

Budget Committee Agenda

Meeting Number 2 November 6, 2020, 9:00 AM - 12:00 PM Live streamed

		Pages
1.	CALL TO ORDER	
2.	DISCLOSURE OF PECUNIARY INTEREST	
3.	APPROVAL OF MINUTES	2
4.	CAPITAL BUDGET REVIEW	6
	4.1. Review	
	4.2. Next Steps	
5.	NEW BUSINESS	
6.	NEXT MEETING DATE	
	The next meeting of the Budget Committee will be held on Tuesday, November 10, 2020 at 9:00 AM.	
7.	ADJOURNMENT	



Budget Committee Minutes

Meeting Number 1 November 3, 2020, 9:00 AM - 12:00 PM Live streamed

Members Councillor Amanda Collucci, Chair

Councillor Andrew Keyes, Vice-Chair

Deputy Mayor Don Hamilton

Councillor Keith Irish

Councillor Reid McAlpine

Councillor Karen Rea Councillor Khalid Usman

Regrets None

Roll Call Regional Councillor Jack Heath

Regional Councillor Jim Jones

Councilor Isa Lee

Andy Taylor, Chief Administrative

Officer

Trinela Cane, Commissioner of

Corporate Services

Arvin Prasad, Commissioner

Development Services

Claudia Storto, City Solicitor and Director of Human Resources

Joel Lustig, Treasurer

Biju Karumanchery, Director of

Planning and Urban Design

Lisa Chen, Senior Manager of

Financial Planning & Reporting

Richard Fournier, Manager of Parks &

Open Space Development

Jay Pak, Senior Financial Analyst

Veronica Siu, Senior Business Analyst Laura Gold, Council and Committee

Coordinator

1. CALL TO ORDER

The Budget Committee convened at 9:03 AM with Councillor Amanda Collucci, Budget Chief in the Chair.

The Budget Chief provided opening remarks on the 2021 Budget.

2. DISCLOSURE OF PECUNIARY INTEREST

There was no disclosure of pecuniary interest.

3. BUDGET PRESENTATION

3.1 2021 Budget Overview

Lisa Chen, Senior Manager of Financial Planning & Reporting provided the "2021 Budget Overview" presentation.

Committee provided the following feedback on the "2021 Budget Overview" presentation:

Economic Trends and Legislative Impacts

- Asked for clarification on how Markham's unemployment rate has changed since 2019;
- Inquired if there were or will be any changes to the Federal Gas Tax Program due to a decrease in demand for gas during the pandemic;
- Inquired if the difference between the Canadian and American dollar has been considered when purchasing large items like the fire pumper trucks.

Capital Budget

- Inquired on the timing of the Markham and Unionville Village Flood Control Environmental Assessment
- Requested that a list of all proposed 2021 Capital Projects that did not make it to the Budget Committee be provided to the Committee.

Operating Budget

- Inquired how funds being allocated to COVID-19 related costs are anticipated to be spent;
- Asked how COVID-19 impacts the projected 2021 supplemental taxes, and assessment growth to be received by the City;
- Inquired if there would be a stormwater management fee in 2021, and for the Committee to discuss at a future meeting;
- Asked if City reserves could be used to help mitigate the budget shortfall;
- Asked if there are funds in the budget for new staff positons;
- Discussed COVID-19 enforcement resources and inquired about available options if additional by-law enforcement is required;
- Asked if the savings derived from staff positions that are vacant is anticipated to increase or decrease in 2021;
- Suggested that staff vacancies be filled on a contract basis during the pandemic;
- Suggested that at some point in the future the City will need to look at the optimal level of by-law enforcement in Markham, noting more By-Law Officers may be required to

- accommodate growth on local issues, and to temporarily enforce COVID-19 restrictions;
- Sought to ensure that the community's voice is being considered when making decisions regarding by-law enforcement in the 2021 Budget.

Staff provided the following responses to inquiries from the Committee:

Economic Trends and Legislative Impacts

- The unemployment rate has decreased to 9.5% since the onset of the pandemic, but it is still higher than 5.9%, which it was in September 2019;
- Staff have received no indication of any changes to the Federal Gas Tax Program, and the demand for gas has increased since the onset of the pandemic;
- American funds have been secured by the City to protect it against volatility in the American dollar when making large purchases, like the purchase of the fire pumper trucks.

Capital Budget

• Staff balanced providing assistance to the economy with the City's resources, cash flow, and fiscal constraints when preparing and making decision regarding the 2021 Capital Budget.

Operating Budget

- The City has allocated 1.1 million dollars for COVID-19 related costs in 2021 (amount to be monitored and is for all City facilities), which may be used to fund additional cleaning, ITS, or personal protective equipment that is required due to the pandemic;
- Explained the timing and 2020 experience of supplementary taxes and impact to the 2021 assessment growth. Anticipate that the City will receive higher supplemental taxes and lower assessment growth in 2021, and the net impact will be \$430,000 favourable in total funds to be received;
- Explained the \$100 to 127 average household impact did not include the stormwater management fee impact. Based on the existing Council resolution, the stormwater management fee of \$51 will be applied in 2021, unless Council directs otherwise;
- Staff to prepare options to present to the Committee on using City reserves to help mitigate a budget shortfall;
- There are no funds allocated in the 2021 budget for new staff positions;
- The salary gapping amount in the 2021 budget is the same as the 2020 budget.

- Staff vacancies are being filled by re-deployed staff whenever possible, or by hiring a permanent full-time employee or contact employee depending on the nature of the position;
- York Region Police (YRP) is the primary enforcer of COVID-19 related offences, but City staff could be redeployed to help if required.
- In 2020, staff were involved in by-law patrols and COVID-19 enforcement, and collaborated with YRP on enforcement strategies. As we require more effort and focus in 2021, staff will review local needs, YRP's role, parking enforcement activities, and review redeployment of other staff to enforcement activities.
- The number of by-law cases have increased with more people staying at home. By-Law Officers are fully deployed. Staff addressing the backlog of property standard complaints based on the order of priority.

4. **NEW BUSINESS**

There was no new business.

5. NEXT MEETING DATE

The next meeting of the Budget Committee will be held on November 6, 2020 at 9:00 AM.

6. ADJOURNMENT

The Budget Committee adjourned at 10:55 PM.

# Project Description					DC -		Description of Other Funding
	Total	Tax	Life Cycle	DC - Reserve	Developer	Other	
Projects Under Consideration							
Development Services							
Culture							
21001 Culture Public Art Master Plan Implementation Phase 2 of 5	204,700					204,700	Public Art Acq. Res. Fund
TOTAL Culture	204,700	-	-	-	-	204,700	
Museum							
21002 Museum - Various Buildings	86,300		86,300				
21003 Museum Maintenance	36,700		36,700				_
TOTAL Museum	123,000	-	123,000	-	-	-	-
Theatre							
21005 Theatre Stage & Building Maintenance	43,800		43,800				
TOTAL Theatre	43,800	-	43,800	-	-	-	=
Arts Centres							
21007 Gallery Lobby Maintenance	29,200		29,200				
21008 Gallery McKay Heating and Cooling System	5,300		5,300				
TOTAL Arts Centres	34,500	-	34,500	-	-	-	=
Planning							
21009 Consultant Studies	72,000			64,800		7,200	Development Fees
21010 Designated Heritage Property Grant Program -2021	30,000			Ź		30,000	Designated Heritage Prop Grant
21011 Heritage Façade Improvements/Sign Replacement - 2021	10,000		10,000				
21012 Housing Strategy - Inclusionary Zoning	50,900			45,810		5,090	Development Fees
21013 Langstaff Master Plan and Secondary Plan Review	508,800			457,920		50,880	Development Fees
21014 Markham Centre Community Energy Plan	161,700			145,530			Development Fees
21015 Parkland Study Update	101,800			91,620		10,180	Development Fees
21016 Planning & Design Staff Salary Recovery	786,300			786,300			
21017 Secondary Plans - General	101,800			91,620			Development Fees
21018 Yonge Corridor Secondary Plan	203,500			183,150			Development Fees
TOTAL Planning	2,026,800	-	10,000	1,866,750	-	150,050	
Design 21019 Berczy Beckett Park (Cherna Ave.) - Design & Construction	405,400			364,860		40 540	Parks Cash-in-Lieu; Note 1
21020 Blodwen Davies Park - Construction	1,681,800			1,513,620		,	Parks Cash-in-Lieu
21020 Blodwell Davies Fair - Construction	7,585,300			6,826,770			Parks Cash-in-Lieu
21021 Green Lane Park - Design and Construction	501,300			451,170		,	Parks Cash-in-Lieu; Note 2
21022 Green Eanle Fark - Besign and Construction 21023 Yonge and Grandview Park - Design and Construction	581,400			523,260			Parks Cash-in-Lieu; Note 3
= 1020 1035 and Station Fair Design and Constitution	10,755,200			9,679,680		1,075,520	= 1 41165 Cubii iii Eleu, 11016 J

# Project Description						DC -		Description of Other Funding
Stagest Lasting the same		Total	Tax	Life Cycle	DC - Reserve	Developer	Other	- confirming
Engineering								
21024 Copper Creek Drive Reconfiguration (Roa	d Diet)	152,900			152,900			
21025 Cycling & Pedestrian Advisory Committee		25,400			16,510		8,890	Non-DC Growth
21026 Engineering Staff Salary Recovery		713,700			713,700		-,	
21042 Hwy 404 Collector Road (Design)		1,475,000			1,475,000			
21027 Installation of Way Finding Signs at Rough	e Valley Trail	182,900			118,885		64,015	Non-DC Growth
21028 LPAT Transportation Peer Review	•	344,300			344,300		- ,	
21030 Markham Cycles & Active Transportation	Awareness Program	15,300			9,945		5,355	Non-DC Growth
21031 Markham Cycling Day	2	10,200			6,630		3,570	Non-DC Growth
21032 New Traffic Signals (Design)		59,100			59,100		- ,	
21033 Secondary Plan Transportation Studies for	Langstaff Gateway	576,300			576,300			
21034 Secondary Plan Transportation Studies for		576,300			576,300			
21035 Servicing & SWM Study for the Highway		344,300			344,300			
21036 Servicing & SWM Study for Yonge Corrid		514,900			514,900			
21037 Servicing and SWM Study for Langstaff S		514,900			514,900			
21038 Sidewalk Program (Design)		509,400			509,400			
21039 Smart Commute Markham-Richmond Hill		76,300			76,300			
21040 Streetlight Program (Construction)		497,800			497,800			
21041 Various walking & cycling initiatives		45,800			29,770		16.030	Non-DC Growth
21178 Traffic Operational Improvements - Annua	1	51,800	51,800		2>,7.70		10,020	Tion Be Grown
	TOTAL Engineering	6,686,600	51,800	-	6,536,940	-	97,860	=
	TOTAL Development Services	19,874,600	51,800	211,300	18,083,370		1,528,130	_
O. L 1 % HD	-	, ,		,	, ,		, ,	-
AO, Legal & HR								
Human Resources		101.000	101.000					
21043 Diversity Action Plan Refresh		101,800	101,800					=
	TOTAL Human Resources	101,800	101,800	-	-	-	-	
	TOTAL CAO, Legal & HR	101,800	101,800	-	-	-	-	- -
rporate Services								
ITS								
21044 ITS Life Cycle Asset Replacement		1,739,900		1,391,900			348 000	\$104k WW, \$244k Dev./Build. Fee
21044 113 Life Cycle Asset Replacement	TOTAL ITS	1,739,900		1,391,900			348,000	= \$104k w w, \$244k Dev./Build. Fee
	TOTAL ITS	1,739,900	-	1,391,900	-	-	348,000	
Finance 21045 Development Charges Background Study		122,100			109,890		12,210	Non-DC Growth
	_	122,100 943,700			109,890 943,700		12,210	Non-DC Growth

# Project Description	Total	Tax	Life Cycle	DC - Reserve	DC - Developer	Other	Description of Other Funding
Asset Management							
21047 Building Condition Audit - FTE	149,800		149,800				
21048 Civic Centre Repair and/or Replacement Projects	366,900		366,900				
21050 Cornell C.C. Parking Garage - Construction	1,996,800	1,095,096	,	782,704		119,000	Carryforward from Project 2011
21051 Corporate Security Operations & System Upgrades	584,400	, ,	584,400	,		ĺ	, , ,
21052 Fire Facilities Repair and/or Replacement Projects	38,000		38,000				
21053 Library Facilities Repair and/or Replacement Projects	44,900		44,900				
21054 Municipal Building Backflow Prevention - Annual Testing	20,400		20,400				
21055 Operations Facilities Repair and/or Replacement Projects	538,100		538,100				
21056 Operations Fuel Sites Monitoring	72,200	72,200	220,100				
21057 Other Facilities Repair and/or Replacement Projects	51,000	72,200	51,000				
21058 Parking Lot Light Replacement	89,800		89,800				
21059 Roofing Maintenance and Repair	122,400		122,400				
21060 Roofing Replacement Projects	757,400		757,400				
21060 Rooting Replacement Projects 21061 Satellite Community Centre Repair and/or Replacement	15,300		15,300				
21061 Satellite Community Centre Repair and/or Replacement 21062 Tennis Clubhouse Repair and/or Replacement Projects	6,700		3,350			2 250	Tennis Club
TOTAL Asset Management	4,854,100	1,167,296	2,781,750	782,704	_	122,350	= Tennis Club
							_
TOTAL Corporate Services	7,659,800	1,167,296	4,173,650	1,836,294	-	482,560	-
mmunity & Fire Services							
Fire & Emergency Services							
21064 Air Cylinders 45+ Minutes Replacement	101,700		101,700				
21065 Arizona Vortex Tripod Replacement	7,400		7,400				
21066 Bunker Gear Life Cycle Replacement	89,200		89,200				
21067 Firefighting Tools & Equipment Replacement	101,700		101,700				
21068 Hazardous Materials Photo Ion Detector Replacement	5,400		5,400				
21069 Replacement of Equipment due to Staff Retirements	99,600		99,600				
21070 Rescue Equipment - Thermal Image Cameras	19,000		19,000				
TOTAL Fire & Emergency Services	424,000		424,000				=
	,		,				
Recreation Services	221 000					221 000	G . T
21072 Angus Glen C.C. Arena Seating Replacement	221,800		45.000			221,800	Gas Tax
21073 Angus Glen C.C. Sand Filter Component Replacement	45,600		45,600				
21074 Angus Glen C.C. Snow Pit Heating Coil Replacement	57,000		57,000				
21075 Angus Glen Tennis Centre Court Re-Painting	40,700		40,700				
21076 Armadale C.C. Gym Interior Door	13,200		13,200				
21077 Camp Chimo High Ropes and Harness Replacement	8,100		8,100				
21078 Centennial C.C. Mechanical Replacement	121,500						Gas Tax
21079 Cornell C.C. Heat Exchanger Replacement	12,200						Gas Tax
21080 Heintzman House Washroom Refurbishment	37,000						Gas Tax
21081 Markham Village C.C. Dehumidification Unit Replacement	84,800					84,800	Gas Tax
21082 Markham Village C.C. Security System Replacement	32,100		32,100				
21083 Mt. Joy C.C. Arena Compressor Replacement	167,900					167,900	Gas Tax
21084 Mt. Joy C.C. Gas Monitor Replacement	5,200		5,200				
21007 011II : 31 I I B I I B I I I	44,800					44,800	Gas Tax
21085 Old Unionville Library Doors and Frames Replacement	11,000						
21085 Old Unionville Library Doors and Frames Replacement 21086 Recreation AED Program Replacement	6,000		6,000				

