescent	07811 - 001	Entirety		464	8
Delhi Crescent	02534 - 001, 002	Entirety		640	8
Caledonia Court	01376 - 001	Entirety		60	8.5
Leahill Drive	05541 - 001	Entirety		100	6
Deanbank Drive	02461 - 001	Entirety		177	3.5
Deanbank Drive	02461 - 002	Entirety		222	8
Simonstone Boulevard East	08468 - 014,016,026,001,004,012,019,024	Dersingham Crescent North	Don Mills	1054	10.5
Brewsland Crescent	01112 - 001	Entirety		329	8
Tamarack Drive	09172 - 001, 002	Entirety		839	8
Elgin Mills Road East	10545 - 013	Victoria Square Boulevard	Warden Avenue	2049	9
Reesor Road TBC	10634 - 004,008	16th	407 ETR	2900	9
Harvest Moon Drive	04268 - 001 to 009	Entirety		1276	9
Riseborough Circuit	07803 - 001 to 022	Entirety		2118	9
Senator Reesors Drive	08303 - 001,002,003,004,005,006,007	Entirety		1362	8
Harry Corsen Place	04421 - 001	Entirety		500	8
John Dexter Place	04987 - 001	Entirety		500	8
Berczy Gate	00825 - 001	Entirety		75	8.5
Kirkham	12009 - 001	Markham Road	New Delhi Drive	135	16

Total

**17.84985**  
km



# 2021 PROJECT FUNDING REQUEST FORM

Number: **21113**

Project Cost: **\$678,900**

Project Name: **Parking Lots- Rehabilitation**

Commission: **Community & Fire Services**

Repair/Replace

Department: **Operations - Roads**

Useful Life: **20**

Pre Approval: ☐

Project Mgr: **Zoyeb Vahora**

Category: **Minor**

Cost Validation: **Recent awards**

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

Requirement Validation: **Condition assessment**

## DETAILED DESCRIPTION (SCOPE OF PROJECT):

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

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

<u>SOURCE(S) OF FUNDING (\$)</u>		<u>Components</u>				<u>Future</u>	
<u>Funding Type</u>	<u>Budget</u>	<u>Miller Yard</u>	<u>Sabiston</u>			<u>Phases</u>	
Operating Funded Life Cycle	678,900	641,400	37,500	0	0	678,900	0
<b>TOTAL FUNDING</b>	<b><u>678,900</u></b>					<b><u>678,900</u></b>	<b><u>0</u></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</u>	<u>Year</u>	<u>Amount</u>	<u>Amount in Study</u>	<u>Life Cycle</u>
Name				
				Amount in Study: <b>1,475,600</b>
				Amount Incl HST <b>678,900</b>
				Year in the study <b>2021</b>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				
75 Clegg deferred until direction from Legal is received. Milliken Mills CC deferred to 2022 due to potential community centre expansion.				