# Project Description	T . 1	T	1:6.6.1	D.C. D	DC -	0.4	Description of Other Funding
	Total	Tax	Life Cycle	DC - Reserve	Developer	Other	
21088 Recreation Exterior Walkways Replacement	163,800					163,800	Gas Tax
21089 Recreation Fitness Equipment Replacement	161,800		161,800				
21090 Recreation Floor Cleaning Machine Replacements	18,300		18,300				
21091 Recreation Lifeguard Chair Replacement	34,800		34,800				
21092 Recreation Pool Grouting Replacement	11,000		11,000				
21093 Recreation Program Equipment Replacement	53,600		53,600				
21094 Recreation Tables and Chairs Replacement	34,000		34,000				
21095 Rouge River C.C. Mechanical Replacement	297,900					297,900	Gas Tax
21096 Thornhill C.C. Ice Equipment Replacement	6,300		6,300				
21097 Thornhill C.C. Retaining Wall Installation	330,700	198,420				132,280	Disaster Mit. Adaptation Fund
21098 Thornhill C.C. Rubber Floor Replacement	158,800		158,800				•
TOTAL Recreation Services	2,187,900	198,420	705,500	-	-	1,283,980	=
larkham Public Library							
21099 Library Collections	2,806,300		2,806,300				
21100 Library Furniture, Equipment & Shelving Replacement	146,700		146,700				
							=
TOTAL Markham Public Library	2,953,000	-	2,953,000	-	-	-	
Operations - Roads							
21101 Asphalt Resurfacing	3,657,900		-			3,657,900	Gas Tax; Note 4
21102 Boulevard Repairs	58,400					58,400	Gas Tax
21103 Bridge Structure Preventative Maintenance - Roads	25,800		25,800				
21104 City Owned Entrance Feature Rehabilitation/Replacement	10,200		10,200				
21105 City Owned Fence Replacement Program	63,900		63,900				
21106 Citywide Ditching Program	91,400		91,400				
21107 Don Mills Storm Channel	35,400		35,400				
21108 Emergency Repairs	143,300		143,300				
21109 Guiderail- Install/Repair/Upgrade	90,900		- 10,000			90,900	Gas Tax
21110 Incremental Growth Related Winter Maintenance Vehicles	459,000			459,000			
21111 Localized Repairs - Curb & Sidewalk	876,400			.55,000		876 400	Gas Tax
21112 Localized Repairs - Parking Lots	119,200		119,200			070,100	Gus Tux
21114 Retaining Wall Repair Program	80,200		80,200				
21115 Storm Water Retention Pond Maintenance Program	51,900		51,900				
TOTAL Operations - Roads	5,763,900	-	621,300	459,000	-	4,683,600	=
Describer Deale							
Operations - Parks	144,000					144.000	Coo Too
21116 Backstop and Outfield Fence Replacement	144,000					,	Gas Tax
21117 Beaupre Park Waterplay Replacement	190,700		22.000			190,700	Gas Tax
21118 Bleachers (Metal) Replacements	22,900		22,900				
21120 Boulevard/Park Trees Replacement	359,400		359,400				
21121 Bridge Structure Preventative Maintenance in Parks	25,800		25,800				
21122 Cemetery Fence Repair/Replacement	40,700		40,700				
21123 City Park Furniture / Amenities	175,000		175,000				
21124 Court Resurfacing/Reconstruction/Maintenance	176,900		94,600				Tennis Clubs
21125 Fence (Tennis Courts)	135,800					,	Gas Tax
21126 Floodlights, Poles & Cross Arms Replacement	820,700						Gas Tax
21127 Goal Posts Replacement- Ashton Meadows Park	20,700					20,700	Gas Tax

# Desired Description					DC -		Description of Other East
# Project Description	Total	Tax	Life Cycle	DC - Reserve		Other	Description of Other Funding
21129 Pathways Resurfacing	142,700					142,700	Gas Tax
21130 Playstructure Replacement	366,800					,	Gas Tax
21131 Recycling Containers Replacement (Yr 4 of 10)	16,900		16,900			200,000	
21132 Relamping & Fixtures Refurbishment	40,100		40,100				
21133 Shade Structure Rehabilitation and/or Replacement	111,700		111,700				
21134 Sportsfield Maintenance & Reconstruction	140,300		140,300				
21135 Stairway Repairs	229,200		229,200				
TOTAL Operations - Parks	3,281,800	-	1,256,600	-	-	2,025,200	=
Operations - Fleet							
21136 Corporate Fleet Growth - Non-Fleet	10,200			10.200			
21137 Corporate Fleet Growth - Non-Fleet 21137 Corporate Fleet Refurbishing	,		27,000	10,200			
1 0	37,000		37,000				
21138 Corporate Fleet Replacement - Fire	2,723,900		2,723,900				
21139 Corporate Fleet Replacement - Ice Resurfacing Machine	102,100		102,100				N C
21140 Corporate Fleet Replacement - Non-Fire	1,334,800		1,334,800			216200	Note 6
21141 Corporate Fleet Replacement - Waterworks	216,200					216,200	Waterworks
21142 New Fleet - Parks	45,800			45,800			=
TOTAL Operations - Fleet	4,470,000	-	4,197,800	56,000	-	216,200	
Operations - Utility Inspection & Survey							
21143 Survey Monument Replacement	28,200		28,200				_
TOTAL Operations - Utility Inspection & Survey	28,200	-	28,200	-	-	-	=
Operations - Business & Technical Services							
21144 Growth Related Park Improvements	478,300			430,470		47.830	Non-DC Growth
TOTAL Operations - Business & Technical Services	478,300	-	-	430,470	-	47,830	• · · · · · · · · · · · · · · · · · · ·
Environmental Services - Infrastructure							
21145 Bridges and Culverts - Condition Inspection	81,000		81,000				
21146 MNRF Monitoring for Capital Projects at Water Crossings	27,600		27,600				
21147 Small Culverts Replacement (8 Structures) - Construction	215,700		215,700				
21147 Sman Curvers Replacement (6 Structures) - Construction 21148 Storm & Sanitary Pumping Stations - Equipment Inspection	116,000		40,700			75 200	Waterworks Reserve
21149 Storm and Sanitary Sewer CCTV Inspection	652,800		215,100			,	Waterworks Reserve
21149 Storm and Samtary Sewer CCTV Inspection						437,700	Waterworks Reserve
•	,		,				
21150 Stormwater Sewer Pipes Emergency Repairs	56,100	101 200	56,100				
21150 Stormwater Sewer Pipes Emergency Repairs 21151 Streetlights - Miscellaneous Requests	56,100 101,800	101,800	56,100				
21150 Stormwater Sewer Pipes Emergency Repairs 21151 Streetlights - Miscellaneous Requests 21152 Structures Program-Full-time Staff	56,100 101,800 148,100	101,800	56,100 148,100				
21150 Stormwater Sewer Pipes Emergency Repairs 21151 Streetlights - Miscellaneous Requests 21152 Structures Program-Full-time Staff 21153 Toogood Pond Dam - Rehabilitation Works	56,100 101,800 148,100 437,400	101,800	56,100 148,100 437,400				
21150 Stormwater Sewer Pipes Emergency Repairs 21151 Streetlights - Miscellaneous Requests 21152 Structures Program-Full-time Staff 21153 Toogood Pond Dam - Rehabilitation Works 21154 Toogood Pond Dam - Structural Inspection	56,100 101,800 148,100 437,400 9,800	ŕ	56,100 148,100 437,400 9,800			513 000	
21150 Stormwater Sewer Pipes Emergency Repairs 21151 Streetlights - Miscellaneous Requests 21152 Structures Program-Full-time Staff 21153 Toogood Pond Dam - Rehabilitation Works	56,100 101,800 148,100 437,400	101,800	56,100 148,100 437,400	-	<u> </u>	513,000	=
21150 Stormwater Sewer Pipes Emergency Repairs 21151 Streetlights - Miscellaneous Requests 21152 Structures Program-Full-time Staff 21153 Toogood Pond Dam - Rehabilitation Works 21154 Toogood Pond Dam - Structural Inspection TOTAL Environmental Services - Infrastructure	56,100 101,800 148,100 437,400 9,800	ŕ	56,100 148,100 437,400 9,800	-	-	513,000	-
21150 Stormwater Sewer Pipes Emergency Repairs 21151 Streetlights - Miscellaneous Requests 21152 Structures Program-Full-time Staff 21153 Toogood Pond Dam - Rehabilitation Works 21154 Toogood Pond Dam - Structural Inspection TOTAL Environmental Services - Infrastructure Environmental Services - Stormwater	56,100 101,800 148,100 437,400 9,800 1,846,300	ŕ	56,100 148,100 437,400 9,800	-	-	ŕ	- Character Fra
21150 Stormwater Sewer Pipes Emergency Repairs 21151 Streetlights - Miscellaneous Requests 21152 Structures Program-Full-time Staff 21153 Toogood Pond Dam - Rehabilitation Works 21154 Toogood Pond Dam - Structural Inspection TOTAL Environmental Services - Infrastructure Environmental Services - Stormwater 21155 Don Mills Channel - Flood Proofing Site Investigation	56,100 101,800 148,100 437,400 9,800 1,846,300	ŕ	56,100 148,100 437,400 9,800	-	-	124,900	Stormwater Fee
21150 Stormwater Sewer Pipes Emergency Repairs 21151 Streetlights - Miscellaneous Requests 21152 Structures Program-Full-time Staff 21153 Toogood Pond Dam - Rehabilitation Works 21154 Toogood Pond Dam - Structural Inspection TOTAL Environmental Services - Infrastructure Environmental Services - Stormwater 21155 Don Mills Channel - Flood Proofing Site Investigation 21156 Don Mills Channel Flood Control Program -Pond Design/CA	56,100 101,800 148,100 437,400 9,800 1,846,300	ŕ	56,100 148,100 437,400 9,800 1,231,500	-	-	124,900	Stormwater Fee SW Fee \$696k, DMFA Grant \$464k
21150 Stormwater Sewer Pipes Emergency Repairs 21151 Streetlights - Miscellaneous Requests 21152 Structures Program-Full-time Staff 21153 Toogood Pond Dam - Rehabilitation Works 21154 Toogood Pond Dam - Structural Inspection TOTAL Environmental Services - Infrastructure Environmental Services - Stormwater 21155 Don Mills Channel - Flood Proofing Site Investigation 21156 Don Mills Channel Flood Control Program -Pond Design/CA 21157 Erosion Restoration Program	56,100 101,800 148,100 437,400 9,800 1,846,300 124,900 1,160,000 898,800	ŕ	56,100 148,100 437,400 9,800	584,300	-	124,900 1,160,000	SW Fee \$696k, DMFA Grant \$464k
21150 Stormwater Sewer Pipes Emergency Repairs 21151 Streetlights - Miscellaneous Requests 21152 Structures Program-Full-time Staff 21153 Toogood Pond Dam - Rehabilitation Works 21154 Toogood Pond Dam - Structural Inspection TOTAL Environmental Services - Infrastructure Environmental Services - Stormwater 21155 Don Mills Channel - Flood Proofing Site Investigation 21156 Don Mills Channel Flood Control Program -Pond Design/CA	56,100 101,800 148,100 437,400 9,800 1,846,300	ŕ	56,100 148,100 437,400 9,800 1,231,500	584,300	-	124,900 1,160,000	

# Project Description		Total	Tax	Life Cycle	DC - Reserve	DC - Developer	Other	Description of Other Funding
21160 SWM Pond Cleaning Design & CA -	ID#47 & #119	152,600					152,600	Gas Tax
21161 SWM Ponds - Condition Inspection		26,500		26,500			- ,,,,,,	
21162 Water Quality Improvements		41,100		41,100				
21163 Water Quality Monitoring		28,100		28,100				
21164 West Thornhill Flood Control Implem	entation - Ph 3B Cons.	4,029,600		20,100			4 029 600	Stormwater reserve
21165 West Thornhill Flood Control Implem		15,655,900					, ,	\$2M Gas tax;\$13.7M SW reserve
	nvironmental Services - Stormwater	22,596,800	-	669,700	584,300	_	21,342,800	= " Gus tax, \$15.711 5 W Teserve
				ŕ	•			
Environmental Services - Waste	. 37.1.1	40.						
21166 Incremental Growth Related Waste M	<u> </u>	102,000			102,000			=
<u>TOT</u>	AL Environmental Services - Waste	102,000	-	-	102,000	-	-	
Environmental Services - Waterworks								
21167 Cathodic Protection of Ductile Iron W	atermains	493,100					493.100	Waterworks Reserve
21168 CI Watermain Rehabilitation / CIPP I		6,623,300					,	Waterworks Reserve
21169 CI Watermain Replacement - Design		447,700						Waterworks Reserve
21170 CI Watermain Replacement-West Tho	ornhill Ph 3B	4,036,300					,	Waterworks Reserve
21170 Cr waterman Replacement West The 21171 Curb Box Inspection and Replacemen		714,900					, ,	Waterworks Reserve
21172 Royal Orchard Sanitary Upgrades (Wo	2	3,471,000				3,471,000	, 14,500	THEOR WOLKS INCOUNCE
21172 Royal Orchard Saintary Opprades (Wo	inomini - i n. TA)	1,405,000				3,71,000	1 405 000	Waterworks Reserve
21175 Sanitary Sewers - Renadilitation 21174 Wastewater Flow Monitoring		1,405,000					, ,	Waterworks Reserve
21174 Wastewater Flow Monitoring 21175 Water Meters - Replacement Program		,					,	Waterworks Reserve
		1,013,200					, ,	
21176 Watermain Leak Detection Program	wironmental Services - Waterworks	37,500 18,364,200				3,471,000	14,893,200	Waterworks Reserve
TOTAL E	vironmental Services - waterworks	10,304,200	-	-	-	3,471,000	14,093,200	
<u>1</u>	OTAL Community & Fire Services	62,496,400	300,220	12,087,600	1,631,770	3,471,000	45,005,810	-
Corporate Wide								
21177 Corporate Capital Contingency	_	1,362,500	5,200	30,400	1,206,461			Various Other Internal; Note 7
	TOTAL Corporate Wide	1,362,500	5,200	30,400	1,206,461	-	120,439	
<u>T0</u>	TAL Projects Under Consideration	91,495,100	1,626,316	16,502,950	22,757,895	3,471,000	47,136,939	- =
e-Approved Projects								
evelopment Services								
_								
<i>Theatre</i> 21004 Theatre Fire Alarm 2 Stage Conversio	n	25,400		25,400				
21007 Theatre Fire Alarm 2 Stage Conversio	TOTAL Theatre	25,400		25,400 25,400				=
	101AL Illeatte	23,400		23,400	-		-	
Design								
Design 21019 Berczy Beckett Park (Cherna Ave.) - I	Design & Construction	59,800			53,820		5,980	Parks Cash-in-Lieu; Note 1
0		59,800 48,000			53,820 43,200		5,980 4,800	Parks Cash-in-Lieu; Note 1 Parks Cash-in-Lieu; Note 2

# Project Description			_	***		DC -		Description of Other Funding
		Total	Tax	Life Cycle	DC - Reserve	Developer	Other	
	TOTAL Design	164,300		-	147,870		16,430	
F								
Engineering 21029 Markham Centre Trail Phase 1B Construc	tion	816,000			530,400		285,600	Section 37
2102) Markham Centre Han Fliase IB Constitue	TOTAL Engineering	816,000			530,400		285,600	section 37
	101112 211111111	010,000			220,100		200,000	
	TOTAL Development Services	1,005,700	-	25,400	678,270		302,030	•
orporate Services								
4								
Asset Management 21049 Civic Centre Vestibule Repairs and/or Re	placements	290,700		290,700				
21063 Theatre-HVAC Replacement	placements	2,000,000		91,200			1,908,800	Gas Tax
1	TOTAL Asset Management	2,290,700		381,900	-		1,908,800	•
	TOTAL Corporate Services	2,290,700		381,900	-		1,908,800	-
ommunity & Fire Services								
Fire & Emergency Services								
21071 SCBA Decontamination Machine		63,300	63,300					
	TOTAL Recreation Services	63,300	63,300	-			-	•
Operations - Roads		2 157 000		100.000			2.057.000	C T N-4- 4
21101 Asphalt Resurfacing 21113 Parking Lots- Rehabilitation		3,157,900 678,900		100,000			3,057,900 678,900	Gas Tax; Note 4 Gas Tax; Note 5
21113 Tarking Lots- Renaumentation	TOTAL Operations - Roads	3,836,800		100,000			3,736,800	Gas Tax, Note 3
	1011111 Operations Tronds	2,020,000		100,000			2,.20,000	
Operations - Parks								
21119 Block Pruning Initiative - Year 2 of 3		1,017,600	1,017,600					:
	TOTAL Operations - Parks	1,017,600	1,017,600	-				
Operations - Fleet								
21140 Corporate Fleet Replacement - Non-Fire		285,900		285,900				Note 6
1 1 1	TOTAL Operations - Fleet	285,900		285,900				:
								-
<u>TOT</u>	AL Community & Fire Services	5,203,600	1,080,900	385,900	-	-	3,736,800	-
orporate Wide								
Corporate Wide								
21177 Corporate Capital Contingency		194,600		12,200			182,400	Gas Tax; Note 7
1 1 5 7	TOTAL Corporate Wide	194,600	-	12,200	-		182,400	•

# Project Description		Total	Tax	Life Cycle	DC - Reserve	DC - Developer	Other	Description of Other Funding
	TOTAL Corporate Wide	194,600	-	12,200	-	-	182,400	_
	TOTAL Pre-Approved	8,694,600	1,080,900	805,400	678,270	-	6,130,030	- -
								_
TOTA	L Projects Under Consideration	100,189,700	2,707,216	17,308,350	23,436,165	3,471,000	53,266,969	_

Notes:

- 1) The overall project budget is \$465,200. The pre-approval request of \$59,800 is for consulting work only.
- 2) The overall project budget is \$549,300. The pre-approval request of \$48,000 is for consulting work only.
- 3) The overall project budget is \$637,900. The pre-approval request of \$56,500 is for consulting work only.
- 4) The overall project budget is \$6,815,800. The pre-approval request of \$3,157,900 is to commence procurement of contracts earlier to potentially attain better pricing. Funding split of Life Cycle vs. Gas Tax funding has been updated since Council approval of the Capital Pre-Approval Report from \$224,340; \$2,933,560 to \$100,000; \$3,057,900
- 5) Funding source has been updated since Council approval of the Capital Pre-Approval Report from fully Life Cycle funded to fully Gas Tax funded
- 6) The overall project budget is \$1,620,700. The pre-approval request of \$285,900 is to commence procurement of articulating loader earlier to potentially attain better pricing.
- 7) The overall project budget is \$1,557,100. The pre-approval request of \$194,600 represents the contingency amounts required for all project pre-approval requests.

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2021 CAPITAL BUDGET

a) Project Summary by Department

Development Services

Culture Projects Under Consideration

Museum Projects Under Consideration

Theatre Projects Under Consideration Pre-Approval

Arts Centre Projects Under Consideration

Planning Projects Under Consideration

Design Projects Under Consideration Pre-Approval

Engineering Projects Under Consideration Pre-Approval

CAO, Legal & HR

Human Resources Projects Under Consideration

Corporate Services

ITS Projects Under Consideration

Finance Projects Under Consideration

Asset Management Projects Under Consideration Pre-Approval

Community and Fire Services

Fire and Emergency Projects Under Consideration Pre-Approval

Recreation Services Projects Under Consideration

Markham Public Library Projects Under Consideration

Operations-Roads Projects Under Consideration Pre-Approval



2021 CAPITAL BUDGET

Community and Fire Services (cont'd)

Operations-Parks Projects Under Consideration Pre-Approval

Operations-Fleet Projects Under Consideration Pre-Approval

Operations-Utility Inspection Projects Under Consideration

Operations-Business & Tech Projects Under Consideration

ES – Infrastructure Projects Under Consideration

ES – Stormwater Projects Under Consideration

ES – Waste Projects Under Consideration

ES – Waterworks Projects Under Consideration

Corporate Wide

Corporate Wide Projects Under Consideration Pre-Approval

# Project Description	T I	<i>T</i>	T:6 G :	D.C. D	DC -	0.4	Description of Other Funding
	Total	Tax	Life Cycle	DC - Reserve	Developer	Other	
rojects Under Consideration							
Development Services							
Culture							
21001 Culture Public Art Master Plan Implementation Phase 2 of 5	204,700					204,700	Public Art Acq. Res. Fund
TOTAL Culture	204,700	-	-	-	-	204,700	_
Museum							
21002 Museum - Various Buildings	86,300		86,300				
21003 Museum Maintenance	36,700		36,700				
TOTAL Museum	123,000	-	123,000	-	-	-	=
Theatre							
21005 Theatre Stage & Building Maintenance	43,800		43,800				
TOTAL Theatre	43,800	-	43,800	-	-	-	=
Arts Centres							
21007 Gallery Lobby Maintenance	29,200		29,200				
21008 Gallery McKay Heating and Cooling System	5,300		5,300				
TOTAL Arts Centres	34,500	-	34,500	-	-	-	=
Planning							
21009 Consultant Studies	72,000			64,800		7 200	Development Fees
21010 Designated Heritage Property Grant Program -2021	30,000			04,000		,	Designated Heritage Prop Gran
21011 Heritage Façade Improvements/Sign Replacement - 2021	10,000		10,000			50,000	Designated Heritage 110p Gran
21012 Housing Strategy - Inclusionary Zoning	50,900		10,000	45,810		5 090	Development Fees
21013 Langstaff Master Plan and Secondary Plan Review	508,800			457,920			Development Fees
21014 Markham Centre Community Energy Plan	161,700			145,530			Development Fees
21015 Parkland Study Update	101,800			91,620			Development Fees
21016 Planning & Design Staff Salary Recovery	786,300			786,300		,	1
21017 Secondary Plans - General	101,800			91,620		10,180	Development Fees
21018 Yonge Corridor Secondary Plan	203,500			183,150			Development Fees
TOTAL Planning	2,026,800	-	10,000	1,866,750	-	150,050	= ^
Design	40.5.400			264.060		40.50	D. I. G. L. Y. W. A
21019 Berczy Beckett Park (Cherna Ave.) - Design & Construction	405,400			364,860			Parks Cash-in-Lieu; Note 1
21020 Blodwen Davies Park - Construction	1,681,800			1,513,620			Parks Cash-in-Lieu
21021 Celebration Park - Construction	7,585,300			6,826,770		,	Parks Cash-in-Lieu
21022 Green Lane Park - Design and Construction	501,300			451,170		,	Parks Cash-in-Lieu; Note 2
21023 Yonge and Grandview Park - Design and Construction	581,400			523,260			= Parks Cash-in-Lieu; Note 3
TOTAL Design	10,755,200	-	-	9,679,680	-	1,075,520	

101,800 101,800 101,800	# Project Description		T I	<i>T</i>	T.C. C. 1	D.C. F	DC -	0.4	Description of Other Funding
152,00			Total	Tax	Life Cycle	DC - Reserve	Developer	Other	
25,00 1,00	Engineering								
1713.700	21024 Copper Creek Drive Reconfiguration (Roa	d Diet)	152,900			152,900			
1,475,000	21025 Cycling & Pedestrian Advisory Committee	c(CPAC)	25,400			16,510		8,890	Non-DC Growth
2007 Installation of Way Finding Signs at Rouge Valley Trail 182,900 344,300 344,000 3	21026 Engineering Staff Salary Recovery		713,700			713,700			
2028 LPAT Transportation Peer Review 344,300 344,300 9,945 5,355 Non-DC Growth	21042 Hwy 404 Collector Road (Design)		1,475,000			1,475,000			
1030 Markham Cycling Day 10,200 6,630 3,50 Non-DC Growth	21027 Installation of Way Finding Signs at Rough	e Valley Trail	182,900			118,885		64,015	Non-DC Growth
10,200	21028 LPAT Transportation Peer Review	-	344,300			344,300			
2003 New Traffic Signals (Design 100	21030 Markham Cycles & Active Transportation	Awareness Program	15,300			9,945		5,355	Non-DC Growth
21033 Secondary Plan Transportation Studies for Langstaff Gateway 576,300 576,30	21031 Markham Cycling Day	-	10,200			6,630		3,570	Non-DC Growth
21033 Secondary Plan Transportation Studies for Langstaff Gateway 576,300 576,30			59,100			59,100		ĺ	
21043 Secondary Plan Transportation Studies for Yonge Corridor 576,300 376,300 376,300 314,300 344,300 344,300 344,300 314,900		Langstaff Gateway	,			576,300			
21035 Servicing & SWM Study for the Highway 404 Ñ. Sec. Plan 344,300 514,900 5									
21036 Servicing & SWM Study for Yonge Corridor Sec. Plan 514,900 514,900 514,900 514,900 510,300 514,900 510,300 514,900 509,4						,			
21037 Servicing and SWM Study for Langstaff Secondary Plan 514,900 514,900 509,400 509,400 509,400 76,300						,			
21038 Sidewalk Program (Design) 509,400 509,400 76,300 7			,			,			
21043 Smart Commute Markham-Richmond Hill 76,300 76,300 497,800 497,800 29,770 16,030 Non-DC Growth		,							
21040 Streetlight Program (Construction) 497,800 497,800 29.770 16,030 Non-DC Growth									
21041 Various walking & cycling initiatives 45,800 51,800 51,800 51,800 - 6,536,940 - 97,860 TOTAL Engineering 6,686,600 51,800 - 6,536,940 - 97,860 TOTAL Development Services 19,874,600 51,800 211,300 18,083,370 - 1,528,130 TOTAL Development Services 19,874,600 51,800 211,300 18,083,370 - 1,528,130 TOTAL Human Resources 101,800 101,800 TOTAL Human Resources 101,800 101,800 TOTAL Human Resources 101,800 101,800 TOTAL CAO, Legal & HR 101,800 101,800 TOTAL TIS 1,739,900 1,391,900 - 348,000 348,000 TOTAL TIS 1,739,900 - 1,391,900 - 348,000 TOTAL TIS 1,739,900 - 348,000			,			,			
21178 Traffic Operational Improvements - Annual 51,800 51,800 TOTAL Engineering 6,686,600 51,800 - 6,536,940 - 97,860 TOTAL Development Services 19,874,600 51,800 211,300 18,083,370 - 1,528,130 TOTAL Development Services 19,874,600 51,800 211,300 18,083,370 - 1,528,130 TOTAL Human Resources 101,800 101,800 TOTAL Human Resources 101,800 101,800 TOTAL CAO, Legal & HR 101,800 101,800 TOTAL CAO, Legal & HR 101,800 101,800 TOTAL TIS Life Cycle Asset Replacement 1,739,900 - 1,391,900 - 348,000 348,000 TOTAL TIS Life Cycle Asset Replacement 1,739,900 - 1,391,900 - 348,000 TOTAL TIS Life Cycle Asset Replacement 1,2100 109,890 12,210 Non-DC Growth TOTAL TIS Life Cycle Management 943,700 943,700 943,700 100,890 12,210 100,890			,			,		16.030	Non-DC Growth
TOTAL Engineering 6,686,600 51,800 - 6,536,940 - 97,860		1		51.800		27,770		10,030	Non De Glowin
TOTAL Development Services 19,874,600 51,800 211,300 18,083,370 - 1,528,130	211/0 Trume operational improvements Timat				-	6,536,940	_	97,860	=
AO, Legal & HR Human Resources 101,800			10.051.000	71 000	211 200	10.002.250		1 700 100	_
101,800 101,800 101,800		TOTAL Development Services	19,874,600	51,800	211,300	18,083,370	-	1,528,130	_
101,800 101,800 101,800									
101,800 101,800 101,800	AO, Legal & HR								
TOTAL Human Resources 101,800 101,800 - - - - - - - - -									
TOTAL CAO, Legal & HR 101,800 101,800	21043 Diversity Action Plan Refresh		101,800	101,800					_
Property Services 1739,900 1,391,900 348,000 \$104k WW, \$244k Dev./Build. For the content of the conte		TOTAL Human Resources	101,800	101,800	-	-	-	-	_
Property Services 1739,900 1,391,900 348,000 \$104k WW, \$244k Dev./Build. For the content of the conte		TOTAL CAO, Legal & HR	101,800	101,800	_	_	_	_	_
1,739,900			,	,					_
21044 ITS Life Cycle Asset Replacement 1,739,900 1,391,900 348,000 \$104k WW, \$244k Dev./Build. For the company of the cycle Asset Replacement TOTAL ITS 1,739,900 - 1,391,900 348,000 - 348,000 - 348,000 - 348,000 - 348,000	=								
Finance 21045 Development Charges Background Study 122,100 109,890 12,210 Non-DC Growth 21046 Internal Project Management 943,700 943,700 943,700									
Finance 21045 Development Charges Background Study 122,100 109,890 12,210 Non-DC Growth 21046 Internal Project Management 943,700 943,700 943,700	21044 ITS Life Cycle Asset Replacement	_	1,739,900		1,391,900			348,000	_\$104k WW, \$244k Dev./Build. Fe
21045 Development Charges Background Study 122,100 109,890 12,210 Non-DC Growth 21046 Internal Project Management 943,700 943,700		TOTAL ITS	1,739,900	-	1,391,900	-	-	348,000	
21045 Development Charges Background Study 122,100 109,890 12,210 Non-DC Growth 21046 Internal Project Management 943,700 943,700	Finance								
21046 Internal Project Management 943,700 943,700			122,100			109.890		12.210	Non-DC Growth
3 6 7 103,100						,		12,210	Tien 20 Grown
		TOTAL Finance	1,065,800			1,053,590		12,210	=

# Project Description	Total	Tax	Life Cycle	DC - Reserve	DC - Developer	Description of Other Funding Other
Asset Management						
21047 Building Condition Audit - FTE	149,800		149,800			
21048 Civic Centre Repair and/or Replacement Projects	366,900		366,900			
21050 Cornell C.C. Parking Garage - Construction	1,996,800	1,095,096	200,000	782,704		119,000 Carryforward from Project 201
21051 Corporate Security Operations & System Upgrades	584,400	-,,	584,400	,,,		,,,,
21052 Fire Facilities Repair and/or Replacement Projects	38,000		38,000			
21053 Library Facilities Repair and/or Replacement Projects	44,900		44,900			
21054 Municipal Building Backflow Prevention - Annual Testing	20,400		20,400			
21055 Operations Facilities Repair and/or Replacement Projects	538,100		538,100			
21056 Operations Fuel Sites Monitoring	72,200	72,200	330,100			
21057 Other Facilities Repair and/or Replacement Projects	51,000	72,200	51,000			
21058 Parking Lot Light Replacement	89,800		89,800			
21059 Roofing Maintenance and Repair	122,400		122,400			
21060 Roofing Replacement Projects	757,400		757,400			
21000 Rooting Replacement Frojects 21061 Satellite Community Centre Repair and/or Replacement	15,300		15,300			
21062 Tennis Clubhouse Repair and/or Replacement Projects	6,700		3,350			3,350 Tennis Club
TOTAL Asset Management	4,854,100	1,167,296	2,781,750	782,704		122,350 Tellilis Club
TOTAL Corporate Services	7,659,800	1,167,296	4,173,650	1,836,294	-	482,560
mmunity & Fire Services						
Fire & Emergency Services						
21064 Air Cylinders 45+ Minutes Replacement	101,700		101,700			
21065 Arizona Vortex Tripod Replacement	7,400		7,400			
21066 Bunker Gear Life Cycle Replacement	89,200		89,200			
21067 Firefighting Tools & Equipment Replacement	101,700		101,700			
21068 Hazardous Materials Photo Ion Detector Replacement	5,400		5,400			
21069 Replacement of Equipment due to Staff Retirements	99,600		99,600			
21070 Rescue Equipment - Thermal Image Cameras	19,000		19,000			
TOTAL Fire & Emergency Services	424,000	-	424,000	-	-	
Demosting Comiton						
Recreation Services	221 000					221 800 C T
21072 Angus Glen C.C. Arena Seating Replacement	221,800		45 (00			221,800 Gas Tax
21073 Angus Glen C.C. Sand Filter Component Replacement	45,600		45,600			
21074 Angus Glen C.C. Snow Pit Heating Coil Replacement	57,000		57,000			
21075 Angus Glen Tennis Centre Court Re-Painting	40,700		40,700			
21076 Armadale C.C. Gym Interior Door	13,200		13,200			
21077 Camp Chimo High Ropes and Harness Replacement	8,100		8,100			121 500 G T
21078 Centennial C.C. Mechanical Replacement	121,500					121,500 Gas Tax
21079 Cornell C.C. Heat Exchanger Replacement	12,200					12,200 Gas Tax
21080 Heintzman House Washroom Refurbishment	37,000					37,000 Gas Tax
21081 Markham Village C.C. Dehumidification Unit Replacement	84,800					84,800 Gas Tax
	32,100		32,100			
21082 Markham Village C.C. Security System Replacement						167,900 Gas Tax
21083 Mt. Joy C.C. Arena Compressor Replacement	167,900					
21083 Mt. Joy C.C. Arena Compressor Replacement 21084 Mt. Joy C.C. Gas Monitor Replacement	5,200		5,200			
21083 Mt. Joy C.C. Arena Compressor Replacement 21084 Mt. Joy C.C. Gas Monitor Replacement 21085 Old Unionville Library Doors and Frames Replacement	5,200 44,800		ŕ			44,800 Gas Tax
21083 Mt. Joy C.C. Arena Compressor Replacement 21084 Mt. Joy C.C. Gas Monitor Replacement	5,200		5,200 6,000 19,000			44,800 Gas Tax

# Project Description	T I	T	1:6.6.1	D.C. D.	DC -	0.4	Description of Other Funding
	Total	Tax	Life Cycle	DC - Reserve	Developer	Other	
21088 Recreation Exterior Walkways Replacement	163,800					163,800	Gas Tax
21089 Recreation Fitness Equipment Replacement	161,800		161,800				
21090 Recreation Floor Cleaning Machine Replacements	18,300		18,300				
21091 Recreation Lifeguard Chair Replacement	34,800		34,800				
21092 Recreation Pool Grouting Replacement	11,000		11,000				
21093 Recreation Program Equipment Replacement	53,600		53,600				
21094 Recreation Tables and Chairs Replacement	34,000		34,000				
21095 Rouge River C.C. Mechanical Replacement	297,900					297,900	Gas Tax
21096 Thornhill C.C. Ice Equipment Replacement	6,300		6,300				
21097 Thornhill C.C. Retaining Wall Installation	330,700	198,420				132,280	Disaster Mit. Adaptation Fund
21098 Thornhill C.C. Rubber Floor Replacement	158,800		158,800				•
TOTAL Recreation Services	2,187,900	198,420	705,500	-	-	1,283,980	=
arkham Public Library							
21099 Library Collections	2,806,300		2,806,300				
21100 Library Furniture, Equipment & Shelving Replacement	146,700		146,700				
							=
TOTAL Markham Public Library	2,953,000	-	2,953,000	-	-	-	
Operations - Roads							
21101 Asphalt Resurfacing	3,657,900		-			3,657,900	Gas Tax; Note 4
21102 Boulevard Repairs	58,400					58,400	Gas Tax
21103 Bridge Structure Preventative Maintenance - Roads	25,800		25,800				
21104 City Owned Entrance Feature Rehabilitation/Replacement	10,200		10,200				
21105 City Owned Fence Replacement Program	63,900		63,900				
21106 Citywide Ditching Program	91,400		91,400				
21107 Don Mills Storm Channel	35,400		35,400				
21108 Emergency Repairs	143,300		143,300				
21109 Guiderail- Install/Repair/Upgrade	90,900		- 10,000			90,900	Gas Tax
21110 Incremental Growth Related Winter Maintenance Vehicles	459,000			459,000			
21111 Localized Repairs - Curb & Sidewalk	876,400			.55,000		876 400	Gas Tax
21112 Localized Repairs - Parking Lots	119,200		119,200			070,100	Gus Tux
21114 Retaining Wall Repair Program	80,200		80,200				
21115 Storm Water Retention Pond Maintenance Program	51,900		51,900				
TOTAL Operations - Roads	5,763,900	-	621,300	459,000	-	4,683,600	=
Operations - Parks	144,000					144.000	Coo Too
21116 Backstop and Outfield Fence Replacement	144,000					,	Gas Tax
21117 Beaupre Park Waterplay Replacement	190,700		22.000			190,700	Gas Tax
21118 Bleachers (Metal) Replacements	22,900		22,900				
21120 Boulevard/Park Trees Replacement	359,400		359,400				
21121 Bridge Structure Preventative Maintenance in Parks	25,800		25,800				
21122 Cemetery Fence Repair/Replacement	40,700		40,700				
21123 City Park Furniture / Amenities	175,000		175,000				
21124 Court Resurfacing/Reconstruction/Maintenance	176,900		94,600				Tennis Clubs
21125 Fence (Tennis Courts)	135,800					,	Gas Tax
21126 Floodlights, Poles & Cross Arms Replacement	820,700						Gas Tax
21127 Goal Posts Replacement- Ashton Meadows Park	20,700					20,700	Gas Tax