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



# 2021 PROJECT FUNDING REQUEST FORM

Number: **21119**

Project Cost: **\$1,017,600**

Project Name: **Block Pruning Initiative - Year 2 of 3**

Commission: Community & Fire Services

Department: Operations - Parks

Project Mgr: Miles Peart

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

Repair/Replace

Useful Life: 0 Pre Approval: ☒

Category: Major

Cost Validation: Third party estimate

Requirement Validation: Visual inspection

## DETAILED DESCRIPTION (SCOPE OF PROJECT):

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

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

## NOTES

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

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

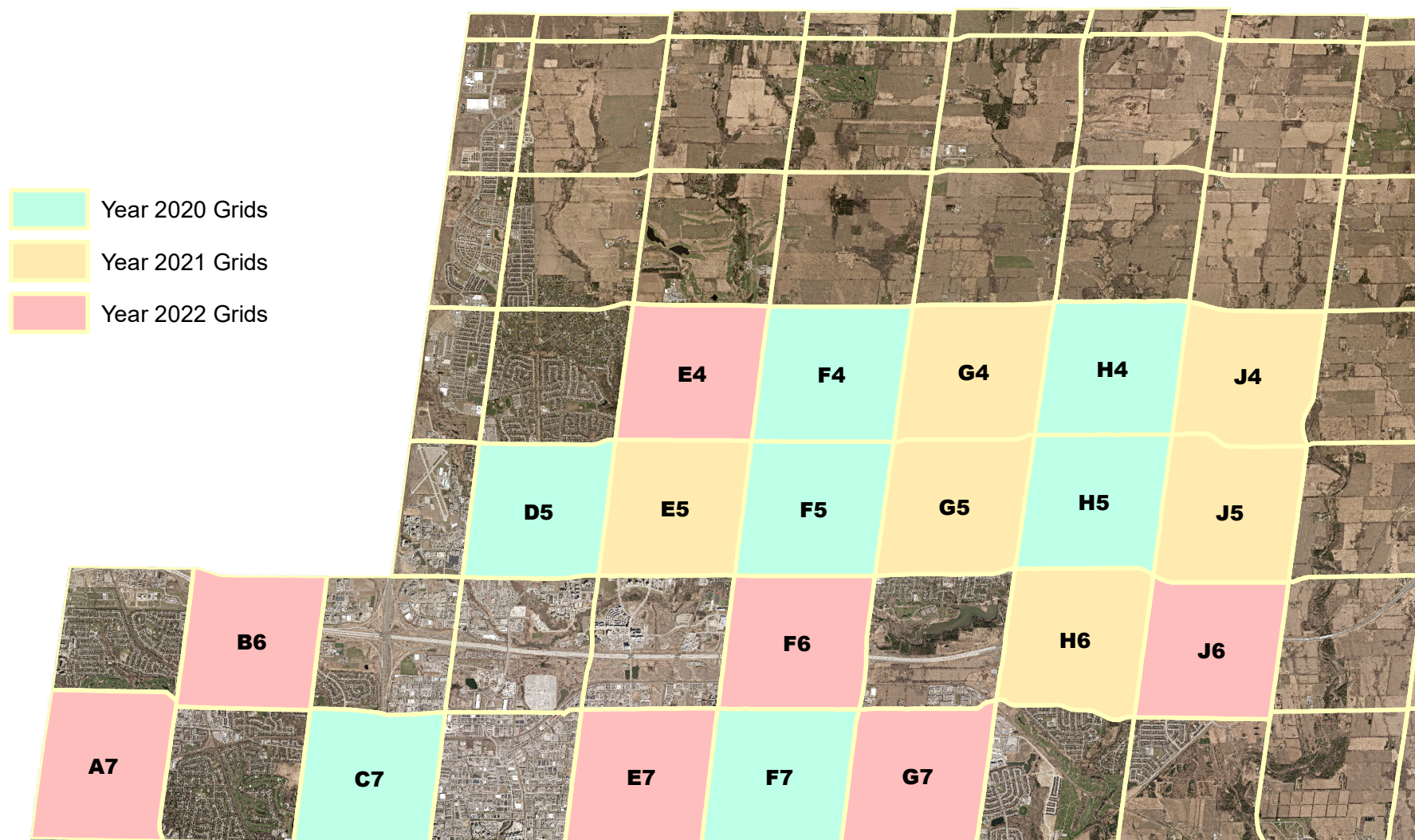
<u>DCA</u>	<u>Year</u>	<u>Amount</u>	<u>Amount in Study</u>	<u>Life Cycle</u>
Name				Amount in Study: <input type="text"/>
				Amount Incl HST <input type="text"/>
				Year in the study <input type="text"/>

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

**Project: Block Pruning 3 Year Project**  
**Total Project Cost Table**

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

## Neighbourhood Tree Maintenance Project 2020, 2021 and 2022 Grids







# 2021 PROJECT FUNDING REQUEST FORM

Number: **21140**

Project Cost: **\$1,620,700**

Project Name: **Corporate Fleet Replacement - Non-Fire**

Commission: **Community & Fire Services**

Repair/Replace

Department: **Operations - Fleet**

Useful Life: **5** Pre Approval: ☐

Project Mgr: **Raymond Law/Peter Englezakos**

Category: **Major**

Cost Validation: **Other(specify in Notes)**

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

Requirement Validation: **Multiple(specify)**

## DETAILED DESCRIPTION (SCOPE OF PROJECT):

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

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

<u>SOURCE(S) OF FUNDING (\$)</u>	<u>Components</u>					<u>Future Phases</u>
<u>Funding Type</u>	<u>Budget</u>	<u>Licensed</u>	<u>Non Licensed</u>	<u>Non Fleet</u>	<u>TOTAL</u>	
Operating Funded Life Cycle	1,620,700	727,633	840,131	52,936	0 1,620,700	0
<b>TOTAL FUNDING</b>	<b>1,620,700</b>				<b>1,620,700</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</u>	<u>Year</u>	<u>Amount</u>	<u>Amount in Study</u>	<u>Life Cycle</u>
<u>Name</u>				Amount in Study: <input type="text" value="2,440,500"/>
				Amount Incl HST <input type="text" value="2,416,900"/>
				Year in the study <input type="text" value="2021"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				

### 2021 Corporate Fleet Replacement - Non-Fire

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



# 2021 PROJECT FUNDING REQUEST FORM

Number: 21177

Project Cost: \$1,557,100

Project Name: Corporate Capital Contingency

Commission: Corporate Wide

New Asset/Expansion

Department: Corporate Wide

Useful Life: 0

Pre Approval: ☒

Project Mgr:

Category: Major

Cost Validation: Other(specify in Notes)

Ward(s): CW ☒ 1 ☐ 2 ☐ 3 ☐ 4 ☐

Requirement Validation: Other(specify in Notes)

5 ☐ 6 ☐ 7 ☐ 8 ☐

## DETAILED DESCRIPTION (SCOPE OF PROJECT):

Total amount of contingency for 2021 applicable capital projects.

## BUILDING MARKHAM'S FUTURE TOGETHER:

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

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

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

DCA/LIFE CYCLE DETAILS

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