					DC -		Desire Cod E P
# Project Description	Total	Tax	Life Cycle	DC - Reserve		Other	Description of Other Funding
21129 Pathways Resurfacing	142,700					142,700	Gas Tax
21130 Playstructure Replacement	366,800					,	Gas Tax
21131 Recycling Containers Replacement (Yr 4 of 10)	16,900		16,900			200,000	
21132 Relamping & Fixtures Refurbishment	40,100		40,100				
21133 Shade Structure Rehabilitation and/or Replacement	111,700		111,700				
21134 Sportsfield Maintenance & Reconstruction	140,300		140,300				
21135 Stairway Repairs	229,200		229,200				
TOTAL Operations - Parks	3,281,800	-	1,256,600	-	-	2,025,200	=
Operations - Fleet							
21136 Corporate Fleet Growth - Non-Fleet	10,200			10.200			
21137 Corporate Fleet Growth - Non-Fleet 21137 Corporate Fleet Refurbishing			27,000	10,200			
	37,000		37,000				
21138 Corporate Fleet Replacement - Fire	2,723,900		2,723,900				
21139 Corporate Fleet Replacement - Ice Resurfacing Machine	102,100		102,100				N
21140 Corporate Fleet Replacement - Non-Fire	1,334,800		1,334,800			216200	Note 6
21141 Corporate Fleet Replacement - Waterworks	216,200			4.		216,200	Waterworks
21142 New Fleet - Parks	45,800			45,800			=
TOTAL Operations - Fleet	4,470,000	-	4,197,800	56,000	-	216,200	
Operations - Utility Inspection & Survey							
21143 Survey Monument Replacement	28,200		28,200				
TOTAL Operations - Utility Inspection & Survey	28,200	-	28,200	-	-	-	=
Operations - Business & Technical Services							
21144 Growth Related Park Improvements	478,300			430,470		47.830	Non-DC Growth
TOTAL Operations - Business & Technical Services	478,300	-	-	430,470	-	47,830	100.20 0.000
Environmental Services - Infrastructure							
21145 Bridges and Culverts - Condition Inspection	81,000		81,000				
21146 MNRF Monitoring for Capital Projects at Water Crossings	27,600		27,600				
21147 Small Culverts Replacement (8 Structures) - Construction	215,700		215,700				
21147 Sman Curvers Replacement (8 Structures) - Construction 21148 Storm & Sanitary Pumping Stations - Equipment Inspection	116,000		40,700			75 200	Waterworks Reserve
21149 Storm and Sanitary Sewer CCTV Inspection	652,800		215,100			,	Waterworks Reserve
21150 Stormwater Sewer Pipes Emergency Repairs						437,700	waterworks Reserve
21151 Streetlights - Miscellaneous Requests	56,100	101 900	56,100				
21151 Structures Program-Full-time Staff	101,800	101,800	140 100				
21153 Toogood Pond Dam - Rehabilitation Works	148,100		148,100				
e e e e e e e e e e e e e e e e e e e	437,400		437,400				
21154 Toogood Pond Dam - Structural Inspection TOTAL Environmental Services - Infrastructure	9,800	101,800	9,800 1,231,500			513,000	=
I O I AL, Environmental Services - Intrastructure	1,846,300	101,800	1,231,500	-	-	513,000	
TO THE BITTO MEAN BUTTON							
Environmental Services - Stormwater							
Environmental Services - Stormwater 21155 Don Mills Channel - Flood Proofing Site Investigation	124,900						Stormwater Fee
Environmental Services - Stormwater 21155 Don Mills Channel - Flood Proofing Site Investigation 21156 Don Mills Channel Flood Control Program -Pond Design/CA	1,160,000						Stormwater Fee SW Fee \$696k, DMFA Grant \$464k
Environmental Services - Stormwater 21155 Don Mills Channel - Flood Proofing Site Investigation 21156 Don Mills Channel Flood Control Program -Pond Design/CA 21157 Erosion Restoration Program	1,160,000 898,800		314,500	584,300		1,160,000	SW Fee \$696k, DMFA Grant \$464k
Environmental Services - Stormwater 21155 Don Mills Channel - Flood Proofing Site Investigation 21156 Don Mills Channel Flood Control Program -Pond Design/CA	1,160,000		314,500	584,300		1,160,000	

# Project Description		Total	Tax	Life Cycle	DC - Reserve	DC - Developer	Other	Description of Other Funding
21160 SWM Pond Cleaning Design & CA	A - ID#47 & #119	152,600					152,600	Gas Tax
21161 SWM Ponds - Condition Inspection		26,500		26,500			102,000	Sub 14.11
21162 Water Quality Improvements		41,100		41,100				
21163 Water Quality Monitoring		28,100		28,100				
21164 West Thornhill Flood Control Impl	ementation - Ph 3B Cons.	4,029,600		20,100			4.029.600	Stormwater reserve
21165 West Thornhill Flood Control Impl	ementation - Ph 4A Cons	15,655,900						\$2M Gas tax;\$13.7M SW reserve
	Environmental Services - Stormwater	22,596,800	-	669,700	584,300	-	21,342,800	=
Environmental Services - Waste								
21166 Incremental Growth Related Waste	Management Vehicles	102,000			102,000			
								=
10	OTAL Environmental Services - Waste	102,000	-	-	102,000	-	-	
Environmental Services - Waterworks								
21167 Cathodic Protection of Ductile Iron	Watermains	493,100					493,100	Waterworks Reserve
21168 CI Watermain Rehabilitation / CII	PP Lining - Construction & CA	6,623,300					6,623,300	Waterworks Reserve
21169 CI Watermain Replacement - Desig	gn	447,700					447,700	Waterworks Reserve
21170 CI Watermain Replacement-West	Γhornhill Ph 3B	4,036,300					4,036,300	Waterworks Reserve
21171 Curb Box Inspection and Replacen	nent Program	714,900					714,900	Waterworks Reserve
21172 Royal Orchard Sanitary Upgrades (3,471,000				3,471,000	·	
21173 Sanitary Sewers - Rehabilitation	`	1,405,000				, ,	1,405,000	Waterworks Reserve
21174 Wastewater Flow Monitoring		122,200						Waterworks Reserve
21175 Water Meters - Replacement Progra	am	1,013,200					1.013.200	Waterworks Reserve
21176 Watermain Leak Detection Program		37,500					,,	Waterworks Reserve
	Environmental Services - Waterworks	18,364,200	-	-	-	3,471,000	14,893,200	
	TOTAL Community & Fire Services	62,496,400	300,220	12,087,600	1,631,770	3,471,000	45,005,810	_
Corporate Wide								
21177 Corporate Capital Contingency		1,362,500	5,200	30,400	1,206,461		120.430	Various Other Internal; Note 7
211// Corporate Capital Contingency	TOTAL C							= various Other Internat, Note /
	TOTAL Corporate Wide	1,362,500	5,200	30,400	1,206,461	-	120,439	
:	TOTAL Projects Under Consideration	91,495,100	1,626,316	16,502,950	22,757,895	3,471,000	47,136,939	- =
e-Approved Projects								
velopment Services								
Theatre								
21004 Theatre Fire Alarm 2 Stage Conver	rsion	25,400		25,400				
21004 Theatte The Marin 2 Stage Conver	TOTAL Theatre	25,400		25,400	-		-	=
Design								
21019 Berczy Beckett Park (Cherna Ave.)	- Design & Construction	59,800			53,820		5,980	Parks Cash-in-Lieu; Note 1
21022 Green Lane Park - Design and Con		48,000			43,200		4,800	,
e		*						· ·
21023 Yonge and Grandview Park - Design	gn and Construction	56,500			50,850		5,650	Parks Cash-in-Lieu; Note 3

# Project Description	_		_			DC -		Description of Other Funding
		Total	Tax	Life Cycle	DC - Reserve	Developer	Other	
	TOTAL Design	164,300		-	147,870		16,430	
r								
Engineering 21029 Markham Centre Trail Phase 1B Construc	tion	816,000			530,400		285,600	Section 37
2102) Warkham Centre Tran Flase 1D Constitue	TOTAL Engineering	816,000			530,400		285,600	section 37
	101112 211111111	010,000			220,100		200,000	
	TOTAL Development Services	1,005,700	-	25,400	678,270		302,030	•
orporate Services								
4								
Asset Management 21049 Civic Centre Vestibule Repairs and/or Re	placements	290,700		290,700				
21043 Theatre-HVAC Replacement	placements	2,000,000		91,200			1,908,800	Gas Tax
1	TOTAL Asset Management	2,290,700		381,900	-		1,908,800	•
	TOTAL Corporate Services	2,290,700		381,900	-		1,908,800	-
ommunity & Fire Services								
Fire & Emergency Services								
21071 SCBA Decontamination Machine		63,300	63,300					
	TOTAL Recreation Services	63,300	63,300	-			-	•
Operations - Roads		2 157 000		100.000			2.057.000	C T N-4- 4
21101 Asphalt Resurfacing 21113 Parking Lots- Rehabilitation		3,157,900 678,900		100,000			3,057,900 678,900	Gas Tax; Note 4 Gas Tax; Note 5
21113 Taiking Lois-Renaumtation	TOTAL Operations - Roads	3,836,800		100,000			3,736,800	Gas Tax, Note 3
	1011111 Operations Tronds	2,020,000		100,000			2,.20,000	
Operations - Parks								
21119 Block Pruning Initiative - Year 2 of 3		1,017,600	1,017,600					:
	TOTAL Operations - Parks	1,017,600	1,017,600	-				
Operations - Fleet								
21140 Corporate Fleet Replacement - Non-Fire		285,900		285,900				Note 6
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	TOTAL Operations - Fleet	285,900		285,900				:
								-
<u>TOT</u>	AL Community & Fire Services	5,203,600	1,080,900	385,900	-	-	3,736,800	-
orporate Wide								
Corporate Wide								
21177 Corporate Capital Contingency		194,600		12,200			182,400	Gas Tax; Note 7
	TOTAL Corporate Wide	194,600	-	12,200	-		182,400	·

# Project Description		Total	Tax	Life Cycle	DC - Reserve	DC - Developer	Other	Description of Other Funding
	TOTAL Corporate Wide	194,600	-	12,200	-	-	182,400	-
	TOTAL Pre-Approved	8,694,600	1,080,900	805,400	678,270		6,130,030	-
	AL Projects Under Consideration	100,189,700	2,707,216	17,308,350	23,436,165	3,471,000	53,266,969	= -

Notes:

- 1) The overall project budget is \$465,200. The pre-approval request of \$59,800 is for consulting work only.
- 2) The overall project budget is \$549,300. The pre-approval request of \$48,000 is for consulting work only.
- 3) The overall project budget is \$637,900. The pre-approval request of \$56,500 is for consulting work only.
- 4) The overall project budget is \$6,815,800. The pre-approval request of \$3,157,900 is to commence procurement of contracts earlier to potentially attain better pricing. Funding split of Life Cycle vs. Gas Tax funding has been updated since Council approval of the Capital Pre-Approval Report from \$224,340; \$2,933,560 to \$100,000; \$3,057,900
- 5) Funding source has been updated since Council approval of the Capital Pre-Approval Report from fully Life Cycle funded to fully Gas Tax funded
- 6) The overall project budget is \$1,620,700. The pre-approval request of \$285,900 is to commence procurement of articulating loader earlier to potentially attain better pricing.
- 7) The overall project budget is \$1,557,100. The pre-approval request of \$194,600 represents the contingency amounts required for all project pre-approval requests.

10/14/2020 Page 8 of 8



V ARKHAM		ECTFUND	~			Number:	21	.001
Project Name: Calkana I	N-1-12 - A4 N#4-	Dl Tl	4-4° Db-	2 . 6 5	Projec	t Cost:	\$204	,700
Project Name: Culture I	ublic Art Maste	er Pian Impieme	entation Pha	ise 2 of 5		New A	Asset/Ex ₁	pansion
Commission: Developme	ent Services			Ī	Jseful Life	-		proval:
Department: Culture				Category:		. 0	11011p	pro van
Project Mgr: Niamh O'L	aoghaire			•				
Ward(s): CW ✓ 1	2 🗆 3 🗆 4 🗆			ost Validation:				
5 🗆	6 7 8		Requirem	ent Validation:	Other(spe	echy in Noi	ies)	
ETAILED DESCRIPTION	ON (SCOPE OF P	ROJECT):						
ith Council's approval of all be a recurring expense the Public Art Collection a Pan Am Centre project.	for 5-years to meet and work towards	the objectives of the	ne Master Pla	n, funded by re	serves. In 2	2021 it will	fund ma	intainance
UILDING MARKHAM	'S FUTURE TOG	ETHER: Engag	ged, Diverse &	Thriving City				
ROJECT COSTS (\$)	2021	Future Phases	NOTES	1 11 4 5		1 D 11' A		
Cost/Quote:	201,200	732,000		anded by the Re \$2.35M). Coll.I				
Internal Charges:	0	0	Centre \$7,	200 Projects:	2 Metrolin	x underpas	ses at	
External Consulting:	0	0		Denison to imp				
Sub Total:	201,200	732,000	site \$100,0	\$70,000). Prep	arations 10	r major ms	tanation	at Pall Al
HST Impact:	3,541	12,883						
Total Project Cost:	204,700	744,900						
=								
-								
URCE(S) OF FUNDING	G (\$)		Com	ponents				Entura
	G (\$) Budget		Com	ponents		TO	OTAL	
nding Type		0	Com 0	ponents 0		0	OTAL 0	Phases
nding Type serve Fund	Budget	0		-				744,90
nding Type serve Fund FOTAL FUNDING	204,700 204,700	rsonnel Non P	0	-	Expendi		0	744,90
nding Type serve Fund FOTAL FUNDING PERATING BUDGET I	Budget 204,700 204,700 Pe	rsonnel Non P	0 ersonnel	0 Revenues	Expendi	0tures/(Rev	0	744,90
nding Type serve Fund FOTAL FUNDING PERATING BUDGET I CA/LIFE CYCLE DETA DCA	Budget 204,700 204,700 Pe	rsonnel Non P \$0	0 ersonnel \$0	0 Revenues \$0 Amount in		0tures/(Rev	0	744,90
nding Type serve Fund FOTAL FUNDING PERATING BUDGET I	Budget 204,700 204,700 Pe	rsonnel Non P \$0	0 ersonnel	0 Revenues \$0 Amount in	<u>Li</u>	0	0 0 enues)	744,90
serve Fund FOTAL FUNDING PERATING BUDGET I CA/LIFE CYCLE DETA DCA	Budget 204,700 204,700 Pe	rsonnel Non P \$0	0 ersonnel \$0	0 Revenues \$0 Amount in	<u>Li</u> — Am	0tures/(Rev \$0	o o enues)	744,90
	Budget 204,700 204,700 Pe	rsonnel Non P \$0	0 ersonnel \$0	0 Revenues \$0 Amount in	Li — Am Am	tures/(Rev \$0 fe Cycle ount in Stu	o o enues) dy:	Future Phases 744,90 744,90

Project: Markham Public Art Implementation Plan

Total Project Cost Table

		Past	Projects	Current Project		Future Projects		
	Project Number(s)		/Forecast \$)	(Budget \$)		recast \$)		Total (\$)
Project Component 1	19001 and 20002	\$	197,262	(Duaget 4)	(\$	197,262
Project Component 2			,	\$ 204,700			\$	204,700
Project Component 3					\$	750,000	\$	750,000
Total (\$)		\$	197,262	\$ 204,700	\$	750,000	\$	1,151,962
Description of Project	Implement the Mark	ham Publi	c Art Master P	lan				
	In November 2019 th	e Council a	approved the N	/Jarkham Public	Art M	aster Plan	and	in February
	2020 the Public Art In	nplementa	tion. In 2020 \$	70,000 remaine	d in p	roject 1900)1 a	nd
	\$249,300 was receive	ed to begin	implementati	on for a combine	ed tot	al of \$319,	300	. Due to the
	COVID-19 situation 3	activities v	were delayed (Varley temporar	y inst	allation, Ur	nion	ville
	streetscape and Pan A	Am centre	preparation).	The Program wa	s able	to implem	ent	the
	community outreach	and engag	ement portion	is. Expenses in 2	020: F	Public Art C	ura	tor Salary
	(\$58,400). Online Pub	olic Art Ser	ninars and DeL	imit, speculative	Com	petition (\$	31,3	312).
	Collections maintena	nce and re	pair, plicy revis	sion (\$35,150). N	∕letrol	linx underp	ass	digital
	project consultation (\$10,000).	Collections Ma	intenance and a	cquis	ition (indo	or) \$	\$25,000;
What was completed in the past?	Education and outrea	ch (\$15,00	00); Public art s	ummit (\$20,000)). Cor	mbined tot	al: S	\$197,262.
Include timeline of works done.	Remaining balance of	\$122,038	(\$319,300 - \$1	197,262) will be	returr	ned to sour	ce.	
	In 2021: Implement p	rojects de	layed from 202	20 (Varley Temp	orary	Installation	ı, Uı	nionville
	Streetscape, Pan Am	Centre pre	paration) (\$12	2,000). Pan Am	Centr	e commiss	ion	competition
	(\$15,000). Metrolinx	underpass	digital art plat	form technical d	lesign	(\$25,000)	Mai	rkham
	Centre projects with I	Parks and	Opens Space D	evelopment (\$4	5,000). Combine	d to	otal
Current project objective	(\$204,700).							
Description of future work required.	2022-2024: Ongoing i	implement	ation of the M	aster Plan as ou	tlined	and as op	oort	unities
Include estimated timing.	arise, \$250,000 for ea	ach of 3 ye	ars.					



-/	2021 DD C 3		, , , , , , , , , , , , , , , , , , ,	NO DES		D14		Pag	e 28 of 3
V ARKHAM	2021 PROJ	ECTFU	J NDI I	NG REQ	UEST FO	KM Nu	mber:	210	002
Project Name: Museum -	Various Buildia	nge				Project Co	ost:	\$86,3	00
		ngs					Repair/F	Replace	
Commission: Developmen	nt Services				Į	Jseful Life:	0 P	re App	roval:
Department: Museum					Category:			rr	
Project Mgr: Vicky Chan	/Cathy Molloy			C	ost Validation:		roviow		
Ward(s): CW ✓ 1	2 3 4 4				ent Validation:				
5 🗆	6 7 8			requireme	nit vandation.	v isuai ilispec			
TAILED DESCRIPTIO	N (SCOPE OF P	ROJECT):	;						
lding maintenance for sel	ected buildings on	the museur	n site in	order to keep	them in a state	e of good repa	iir.		
JILDING MARKHAM'S	S FUTURE TOG	ETHER:	Engage	d, Diverse & T	Thriving City				
				NOTES					
OJECT COSTS (\$)	<u>2021</u>	<u>Future P</u>	<u>hases</u>	NOTES \$5,000 - H	oover House (v	windows)			
Cost/Quote:	75,000		0	\$20,000 - 1	Pest control for	entire site			
Internal Charges:	10,000		0	\$60,000 - 1	Mount Joy Sch	ool (fire alarm	panel)		
External Consulting:	0		0						
Sub Total:	85,000		0						
HST Impact:	1,320	-	0						
Total Project Cost:	86,300		0						
URCE(S) OF FUNDING	; (\$)			Com	ponents				
nding Type	<u>Budget</u>	Hoove	er House	Pest Contro	ol <u>Fire Al</u>	<u>arm</u>	HST TOT	<u>ral</u>	Future Phases
rating Funded Life Cycle	86,300	5,0	000	20,000	60,000	1,300	86,3	300	(
OTAL FUNDING	86,300						86,	300	(
	Per	rsonnel	Non Per	rsonnel	Revenues	Expenditure	es/(Reven	nues)	
PERATING BUDGET IN	MPACT 100	\$0	\$(\$0	-	60	/	
A/LIFE CYCLE DETA	II.S	ΨΟ			ΨΟ	<u> </u>	<i>y</i> 0		
DCA					Amount in	Life C	'vele		
Name			Yea	ar Amoun			-		
					•	— Amoun	it in Study	/:	144,800

	\$0	\$0	\$0	\$0	
A/LIFE CYCLE DETAILS					
<u>DCA</u>			Amount in	<u>Life Cycle</u>	
Name		Year Am	ount Study	- Amount in Study:	144,80
				Amount Incl HST	86,30
				Year in the study	20



2021 PROJECT FUNDING REQUEST FORM

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Number: 21003

van				Project	Cost: \$	36,700
Project Name: Museum N	Maintenance				Repair/Rep	
Commission: Developmen	nt Services			Useful Life:		Approval:
Department: Museum			Catagora	: Minor	0 FIE	Approvai. —
Project Mgr: Cathy Mollo	оу					
Ward(s): $CW \boxed{\bullet} 1 \square$	2 🗆 3 🗆 4 🗆		Cost Validation Requirement Validation			
5 🗆	6 7 8		Requirement vandation	· Visuai ilisp	cction	
DETAILED DESCRIPTIO		· · · · · · · · · · · · · · · · · · ·				
Building maintenance for seld	ected buildings to	keep them in a good	d state of repair.			
BUILDING MARKHAM'S	S FUTURE TOG	ETHER: Engage	d, Diverse & Thriving City			
PROJECT COSTS (\$)	2021	Future Phases	NOTES	427.0		
Cost/Quote:	36,100	0	Pavilion roll-wall replace \$5,000, Sump-pump rep			
Internal Charges:	0	0	replacment program \$2			
External Consulting:	0	0	\$600.			
Sub Total:	36,100	0				
HST Impact:	635	0				
Total Project Cost:	36,700	0				
SOURCE(S) OF FUNDING	(\$)		Components			- E4
Funding Type	<u>Budget</u>	Mount Joy	Pavilion Site-	Radio Site	-Fire Plan TOTA	Future L Phases
Operating Funded Life Cycle	36,700	3,650	25,500 2,500	5,05	0 36,700) (
TOTAL FUNDING	36,700				36,70	0 0
	Pe Pe	rsonnel Non Pe	rsonnel Revenues	Expenditu	res/(Revenue	es)
OPERATING BUDGET IN	MPACT	\$0 \$6	0 \$0	-	\$0	
DCA/LIFE CYCLE DETA	<u>ILS</u>					
<u>DCA</u>		•	Amount i	n <u>Life</u>	Cycle	
Name		Yea	ar Amount Study	— Amo	unt in Study:	87,700
				Amou	. I LICT	36,700
				7 111100	ant Incl HST	50,700
					in the study	2021



-/	2021 DDA	IFOT FIND	INC DECLIERT EA	D1/		
MARKHAM	2021 PKO	JECI FUNDI	ING REQUEST FO	K <i>IVI</i> Ni	ımber:	21005
				Project C	Cost:	\$43,800
Project Name: Theatre	Stage & Buildin	g Maintenance			- ·	6 1
Commission: Develop	mont Carvigos				Repair	/Replace
	Helit Services		U	Jseful Life:	5	Pre Approval:
Department: Theatre			Category:	Minor		
Project Mgr: Andrew	Rosenfarb					
Ward(s): CW ✓ 1	□ 2□ 3□ 4□		Cost Validation:			
Ε	□ 6□ 7□ 8□		Requirement Validation:	Condition a	ssessmen	ıt
ETAILED DESCRIPT	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·	lyzer replacement, box office	a achinat ran	laaamant	1 how office tieket
		•	ment of our motorized projec	-		, i don office ticket
UILDING MARKHAN	M'S FUTURE TOO	GETHER: Except	tional Services by Exceptional P	People		
ROJECT COSTS (\$)	<u>2021</u>	Future Phases	NOTES Amount requested is cons	ictant with li	fo evelo	Usoful life veries
Cost/Quote:	43,000	0	depending on item 5-15 ye		•	
Internal Charges:	0	0	(\$4,000), Audio analyzer			
External Consulting:	0	0	measurement of decibel le			
External Consulting.			approved safe volume ran	_		
Sub Total:	43,000	0	frequencies causing micro	phone interf	erence qu	aickly. (\$10,000)

	43,800	0
Total Project Cost:	42.000	
HST Impact:	757	0
Sub Total:	43,000	0
External Consulting:	0	0

Replacement of 1 box office ticket printer (\$2,000), box office cabinet replacement (\$5,000), greenroom ceiling drywall repair and paint (\$4,000). motorized projection screen replacement (\$18,000)

SOURCE(S) OF FUNDING (\$)		Components						
Funding Type	Budget					TOTAL	<u>Future</u> <u>Phases</u>	
Operating Funded Life Cycle	43,800	0	0	0	0	0	0	
TOTAL FUNDING	43,800				=	0		

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)	
OA DAMATAN (O DOD GET MYNT MOT	\$0	\$0	\$0	\$0	

DCA/LIFE CYCLE DETAILS DCA Amount in Life Cycle Year **Amount** Name Study Amount in Study: 2,739,100 Amount Incl HST 43,800 2021 Year in the study DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:



WARKHAM 2021 PROJECT FUNDING REQUEST FORM

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<u>Viarkh</u>	AM			01,1211,	<u>-</u>	010110	Nu	ımber:	21	1007	
Drainat Nama	C 11 T	11 34 4					Project C	Cost:	\$29,	,200	
Project Name: (Name: Gallery Lobby Maintenance						Repair/Replace				
Commission:	Developme	ent Services				Ī	Jseful Life:	20		proval:	
Department:	Arts Centre	es				Category:		20	пслр	provar. —	
Project Mgr:	Niamh O'L	aoghaire			Co						
Ward(s):	cw □ 1□	2 □ 3 ✔ 4 □		ī		st Validation: nt Validation:					
	5 🗆	6 7 8		1	Kequireillei	it vanuation.	Condition as	ssessinei	11		
ETAILED DE	SCRIPTIO	ON (SCOPE OF P	ROJECT)	:							
anitation, particu ound system to c	ularly in a pereate a cle	Art Gallery Lobby, a post COVID-19 envan, multi-functional	ironment.	Upgrade co active to the	mmunication communit	ons via a wall y to renters ar	mounted flat nd program re	screen a	nd an in		
BUILDING MA	AKKHAM	'S FUTURE TOG	ETHER:	Ехсериона	ii Services u	y Exceptional l	reopie				
PROJECT COS	STS (\$)	2021	Future I	nacec	NOTES						
	t/Quote:	28,850				ter, the unever y mopping, cr					
Internal (_	0				inting the wa					
External Cor	-	0		0 h		natic effect, cr					
	b Total:	28,850			to maintain lobby. Costs: Removal and disposal of floor tiles \$5,000; Supply and install vinyl plank flooring \$7,400; supply an install waterproof, industrial grade baseboard \$1,750; Paint all						
	Impact:	305		i							
Total Projec		29,200		f	foyer, lobby and corridor brick walls \$3,200; Flat screen TV and						
OURCE(S) OF	FUNDIN	<u>G (\$)</u>			Comp	onents					
unding Type		Budget						<u>T(</u>	<u>OTAL</u>	<u>Future</u> <u>Phases</u>	
perating Funded I	Life Cycle	29,200		0	0	0	0)	0	0	
TOTAL FUNI	DING	29,200							0	0	
		Per	rsonnel	Non Perso	nnel k	Revenues	Expenditur	res/(Rev	enues)		
OPERATING B	BUDGET 1	MPACT 10.	\$0	\$0		\$0	_	\$0	ciides)		
CA/LIFE CYC	CLE DETA	AILS	ΨΟ	40		ΨΟ		Ψ0			
<u>DCA</u>						Amount in	Life	Cycle			
Name				Year	Amount			nt in Stu	dv:	130,000	
								nt Incl H	•		
										29,400	
DCA 1/	Tic. C. 1	. D1.t 10.4	1		1/		Year	in the stu	ıdy	2021	
DCA and/or	Life Cycle	e: Explain if there is	a change 1	n the year a	nd/or cost:						
1											



2021 PROJECT FUNDING REQUEST FORM

Page 36 of **23**Number: 21008

Project Name C. B. M					Project Cost:	\$5,3	300		
Project Name: Gallery M	•	and Cooling Syste	em		Repa	air/Replace	e		
Commission: Development Services				Ţ	Jseful Life: 20	Pre Ap	proval:		
Department: Arts Centres				Category:	Minor				
Project Mgr: Niamh O'La		Cost Validation: Third party estimate							
Ward(s): CW 1				Condition assessm					
	6 7 8 8		-						
Replace current heating/cool create a safe and healthy cust renters and office tenants. BUILDING MARKHAM'S	ing system installe comer-friendly env	d in 2005 which re ironment that will c	ontinue to att		egistrations, kinder				
PROJECT COSTS (\$)	2021	Future Phases	NOTES						
Cost/Quote:	5,200	()			ing/cooling unit (Lu v, more efficient mo				
Internal Charges:	0	0			ooling unit is neari				
External Consulting:	0	0			or and requires regu				
Sub Total:	5,200	0			laints from renters ag. The Varley reque				
HST Impact:	92		and cooling in the building. The Varley requests \$5,600 to purch and install a new system to create a safe, healthy and customer-						
Total Project Cost:	5,300	0	friendly environment that will continue to attract art class						
SOURCE(S) OF FUNDING	<u>; (\$)</u>		Comp	onents					
Funding Type	<u>Budget</u>	<u>5,600</u>			, -	<u> FOTAL</u>	<u>Future</u> <u>Phases</u>		
Operating Funded Life Cycle	5,300	0	0	0	0	0	0		
TOTAL FUNDING	5,300					0	0		
OPERATING BUDGET IN		Personnel Revenues Expenditures/(Revenues \$0 \$0 \$0			evenues)				
DCA/LIFE CYCLE DETA	<u>ILS</u>								
<u>DCA</u>		Yes	an Amaunt	Amount in	<u>Life Cycle</u>				
Name		1 63	ar Amount	Study	— Amount in S	tudy:	5,600		
					Amount Incl	HST	5,300		
					Year in the	study	2021		
DCA and/or Life Cycle:	Explain if there is	a change in the yea	ar and/or cost:						



Number:	21009
1 tuilibel .	-1007

Project Name: Consulta				I	Project Cost:	\$72 ,	000
	ant Studies				Stud	lies/Pilot P	
Commission: Developm	ent Services			Haaf			oroval:
Department: Planning					ıl Life: 0	Pre Ap	provai: —
Project Mgr: Biju Karu	manchery			ategory: An			
Ward(s): CW ✓ 1	□ 2□ 3□ 4□			lidation: Red			
5	□ 6□ 7□ 8□		Requirement Val	lidation: Oth	er(specify in N	lotes)	
DETAILED DESCRIPTI	ON (SCOPE OF P	ROJECT):					
This recurring account allo			ties and unplanned	d needs that a	rise throughou	t the year v	vhere
pecialized consultant servi	ces are needed.						
BUILDING MARKHAM	I'S FUTURE TOG	ETHER: Engaged	, Diverse & Thrivin	g City			
PROJECT COSTS (\$)	2021	Future Phases	NOTES				
Cost/Quote:	70,755	0	This account is in needs and strateg				
_			spend (2017-201		ies. The projec	teu 5-year	average
Internal Charges: External Consulting:	0	0					
Sub Total:	70,755	0					
HST Impact: Total Project Cost:	1,245	0					
Total Project Cost.	72,000						
OURCE(S) OF FUNDIN	[G (\$)		Componen	ts			Future
unding Type	<u>Budget</u>					<u> FOTAL</u>	Phases
	64,800	0	0	0	0	0	0
CA	04,800	U					
CA revelopment Fees	7,200	0	0	0	0	0	0
evelopment Fees	7,200		0	0	0		-
			0	0	0	0	0 0
TOTAL FUNDING	7,200 72,000				0 penditures/(Ro	0	-
evelopment Fees	7,200 72,000	0		ues Ex	_	0	-
TOTAL FUNDING	7,200 72,000 Pe	orsonnel Non Pers	sonnel Reven	ues Ex	penditures/(R	0	-
TOTAL FUNDING DPERATING BUDGET	7,200 72,000 Pe	orsonnel Non Pers	sonnel Reven	ues Ex	penditures/(R	0	-
TOTAL FUNDING DPERATING BUDGET DCA/LIFE CYCLE DET DCA Name	7,200 72,000 Pe IMPACT AILS	rsonnel Non Pers	sonnel Reven \$0 Am	nues Ex	penditures/(Ro \$0 <u>Life Cycle</u>	evenues)	-
TOTAL FUNDING DPERATING BUDGET DCA/LIFE CYCLE DET DCA Name General Government - V	7,200 72,000 Pe IMPACT AILS	rsonnel Non Pers	Sonnel Reven \$0	nues Expount in Study 1,593,063	penditures/(Rose) \$0 Life Cycle Amount in S	evenues)	-
TOTAL FUNDING DPERATING BUDGET DCA/LIFE CYCLE DET DCA Name	7,200 72,000 Pe IMPACT AILS	rsonnel Non Pers	sonnel Reven \$0 Am	nues Ex	penditures/(R-\$0 Life Cycle Amount in S Amount Incl	evenues)	-
DPERATING BUDGET DCA/LIFE CYCLE DET DCA Name General Government - V TOTAL FUNDING	7,200 72,000 Pe IMPACT AILS arious Studies	7 year 202	Sonnel Reven \$0	nues Expount in Study 1,593,063	penditures/(Rose) \$0 Life Cycle Amount in S	evenues)	-
DEA See See See See See See See See See Se	7,200 72,000 Pe IMPACT AILS arious Studies	rsonnel Non Pers \$0 \$0 Year 202	Sonnel Reven \$0	nues Expount in Study 1,593,063	penditures/(R-\$0 Life Cycle Amount in S Amount Incl	evenues)	-
DPERATING BUDGET DCA/LIFE CYCLE DET DCA Name General Government - V TOTAL FUNDING	7,200 72,000 Pe IMPACT AILS arious Studies	rsonnel Non Pers \$0 \$0 Year 202	Sonnel Reven \$0	nues Expount in Study 1,593,063	penditures/(R-\$0 Life Cycle Amount in S Amount Incl	evenues)	-
DEA Seneral Government - V TOTAL FUNDING DEA STATE OF THE SENERAL SEN	7,200 72,000 Pe IMPACT AILS arious Studies	rsonnel Non Pers \$0 \$0 Year 202	Sonnel Reven \$0	nues Expount in Study 1,593,063	penditures/(R-\$0 Life Cycle Amount in S Amount Incl	evenues)	-
DEA Seneral Government - V TOTAL FUNDING DEA STATE OF THE SENERAL SEN	7,200 72,000 Pe IMPACT AILS arious Studies	rsonnel Non Pers \$0 \$0 Year 202	Sonnel Reven \$0	nues Expount in Study 1,593,063	penditures/(R-\$0 Life Cycle Amount in S Amount Incl	evenues)	-
DEA See See See See See See See See See Se	7,200 72,000 Pe IMPACT AILS arious Studies	rsonnel Non Pers \$0 \$0 Year 202	Sonnel Reven \$0	nues Expount in Study 1,593,063	penditures/(R-\$0 Life Cycle Amount in S Amount Incl	evenues)	-



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Number: 21010

Department: Planning Project Mgr: Regan Hutcheson Ward(s): CW ✓ 1 □ 2 □ 3 □ 4 □ Cost Validation: Requirement Validation: S□ General Requirement Validation: Project Mgr: Requirement Validation: Other(specify in Notes) DETAILED DESCRIPTION (SCOPE OF PROJECT): Grant assistance (50/50) to a maximum of \$5,000/property for restoration work on designated properties. Program was ext Council for three years (2020-2022) BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community PROJECT COSTS (\$) 2021 Future Phases Cost/Quote: 30,000 0 0 Sab Total: 30,000 0 0 Sub Total: 30,000 Sub Tota	,000	tost: \$30,00	Project Cost:						
Department Planning	Programs	Studies/Pilot Pro	Stud		gram -202	ant Prog	perty Gra	Heritage Prop	Project Name: Designated I
Department: Planning Project Mgr: Regan Hutcheson Ward(s): CW ☑ 1 □ 2 □ 3 □ 4 □	proval:			ĪI				Services	Commission: Development S
Ward(s):	provai. —	r ie Appi							Department: Planning
Requirement Validation: Other(specify in Notes) Other(specify in Notes)				_				son	Project Mgr: Regan Hutches
DETAILED DESCRIPTION (SCOPE OF PROJECT): Grant assistance (50/50) to a maximum of \$5,000/property for restoration work on designated properties. Program was ext Council for three years (2020-2022) BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community PROJECT COSTS (S) 2021 Future Phases Cost/Quote: 30,000 0 0 S30,000 per year. Project and additional three years (2010-20 S30,000 per year. It was renewed for another three years (2016) and for an additional three years (2017-2019 and all at \$30,000 per year. Project classified as major during time line granted to property owners. SOURCE(S) OF FUNDING (\$) Components Funding Type Budget TOTAL Heritage Reserve 30,000 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0				=				3 □ 4 □	Ward(s): $CW \boxed{\bullet} 1 \square 2$
Grant assistance (50/50) to a maximum of \$5,000/property for restoration work on designated properties. Program was ext Council for three years (2020-2022) BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community PROJECT COSTS (\$)		y in Notes)	Other(specify in N	ent Validation:	Requiren			7 8	5□ 6
PROJECT COSTS (\$) 2021 Future Phases Cost/Quote: 30,000 0 0 0 30,000 per year. It was renewed for another three ye so (2016) and for an additional three years (2017-2019 an all at \$30,000 per year. Project classified as major dutimeline granted to property owners. Sub Total: 30,000 0 0 all at \$30,000 per year. Project classified as major dutimeline granted to property owners. SOURCE(S) OF FUNDING (\$) Components Funding Type Budget TOTAL Heritage Reserve 30,000 0 0 0 0 0 0 0 0 0 TOTAL FUNDING 30,000 Personnel Revenues Expenditures/(Revenues) SOURCE(S) OF FUNDING SOURCE(S) SOURCE(S) OF SOURC	ended by	rogram was extend	properties. Progran	on designated p	oration wor			aximum of \$5,0	rant assistance (50/50) to a ma
Program was initiated in 2010 for four years (2010-20 \$30,000 per year. It was renewed for another three years (2017-2019 and all at \$30,000 per year. It was renewed for another three years (2017-2019 and all at \$30,000 per year. Project classified as major due timeline granted to property owners. Sub Total: 30,000				ommunity	Sustainable	Safe &	ETHER:	FUTURE TOG	UILDING MARKHAM'S F
Cost/Quote: 30,000 0 \$30,000 per year. It was renewed for another three ye 2016) and for an additional three years (2017-2019 an all at \$30,000 per year. Project classified as major durineline granted to property owners. Sub Total: 30,000 0 0	13) at	vears (2010-2013)	010 for four years	vas initiated in 2		<u>Phases</u>	<u>Future</u>	2021	ROJECT COSTS (\$)
External Consulting: Sub Total: 30,000 0 HST Impact: 0 0 Total Project Cost: 30,000 0 Eminification 10 10 Total Project Cost: 30,000 0 Total Project Cost: 30,000 0 Eminification 10 10 Eminification 10	ars (2014-	nother three years	enewed for another	er year. It was r	\$30,000	0		30,000	Cost/Quote:
SUB Total: 30,000 HST Impact: 0 Total Project Cost: 30,000 Bound Total Project Cost: 30,000 Funding Type Budget Heritage Reserve 30,000 OPERATING BUDGET IMPACT SO SO SO DCA/LIFE CYCLE DETAILS DCA Name Non Personnel Year Amount in Study Amount in Study Amount in Study Amount in Study Amount Incl HST Year in the study Timeline granted to property owners. TOTAL TOTAL Anount in Study: Amount in Study:						0		0	Internal Charges:
SOURCE(S) OF FUNDING (\$) O O O O O O O O O	to 2 year	ed as major due to				0		0	External Consulting:
HST Impact: 0 0 0 0			ly owners.	unica to propert		0		30,000	Sub Total:
Components Funding Type Budget TOTAL						0		 -	
Funding Type Budget						0		30,000	Total Project Cost:
Funding Type Budget TOTAL Heritage Reserve 30,000 0 0 0 0 0 TOTAL FUNDING 30,000				ponents	Coi			<u>(\$)</u>	OURCE(S) OF FUNDING (S
TOTAL FUNDING 30,000 Personnel Non Personnel Revenues \$\frac{1}{50}\$ \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	Future Phases]	-				Budget	unding Type
OPERATING BUDGET IMPACT \$0 \$0 \$0 \$0 \$0 DCA/LIFE CYCLE DETAILS DCA Name Year Amount in Study: Year in the study		0	0	0	0	0		30,000	eritage Reserve
SO \$0 \$0 \$0 DCA/LIFE CYCLE DETAILS DCA Name Year Amount in Study Amount in Study: Amount in Study: Amount Incl HST Year in the study								30,000	TOTAL FUNDING
\$0 \$0 \$0 \$0 DCA/LIFE CYCLE DETAILS DCA Name Year Amount Study Amount in Study: Amount Incl HST Year in the study		es/(Revenues)	Expenditures/(Re	Revenues	rsonnel	Non Pe	ersonnel	Pe Pe	
DCA Amount in Study Name Year Amount Study Amount in Study: Amount Incl HST Year in the study		\$0	\$0	\$0	0	\$	\$0	PACT	PERATING BUDGET IMP
Name Year Amount Study Amount in Study: Amount Incl HST Year in the study								<u>S</u>	
Amount in Study: Amount Incl HST Year in the study		<u>Cycle</u>	<u>Life Cycle</u>			T 7			
Year in the study		nt in Study:	– Amount in S	t Study	ar Amou	Yea			Name
Year in the study		nt Incl HST	Amount Incl						
• —									
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:									
						1	1		DCA 1/ I 'C- C- 1 E
				::	ar and/or co	in the yea	s a change	xplain if there is	DCA and/or Life Cycle: Ex
				::	ar and/or co	in the yea	s a change	xplain if there is	DCA and/or Life Cycle: Ex
				:	ar and/or co	in the yea	s a change	xplain if there is	DCA and/or Life Cycle: Ex
				:	ar and/or co	in the yea	s a change	xplain if there is	DCA and/or Life Cycle: Ex
				:	ar and/or co	in the yea	s a change	xplain if there is	DCA and/or Life Cycle: Ex



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		_		Project Cost:	\$10 ,	,000
Façade Improve	ments/Sign Re	placement -	2021	Stud	dies/Pilot F	Programs
nt Services			Į	Jseful Life:	Pre Ap	proval:
			Category:	Major	1	1
		(
					Notes)	
6 7 8		requiren	ione varioueron.		10103)	
· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·					
S FUTURE TOG	ETHER: Safe	& Sustainable (Community			
2021	Future Phases	NOTES		- 2021 Ab	- h - ¢10 00	0 11 0
10,000	0					
0	0	up to two	years to comple	ete and provide gran	nt. 2021 p	roject to be
0	0			-	-	-
10,000	0	was ictui	ned to Ene Cyci	e as per the June 90	in Council	кероп.
0	0					
10,000	0					
G (\$)		Cor	nponents			T4
<u>Budget</u>					TOTAL	<u>Future</u> <u>Phases</u>
10,000	0	0	0	0	0	0
10,000				<u> </u>	0	0
MPACT Pe	rsonnel Non I	Personnel	Revenues	Expenditures/(R	devenues)	
MIACI	\$0	\$0	\$0	\$0		
AILS						
			Amount in	<u>Life Cycle</u>	<u> </u>	
	Y	ear Amou	nt Study	— Amount in S	Study:	
				Amount Inc	1 HST	
				Year in the		
				rear in the	study	
. Evaloin if there is	a ahanga in tha t	room and/am ac	at.			
: Explain if there is	a change in the y	ear and/or co	st:			
: Explain if there is	a change in the y	year and/or co	st:			
: Explain if there is	a change in the y	ear and/or co.	st:			
: Explain if there is	a change in the y	vear and/or co	st:		·	
: Explain if there is	a change in the y	/ear and/or co	st:		-	
	Pen	2	2	Category: Cost Validation: Requirement Validation: Revenues SEUGET SAMPACI SAM	Category: Major Cost Validation: Recent awards Cost Validation: Recent awards Cost Validation: Cost Validation: Other(specify in 1900) Cost Validation: Cost Validation: Other(specify in 1900) Cother(specify in 1900) Cother(s	Services Useful Life: Pre Apole Pr

21012

Number:



2021 PROJECT FUNDING REQUEST FORM

Project Name: Housing Strategy - Inclusionary Zoning

Commission: Development Services

Department: Planning
Project Mgr: Darryl Lyons

Ward(s): CW 2 1 2 3 4

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Approximately \$50,000 will be required to update the consultant's financial and market analysis necessary to implement inclusionary zoning. The need for the updated financial analysis stems from the community benefits charge (CBC) legislation which is yet to be finalized.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

PROJECT COSTS (\$)	<u>2021</u>	Future Phases
Cost/Quote:	0	0
Internal Charges:	0	0
External Consulting:	50,000	0
Sub Total:	50,000	0
HST Impact:	880	0
Total Project Cost:	50,900	0

NOTES

This project relates to project 19020 Housing Strategy with a budget of \$100,000, which has been substantially completed. The updated financial analysis is needed in order for the City to implement inclusionary zoning as per provincial regulation.

Requirement Validation: Other(specify in Notes)

SOURCE(S) OF FUNDING	(\$)	Components					E4
Funding Type	<u>Budget</u>					TOTAL	<u>Future</u> <u>Phases</u>
DCA	45,810	0	0	0	0	0	0
Development Fees	5,090	0	0	0	0	0	0
TOTAL FUNDING	50,900				=	0	

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)	
OI BINITING DODGET IVITATE	\$0	\$0	\$0	\$0	

DCA/LIFE CYCLE DETAILS DCA Life Cycle Amount in **Amount** Year Name Study Amount in Study: General Government - Various Studies 2021 45,810 1,593,063 Amount Incl HST TOTAL FUNDING 45.810 1,593,063 Year in the study DCA and/or Life Cycle: Explain if there is a change in the year and/or cost: Funds are included in the studies section of the DC Background Study.



21013 **Number: Project Cost:** \$508,800 Project Name: Langstaff Master Plan and Secondary Plan Review Studies/Pilot Programs Commission: Development Services Pre Approval: Useful Life: Department: Planning

Project Mgr: Dave Miller Cost Validation: Internal peer review CW □ 1 ✓ 2 □ 3 □ 4 □ Ward(s):

Requirement Validation: Other(specify in Notes)

DETAILED DESCRIPTION (SCOPE OF PROJECT):

To review and update the Master Plan, and the Secondary plan, including a review of Urban Design. This work will be done in consultation with Senior levels of Government adjoining Municipalities, external agencies, stakeholders such as landowners and the public.

BUILDING MARKHAM'S FUTURE TOGETHER:

Safe & Sustainable Community

PROJECT COSTS (\$)	<u>2021</u>	Future Phases
Cost/Quote:	0	0
Internal Charges:	0	0
External Consulting:	500,000	0
Sub Total:	500,000	0
HST Impact:	8,800	0
Total Project Cost:	508,800	0

NOTES External consultants to coordinate the updates, amendments, review

Category: Major

and approvals. Any future requirements will be determined following the update. Costs include retaining an external Project Manager.

SOURCE(S) OF FUNDING	<u>G (\$)</u>	<u>Components</u>					T 4
Funding Type	Budget					TOTAL	<u>Future</u> <u>Phases</u>
DCA	457,920	0	0	0	0	0	0
Development Fees	50,880	0	0	0	0	0	0
TOTAL FUNDING	508,800				=	0	0

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)	
OI BINITING DODGET IVITATE	\$0	\$0	\$0	\$0	

DCA/LIFE CYCLE DETAILS

<u>DCA</u>		A	mount in	<u>Life Cycle</u>	
Name	Year	Amount	Study	A managed in Charles	
General Government - Various Studies	2021	457,920	1,593,063	Amount in Study:	_
TOTAL FUNDING		457,920	1,593,063	Amount Incl HST	
				Year in the study	

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

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





Langstaff Gateway Master Plan & Secondary Plan Review 2021 Budget Request

The Approved Master Plan and Secondary Plan provides for:

- A compact, complete, integrated, sustainable, vibrant, well designed, transit oriented,
 high density urban centre
- Variety of housing options, employment, cultural / community facilities, shopping, & connections to higher order transit
- 3. Up to 32,000 residents (15,000 dwelling units) & 15,000 jobs, to be phased and linked to transit





47 hectares (116 acres)





The Mater Plan & Secondary Plan Should be reviewed prior to development beyond the first phases in the East & West Precints

The review and commenting process to support the first phase (1A) of development in both the West (Condor) and East (Kylemore) Precincts, under the in-force Secondary Plan, has presented some implementation challenges for the developers, City and related agencies. Such challenges include the site topography, relative to the construction of the planned street network including grade separations at the C.N.R. tracks which bisect the area, the integration of Pomona Creek into the community structure, and a changing market for residential and non-residential (e.g. office and retail) development.





The Master Plan & Secondary Plan should be reviewed before proceeding with development beyond Phase 1A

This includes a review of:

- 1. Development phasing and ultimate build-out
- 2. Community structure including: street and block network
- 3. Transportation priorities and parking supply
- 4. Yonge Street Subway extension station locations and direct connections
- 5. Grade-separated crossings of the C.N.R. tracks
- 6. Networked community infrastructure (including district energy & utilidor)
- 7. Parks and open space including Pomona Creek
- 8. Schools and other civic uses





Master Plan & Secondary Plan review cost is estimated at approx. \$500,000

The 2009 to 2011 Master Plan & Secondary Plan budget was approximately \$880,000 (not including HST)*

Based on staff's recent experiences with the costs of other Secondary Plan reviews, the anticipated Planning Department costs to review the Master Plan and Secondary Plan for the Langstaff Gateway area will be approximately \$500,000.

*This doesn't include the Transportation or Civil Engineering component. The Civil Eng, was contracted and paid for by the developers. (Likely why we didn't get complete information about the grading challenges wrt the grade separated crossings at the time.)



Number: 21014

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Duringt Names M. H. G. 4 G. 44 F. J.	Project Cost: \$161,700	
Project Name: Markham Centre Community Energy I Commission: Development Services	Studies/Pilot Programs	_
Department: Planning Project Mgr: Stephen Lue and Parvathi Nampoothiri	Useful Life: 0 Pre Approval: ☐ Category: Minor	
Ward(s): $CW \square 1 \square 2 \checkmark 3 \checkmark 4 \square$ $5 \square 6 \square 7 \square 8 \checkmark$	Cost Validation: Other(specify in Notes) Requirement Validation: Other(specify in Notes)	_

DETAILED DESCRIPTION (SCOPE OF PROJECT):

The development of the Community Energy Plan ("CEP") to evaluate energy and emissions as a required and important component of the Markham Centre Secondary Plan Study Update. The scope of work involves the evaluation of Markham's North District's CEP model and its adaption to a high-density Growth Centre environment. The modelling would analyze and recommend the energy and greenhouse gas ("GHG") emission targets for Markham Centre and would include the requirements to minimize GHG emissions through compact urban design; address energy-efficient building operation, design and construction; and identify opportunities for onsite energy generation, connections to the Markham District Energy infrastructure, and renewable energy options.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

PROJECT COSTS (\$)	<u>2021</u>	Future Phases
Cost/Quote:	0	0
Internal Charges:	13,140	0
External Consulting:	146,000	0
Sub Total:	159,140	0
HST Impact:	2,570	0
Total Project Cost:	161,700	0

NOTES

The CEP is a requirement of the York Region Official Plan and the City's 2014 Official Plan and the Municipal Energy Plan. The CEP must be completed in order for York Region's approval of the updated Secondary Plan. Validation of the budget resulted from Staff's discussion with external consultants and City departments involved in the North District CEP, based on the comparison of past scope of work, tasks and budget. This work is supplemental to project 18026 Markham Centre Secondary Plan Update.

SOURCE(S) OF FUNDING	<u> </u>		Compone	ents			E-4
Funding Type	<u>Budget</u>					TOTAL	<u>Future</u> <u>Phases</u>
DCA	145,530	0	0	0	0	0	0
Development Fees	16,170	0	0	0	0	0	0
TOTAL FUNDING	161,700				_	0	0

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)	
OI EXCITING BODGET IVII NOT	\$0	\$0	\$0	\$0	

DCA/LIFE CYCLE DETAILS

<u>DCA</u>		A	mount in	<u>Life Cycle</u>
Name	Year	Amount	Study	Amount in Study:
General Government - Various Studies	2021	145,530	1,593,063	
TOTAL FUNDING		145,530	1,593,063	Amount Incl HST
				Year in the study
DCA and/or Life Cycle: Explain if there is a change in the	e year ai	nd/or cost:		



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2021 PROJECT FUNDING REQUEST FORM RKHAM 21015 Number: **Project Cost:** \$101,800 Project Name: Parkland Study Update Studies/Pilot Programs Commission: Development Services Pre Approval: Useful Life: Department: Planning Category: Major Project Mgr: Biju Karumanchery Cost Validation: Internal peer review CW ✓ 1 □ 2 □ 3 □ 4 □ Ward(s): Requirement Validation: Other(specify in Notes) 5 🗆 6 🗆 7 🗆 8 🗆 **DETAILED DESCRIPTION (SCOPE OF PROJECT):** As a result of Bill 197, COVID19 Economic Recovery Act the Province has introduced legislation which will require certain actions on the part of the municipality. Existing parkland by-laws establishing an alternative rate will expire two years following Bill 197 coming into effect. Accordingly, municipalities will have two years to pass a new parkland dedication by-law if they wish to continue charging an alternative rate. Markham will have to amend the scope of the current Parkland Study to include additional matters in order to prepare a new Parkland Dedication By-law that can be defended at the LPAT. **BUILDING MARKHAM'S FUTURE TOGETHER:** Engaged, Diverse & Thriving City NOTES **PROJECT COSTS (\$)** 2021 **Future Phases** Staff assume that the additional work will cost approximately Cost/Quote: 100,000 0 \$100,000 over and above the budget set aside for the current Parkland Acquisition Study (project 16008 with budget of \$208.2k 0 Internal Charges: 0 and \$11.5k remaining) **External Consulting:** 0 0 Sub Total: 100,000 0 **HST Impact:** 1,760 0 **Total Project Cost:** 101.800 0 SOURCE(S) OF FUNDING (\$) **Components Future Funding Type Phases Budget** TOTAL DCA 0 0 0 0 0 0 91,620 Development Fees 0 0 0 0 0 10,180 0 0 0 **TOTAL FUNDING** 101,800 Non Personnel Expenditures/(Revenues) Personnel Revenues **OPERATING BUDGET IMPACT** \$0 \$0 \$0 \$0 DCA/LIFE CYCLE DETAILS **DCA** Amount in Life Cycle Year **Amount** Name Study Amount in Study: General Government - Various Studies 2021 91,620 1,593,063 Amount Incl HST 1,593,063 TOTAL FUNDING 91,620 Year in the study

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



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YIARKHAM		_ = = = = = = = = = = = = = = = = = = =	· 3 ,	2	Nı	umber:	21	016	
Project Name: Planni	na & Dosian Stoff	Salamy Dagaya	we,		Project (Cost:	\$786 ,	,300	
		Salary Recove	гу			Studies/F	Pilot P	rograms	
Commission: Develop			_	,	Useful Life:	0 P:	re Apr	oroval:	
Department: Planning			_				· FF		
Project Mgr: Biju Karumanchery		Category: Annual Cost Validation: Internal peer review							
Ward(s): CW ✓	Ward(s): $CW \ \ \ \ \ \ \ \ \ \ \ \ \ $			nent Validation:)		
!	5 6 7 8		requirer	nent vandation.	Other (speed	Ty III TYOUS,	<u>, </u>		
DETAILED DESCRIP	TION (SCOPE OF P	ROJECT):							
BUILDING MARKHA	M'S FUTURE TOG	ETHER: Eng	gaged, Diverse &						
ROJECT COSTS (\$)	<u>2021</u>	Future Phase	NOTES		ima is spant h	vy plannare	(both		
Cost/Quote:	0	0	A significant amount of time is spent by planners (both development and policy staff) and urban designers on growth						
Internal Charges:	786,300	0		ated hard infrastructure such as roads, storm water ponds,					
External Consulting:	0	0	bridges etc. during the subdivision and secondary plan process and in one-off construction projects such as bridge construction and						
Sub Total:	786,300	0	street re-	construction. T	his project is	to recover s	salaries	es of existing	
HST Impact:		0	staff that	assist in the del	ivery of grow	th related h	ard inf	rastructure	
Total Project Cost:	786,300	0							
OURCE(S) OF FUND	ING (\$)		Co	mponents				Eutumo	
unding Type	<u>Budget</u>					TOT	<u>'AL</u>	<u>Future</u> <u>Phases</u>	
CA	786,300	0	0	0	()	0	0	
TOTAL FUNDING	786,300						0	0	
OPERATING BUDGE	T IMPACT Pe	rsonnel Non	Personnel	Revenues	Expenditu	res/(Reven	ues)		
ZI ZIWIII IO DODGE	<u> </u>	\$0	\$0	\$0		\$0			
OCA/LIFE CYCLE DE	TAILS								
<u>DCA</u>				Amount in	Life	Cvcle			

DCA and/or	Life Cycle	e: Explain	if there is a	change i	n the year	and/or cost:
						1

DC funding is included under the hard services studies of the Development Charges Background Study.

Year

Amount

786,300

786,300

Study

669,300

669,300

Amount in Study:

Amount Incl HST

Year in the study

Name

Hard - City Wide - Studies

TOTAL FUNDING



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21017 Number: **Project Cost:** \$101,800 Project Name: Secondary Plans - General Studies/Pilot Programs Commission: Development Services Pre Approval: Useful Life: Department: Planning Category: Major Project Mgr: Biju Karumanchery/Marg Wouters Cost Validation: Recent awards CW ✓ 1 □ 2 □ 3 □ 4 □ Ward(s): Requirement Validation: Other(specify in Notes) 5 □ 6 □ 7 □ 8 □ **DETAILED DESCRIPTION (SCOPE OF PROJECT):** Funds are required to cover overages in secondary plan studies resulting from circumstances including low budget estimates and expanded scope of work as directed by Council. Safe & Sustainable Community **BUILDING MARKHAM'S FUTURE TOGETHER:** NOTES **PROJECT COSTS (\$)** 2021 **Future Phases** These funds would also be used as follows: \$50,000 to top up the Cost/Quote: 100,000 0 2019 budget approval of the Markville Secondary Plan; \$25,000 to fund additional natural heritage work for the Milliken Secondary 0 **Internal Charges:** 0 Plan, and \$25,000 to coverage additional public engagement **External Consulting:** 0 0 meetings for the Markham Road-Mount Joy Secondary Plan. Sub Total: 100,000 0 0 **HST Impact:** 1,760 **Total Project Cost:** 101,800 0 SOURCE(S) OF FUNDING (\$) **Components Future Funding Type TOTAL Phases Budget** DCA 91,620 0 0 0 0 0 0 Development Fees 0 0 0 0 10,180 0 0 **TOTAL FUNDING** 101,800 0 0 **Expenditures/(Revenues)** Personnel Non Personnel Revenues OPERATING BUDGET IMPACT \$0 \$0 \$0 \$0 **DCA/LIFE CYCLE DETAILS DCA** Amount in Life Cycle Year **Amount** Name Study Amount in Study: General Government - Various Studies 2021 181,620 1,593,063 Amount Incl HST 1,593,063 TOTAL FUNDING 181.620 Year in the study DCA and/or Life Cycle: Explain if there is a change in the year and/or cost: Funds are included in the studies section of the DC Background Study.



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MAKKH	AM			~	N	umber	: 21018
Project Name: \	Yonge Co	orridor Seconda	ry Plan		Project (\$203,500
Commission: I Department: I Project Mgr: I	Planning			Category:	Useful Life: Major	Studi 0	Pre Approval:
	cw □ 1 ☑	2 3 4 4 1 6 1 7 1 8 1 1		Cost Validation: Requirement Validation:			otes)
	e Yonge No	orth Subway Exter		or the Yonge Steeles Key Do to plan comprehensively for			
BUILDING MA	RKHAM'	S FUTURE TOG	SETHER: Safe &	Sustainable Community			_
Internal C External Con	t/Quote: Charges: nsulting:	2021 0 0 200,000	Future Phases 0 0 0	NOTES Consultants will be retain is for planning and urban based on other similar se	design servi	ces only	. Cost estimate is
Sul	b Total:	200.000	0				

SOURCE(S) OF FUNDING	r (\$)		Compone	ents			Entuna
Funding Type	<u>Budget</u>					TOTAL	<u>Future</u> <u>Phases</u>
	0	0	0	0	0	0	0
DCA	183,150	0	0	0	0	0	0
Development Fees	20,350	0	0	0	0	0	0
TOTAL FUNDING	203,500				=	0	0

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

<u>CA</u>		A	mount in	Life Cycle
ame	Year	Amount	Study	A
eneral Government - Various Studies	2021	183,150	1,593,063	Amount in Study:
TOTAL FUNDING		183,150	1,593,063	Amount Incl HST
				Year in the study
CA and/or Life Cycle: Explain if there is a change	Background St			

HST Impact:

Total Project Cost:

3,520

203,500



Department: Design

Ward(s):

Project Mgr: Richard Fournier

~!		70D14		Page 62 of 95	
MARKHAM	2021 PROJECT FUNDING REQUEST I	TORM	Number:	21019	
Project Name: Rayory P	eckett Park (Cherna Ave.) - Design & Construction	Proje	ect Cost:	\$465,200	
			New A	Asset/Expansion	
Commission: Developme	ent Services	Heeful Li	fe: 25	Pre Approval:	7

DETAILED DESCRIPTION (SCOPE OF PROJECT):

5 □ 6 🗸 7 □ 8 □

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 structrure & associated landscape works. This will be the last park in the Berczy subdivision.

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

PROJECT COSTS (\$)	<u>2021</u>	Future Phases
Cost/Quote:	370,000	0
Internal Charges:	37,800	0
External Consulting:	50,000	0
Sub Total:	457,800	0
HST Impact:	7,392	0
Total Project Cost:	465,200	0

NOTES

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.

Category: Major

Cost Validation: Recent awards

Requirement Validation: Other(specify in Notes)

SOURCE(S) OF FUNDING	<u>G (\$)</u>		Compone	ents			TR 4
Funding Type	Budget					TOTAL	<u>Future</u> <u>Phases</u>
DCA	418,680	0	0	0	0	0	0
Parks Cash-in-Lieu	46,520	0	0	0	0	0	0
TOTAL FUNDING	465,200				=	0	

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)	
OI BINITING DODGET IVITATE	\$0	\$0	\$0	\$0	

DCA/LIFE CYCLE DETAILS DCA Amount in Life Cycle Year Amount Name **Study** Amount in Study: Parks - Berczy Beckett Neighbourhood Park 2017 418,680 661,500 Amount Incl HST TOTAL FUNDING 418,680 661,500 Year in the study 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.





Berczy Beckett Park

Design & Construction



Ward 6

Features:

- Tree protection measures for existing tree construction
- Shade structure
- Retaining wall
- Associated landscape works
- Estimated in service date: Q2 2022



Number: 21020

Decision Name District					F	Project Cost	\$1,68	1,800
Project Name: Blodwen	Davies Park - C	onstructi	on			N	lew Asset/Ex	pansion
Commission: <u>Developme</u>	ent Services				Usefu	ıl Life: 25	Fre Ap	proval:
Department: Design					Category: Ma		· r	1
Project Mgr: Richard Fo	ournier				alidation: Red			
Ward(s): $CW \square 1 \square$	2 3 4		ī		alidation: Oth		n Notes)	
5 🗹	6 7 8		1	xequirement v	andation. Ou	ier(specify i	ii Notes)	
DETAILED DESCRIPTION	ON (SCOPE OF P	ROJECT):					
This project is to construct t					ay. Anticipated	l park amen	ities include	Γennis
Courts, Jr/Sr Playground, Sl	hade Structure and	associated	landscape w	orks.				
BUILDING MARKHAM	'S FUTURE TOG	ETHER:	Engaged, I	Diverse & Thriv	ing City			
	2024	.		NOTES				
PROJECT COSTS (\$)	<u>2021</u>	<u>Future</u>	<u>Pnases</u> (Cost per ha is \$	6646,846 (\$1,6			
Cost/Quote:	1,500,000				erating cost is \$			
Internal Charges:	135,000				d in service dat le Reserve Stud			
External Consulting:	20,000				lacement cost f			
Sub Total:	1,655,000				been hired and	design deve	elopment is u	nderway for
HST Impact:	26,752		<u> </u>	ender in Q1 20	021.			
Total Project Cost:	1,681,800		0					
OURCE(S) OF FUNDIN	<u>G (\$)</u>			Compone	ents			T
unding Type	Budget						TOTAL	<u>Future</u> <u>Phases</u>
CA	1,513,620		0	0	0	0	0	0
arks Cash-in-Lieu	168,180		0	0	0	0	0	0
TOTAL FUNDING	1,681,800					=	0	0
OPERATING BUDGET I	IMPACT Pe	rsonnel	Non Perso	onnel Revo	enues Ex	penditures/	(Revenues)	
		\$0	\$0	\$	50	\$0		
OCA/LIFE CYCLE DETA	AILS							
<u>DCA</u>			Voor		mount in	Life Cy	<u>cle</u>	
Name Parks - Upper Greensbou	rough Parkway Park		Year 2021	Amount 1,513,620	2,021,447	Amount i	n Study:	
TOTAL FUNDING	iougii i aikway i aik		2021	1,513,620	2,021,447	Amount I	ncl HST	
TOTAL FUNDING				1,313,020	2,021,447	Year in t	he study	
DCA and/or Life Cycle	e. Evnlain if there is	s a change	in the vear a	nd/or cost·				
Deri and/or Ene cycle	. Explain if there is	, a change	III the year a	nd/or cost.				
								l l





Blodwen Davies Park - Construction



Ward 5

Features:

- Tennis courts
- Jr./Sr. playground
- Shade structure
- Associated landscape works
- Estimated in service date: Q3 2022



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21021 **Number:**

Declar Name Clin de Dela Contra		Project (Cost:	\$7,585,300
Project Name: Celebration Park - Construction			New	Asset/Expansion
Commission: Development Services	J	Jseful Life:	25	Pre Approval:
Department: <u>Design</u>	Catalana	Malan		11
Project Mgr: Richard Fournier	Category:	Major		
Ward(s): $CW \square 1 \square 2 \square 3 \square 4 \square$	Cost Validation:	Recent awa	rds	
5 □ 6 □ 7 ▼ 8 □	Requirement Validation:	Other(speci	fy in N	otes)
ETAILED DESCRIPTION (SCOPE OF PROJECT):				
o hire contractors to build the 25.5 acre /10.3 ha Celebration Park	Program includes Combin	ned Washroo	m/Pavi	lion Ruilding

D

To hire contractors to build the 25.5 acre /10.3 ha Celebration Park. Program includes Combined Washroom/Pavilion Building, Maintenance Building, Cricket Pitch (lit), Cricket Batting Cages (lit), Junior & Senior play, Water Play, Community Gathering Space w/ Stage, Parking Lot(s), Shade Structure(s) and associated landscape works.

BUILDING MARKHAM'S FUTURE TOGETHER:

Engaged, Diverse & Thriving City

PROJECT COSTS (\$)	<u>2021</u>	Future Phases
Cost/Quote:	6,785,000	0
Internal Charges:	630,000	0
External Consulting:	50,000	0
Sub Total:	7,465,000	0
HST Impact:	120,296	0
Total Project Cost:	7,585,300	0

NOTES

Cost per ha is \$757,680 (\$7,804,100/10.3 ha) or \$306,043 per acre. Annualized operating cost is \$94,451 (10.3ha x \$9,170/ ha) starting in 2023. Estimated in-service date: Q3 2023. Consultant has been hired, scope of the consultant PO must be adjusted to reflect revised scope of construction. Anticipate design to be ready for tender Q2 2021.

SOURCE(S) OF FUNDING	G (\$)	Components					T. 4	
Funding Type	<u>Budget</u>					TOTAL	<u>Future</u> <u>Phases</u>	
DCA	6,826,770	0	0	0	0	0	0	
Parks Cash-in-Lieu	758,530	0	0	0	0	0	0	
TOTAL FUNDING	7,585,300				=	0		

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)	
OA BARRATA VO DED GET TRANSFER	\$0	\$0	\$0	\$0	

DCA/LIFE CYCLE DETAILS

<u>DCA</u>		A	mount in	<u>Life Cycle</u>
Name	Year	Amount	Study	· · · · · · · · · · · · · · · · · · ·
Parks - Celebration Park Phase 2	2017	230,491	230,491	Amount in Study:
Parks - Celebration Park Phase 2 Standalone Washroom	2017	358,470	358,470	Amount Incl HST
Parks - Celebration Park Phase 2	2017	2,798,749	2,798,749	Year in the study
Parks - Celebration Park Phase 2 Soccer	2017	635,004	635,004	
TOTAL FUNDING		4,022,714	4,022,714	
DCA and/or Life Cycle: Explain if there is a change in As part of the Q1 2020 status of capital council report,	•		OC reserve from	n Kirkham Drive park (former na
of Celebration Park) (projects 9350 & 13011).				





Celebration Park - Construction



Ward 7

Features:

- Combined Washroom/Pavilion Building
- Maintenance Building
- Cricket Pitch and Cricket Batting Cages (lit)
- Jr./Sr. Playground
- Water play
- Community Gathering Space with Stage
- Parking Lot(s)
- Shade Structure(s)
- Estimated in service date: Q3 2023





Celebration Park - Construction



Total Project Cost (\$)

9350 - Kirkham Drive Park – Two Soccer Fields (Celebration Park)	\$1,025,300
13011 – Kirkham Drive Park Phase 2 Construction (Celeb. Park)	\$3,544,300
Total Approved	\$4,569,600
LESS Total Return in 2020	\$3,599,804

Total Committed (Design, Site Preparation)	\$969,796
--	-----------

PLUS 2021 Budget Request

Celebration Park – Construction \$7,585,300

Total Project Cost: \$8,555,096



Number: 21022

D: W G						Project (Cost:	\$549	,300
Project Name: Green La	ne Park - Desigi	and Con	struction				New 1	Asset/Ex	pansion
Commission: Developme	ent Services				Į	Jseful Life:	25	Pre Ap	proval:
Department: Design					Category:	Maior	-	1.	•
Project Mgr: Richard Fo				Cost '		Recent awa	nrds		
Ward(s): $CW \square 1$	2 3 4 4		R	equirement V				ites)	
5 🗆	6 7 8		IX.	equirement	v andation.	Other (speed	<u></u>		
DETAILED DESCRIPTION	ON (SCOPE OF P	ROJECT):							
his project is to design and								Lawrie La	ane.
Anticipated amenities includ	le Jr/Sr playground	, half basket	iball, shade	structure and	l associated	landscape v	/orks.		
BUILDING MARKHAM'	S FUTURE TOG	ETHER:	Engaged, D	iverse & Thri	ving City				
PROJECT COSTS (\$)	2021	Future P	hases	NOTES					
		<u>ruture r</u>	C	ost per ha is					
Cost/Quote:	450,000		in	nnualized op service date					
Internal Charges:	40,500		R	eserve Study					
External Consulting:	50,000		re	placement co	ost for each	amenity.			
Sub Total:	540,500		0						
HST Impact:	8,800	-	0						
Total Project Cost:	549,300		0						
OURCE(S) OF FUNDING	G (\$)			Compon	ents				TD 4
unding Type	Budget						<u>T(</u>	<u>OTAL</u>	<u>Future</u> <u>Phases</u>
CA	494,370		0	0	0	(0	0	0
arks Cash-in-Lieu	54,930		0	0	0	(0	0	0
TOTAL FUNDING	549,300							0	0
OPERATING BUDGET I	MPACT Pe		Non Persoi		enues	Expenditu		renues)	
		\$0	\$0		\$0		\$0		
DCA/LIFE CYCLE DETA	AILS								
<u>DCA</u> Name			Year	Amount	Amount in Study	<u>Life</u>	<u>Cycle</u>		
Parks - Yonge Canac Park	ζ		2021	494,370	696,8	$\overline{07}$ Amou	ınt in Stu	ıdy:	
TOTAL FUNDING	-		2021	494,370	696,8	A	int Incl H	IST	
TOTALTONDING				=======================================			in the st	udy	
DCA and/or Life Cycle	: Explain if there is	a change ir	the vear ar	d/or cost:					<u> </u>
	<u> </u>								





Green Lane Park

Design & Construction



Ward 1

Features:

- Jr/Sr. Playground
- Half Basketball
- Shade Structure
- Associated landscape works
- Estimated in service date: Q3 2022



Number: 21023

D			. ~			Project (Cost:	\$637	,900
Project Name: Yonge ar	nd Grandview Pa	ırk - Design a	and Con	struction			New A	Asset/Ex ₁	pansion
Commission: <u>Developm</u>	ent Services				Ţ	Jseful Life:	25		proval:
Department: <u>Design</u>					Category:				
Project Mgr: Richard Fo				Cost		Recent awa	ırds		
Ward(s): $CW \square 1$	2 3 4		R			Other(speci		tes)	
5 🗆	□ 6□ 7□ 8□		TC.	equirement	vandation.	Other (speed	<u></u>		
DETAILED DESCRIPTION		-							
This project is to design and anticipated park amenities									
BUILDING MARKHAM	'S FUTURE TOG	ETHER: E	ngaged, Di	iverse & Thr	iving City				,
PROJECT COSTS (\$)	<u>2021</u>	Future Phas	242	OTES	Φ2 100 655	· (\$<27,000 W	201	ФОДО (200
Cost/Quote:	530,000					(\$637,900/0 t is \$2,659 (0	,		336 per acre. Estimated
Internal Charges:	47,700	(in	service dat	e: Q3 2022.	Costs will be	e include	d in the l	Life Cycle
External Consulting:	50,000		Re		•	park assump	tion base	d on upd	ated
Sub Total:	627,700		_ le	piacement (cost for each	amemty.			
HST Impact:	10,208	-)						
Total Project Cost:	637,900		_						
OURCE(S) OF FUNDIN	<u>G (\$)</u>			Compo	nents				<u>Future</u>
unding Type	<u>Budget</u>						<u>T(</u>	<u>OTAL</u>	Phases
CA	574,110	0)	0	0	()	0	0
arks Cash-in-Lieu	63,790	0)	0	0	(O	0	0
TOTAL FUNDING	637,900							0	0
	Pe	rsonnel No	on Person	nel Re	venues	Expenditu	res/(Rev	renues)	
OPERATING BUDGET	<u>IMPACT</u>	\$0	\$0		\$0	•	\$0	ŕ	
CA/LIFE CYCLE DETA	AILS								
<u>DCA</u>			=7		Amount in	<u>Life</u>	<u>Cycle</u>		
Name	1		Year	Amount	Study	Amou	ınt in Stu	ıdy:	
Parks - Yonge Devron Pa	ark		2020	574,110		7/4 — A	ınt Incl H	-	
TOTAL FUNDING				574,110	613,9	1/4	in the st		
DCA and/or Life Cycle	e: Explain if there is	s a change in th	ie vear an	d/or cost:					
			J						





Yonge and Grandview Park

Design & Construction



Ward 1

Features:

- Jr./Sr. Playground
- Plaza Area
- Shade Structure
- Pathways
- Associated landscape works
- Estimated in service date: Q3 2022



Page 82 of **69**Number: 21024

			Project C	Cost:	\$152,900	
Project Name:	Copper Creek Drive Reconfiguration (Re	oad Diet)	210,000	3050	φ132,700	_
				Studi	ies/Pilot Programs	
Commission:	Development Services	I	Jseful Life:	15	Pre Approval:	
Department:	Engineering			13	Tro Tipprovan	
Project Mgr:	Justin Chin	Category:	Minor			
Ward(s):	CW □ 1□ 2□ 3□ 4□	Cost Validation:	Other(speci	fy in N	otes)	
		Requirement Validation:	Other(speci	fy in N	otes)	
	5 □ 6 □ 7 🗹 8 □		_			

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Copper Creek Drive is a 4-lane collector road, with bicycle lanes and a posted 50 km/h speed limit. Local area residents have repeatedly been concerned about vehicle speeding and pedestrian safety. In response, City staff are currently preparing a detailed design involving converting the existing 4-lane cross-section with standard bicycle lanes, to a 3-lane cross-section (one travel lane per direction; centre turn lane; buffered bike lanes). A formal pedestrian crossover is also proposed between 9th Line and Stonechurch. Because speeding is the main factor contributing to concerns, reducing the number of lanes would be the most impactful and sustainable approach. The need for the road diet is driven by increase in growth related traffic, cyclists and pedestrians. Travel demand will continue to grow on Copper Creek Drive for the foreseeable future. The original design is a 4 lane road and the higher travel demand, particularly in volumes of active transportation, was not envisaged, which results in this project to redistribute the road cross section for all users.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

PROJECT COSTS (\$)	2021	Future Phases
	2021	<u>r atare r nases</u>
Cost/Quote:	130,400	0
Internal Charges:	20,212	0
External Consulting:	0	0
Sub Total:	150,612	0
HST Impact:	2,295	0
Total Project Cost:	152,900	0

NOTES

Vehicle operating speeds on Copper Creek ranges from 60 - 70 km/h. Staff have implemented speed radar boards there, but their impact has been limited due to the 4-lane cross-section. Traffic signals and stop controls at multiple locations along the corridor were also considered. However none meet Provincial warrant criteria.

SOURCE(S) OF FUNDING (\$)		Components							
Funding Type	<u>Budget</u>	Pavement Marking	Signage	<u>PXO</u>	Internal	Chg TOTAL	<u>Future</u> <u>Phases</u>		
DCA	152,900	76,320	5,488	50,880	20,212	152,900	0		
TOTAL FUNDING	152,900				=	152,900	0		

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)	
OT EXPLICIT DEDGET INTEREST	\$0	\$20,000	\$0	\$20,000	

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DCA/LIFE CYCLE DETAILS

<u>DCA</u>		A	mount in	Life Cycle
Name	Year	Amount	Study	Amount in Study:
Hard - Special Projects - City Wide - Bike Lanes on City		152,900	11,325,356	•
and Regional Land				Amount Incl HST
TOTAL FUNDING		152,900	11,325,356	Year in the study
End and/of Ene Cycle. Explain it there is a change in the	ic year a	nu/or cost.		
DCA and/or Life Cycle: Explain if there is a change in the	ic year ar	nu/or cost.		
DEA and/of Life Cycle. Explain if there is a change in the	ic year an	ituroi cost.		
DEA and/of Life Cycle. Explain if there is a change in the	ic year a	itaroi cost.		





WHY HAVE A ROAD DIET?

Bike lanes create
a buffer between
vehicular traffic
and pedestrians,
improving comfort
while walking
along the corridor

New two-way left turn lane makes it easier to make left turns into side streets and driveways



Speeding can be reduced by lane reconfiguration, improving neighbourhood liveability

Studies show the neighbourhoods that invest in walking and cycling infrastructure have higher property values

Enhanced cycling facilities provide a more comfortable environment for people who would like to cycle





Figure 22: Pedestrian Crossover Level 2 Type B – Mid-block (3-lane with centre 2-way left-turn lane)



Page 88 of **35**Number: 21025

Project Name: Cycling & Pedestrian Advisory Commit		:4400 (CDAC)	Project C	Cost:	\$25,400	
		mee (CPAC)		Stud	ies/Pilot Programs	
Commission: Department:	Development Services Engineering		Jseful Life:	0	Pre Approval: \Box	
Project Mgr:	**	Category:				
Ward(s):	CW ☑ 1 □ 2 □ 3 □ 4 □	Cost Validation:				
	5	Requirement Validation:	Otner(speci	ry in N	otes)	

DETAILED DESCRIPTION (SCOPE OF PROJECT):

CPAC was established in September 2003, as per the direction of the Transportation Committee. In the Terms of Reference, the specific duties of CPAC is to include, but not limited, the following: (i) Advising staff of various departments and Council on the design, development and delivery of cycling and pedestrian policies, programs and facilities to promote and enhance cycling and walking in walking; (ii) Compiling research and statistics on cycling and pedestrian issues; (iii) Working with local neighborhoods by collecting and distributing information related to cycling and walking; (iv) Promoting an increased public awareness of cycling and walking as environmentally forms of transportation; (v) Assisting in fundraising opportunities; (vi) Discussing and resolving and issues between cyclists and pedestrians; (vii) Assisting in the integration of bicycle and pedestrian facilities into significant development proposals as they arise.

BUILDING MARKHAM'S FUTURE TOGETHER: Saf

Safe & Sustainable Community

<u>2021</u>	Future Phases
25,000	0
: 0	0
: 0	0
: 25,000	0
: 440	0
: 25,400	0
5	25,000 3: 0 3: 0 440

SOURCE(S) OF FUNDING	<u>G (\$)</u>	Components						
Funding Type	<u>Budget</u>					TOTAL	<u>Future</u> <u>Phases</u>	
DCA	16,510	0	0	0	0	0	0	
Non-DC Growth	8,890	0	0	0	0	0	0	
TOTAL FUNDING	25,400				_	0		

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

DCA/LIFE CYCLE DETAILS

<u>DCA</u>		A	mount in	<u>Life Cycle</u>
Name	Year	Amount	Study	Amount in Study:
Hard - Special Projects - City Wide - Bike Lanes on City		16,510	11,325,356	
and Regional Land				Amount Incl HST
TOTAL FUNDING		16,510	11,325,356	Year in the study



~*	2021 BB 0			IC DECL		D14		Pag	ge 90 of 3
MARKHAM	2021 PROJ	IECT I	TUNDIN	VG REQU	EST FO	PRM N	umber:	21	026
D: W = .	G. 88 G 1	_				Project (Cost:	\$713	,700
Project Name: Engineeri	ng Staff Salary	Recover	·y				Studie	s/Pilot P	rograms
Commission: Developmen	nt Services				1	Jseful Life:			proval:
Department: Engineering	ζ						0	Pie Apj	Jiovai: □
Project Mgr: TBD					Category:				
Ward(s): CW ✓ 1	2□ 3□ 4□					Other(spec	•		
5 🗆	6□ 7□ 8□			Requirement	Validation:	Other(speci	fy in Not	tes)	
DETAILED DESCRIPTIO		ROJECT	Г):						
projects are as follows: Metro Road and 16th Avenue, Regi ocations, CPAC, Yonge Sub BUILDING MARKHAM'S	on of York Designoway and Smart Co	n for the Formute.	Iwy 404 Mi		ing at 16th				
PROJECT COSTS (\$)	2021	Future	Phases	<u>NOTES</u>					
Cost/Quote:	0		0	This request i allocated to w					
Internal Charges:	713,720		0	Metrolinx.	OIK OII Vali	ous shared pi	ojecis wi	iui Kegic	iii aiid
External Consulting:	0		0						
_									
Sub Total: _ HST Impact:	713,720	-	0 0						
Total Project Cost:	713,700								
= =====================================	/13,/00								
OURCE(S) OF FUNDING	G (\$)			Compo	nents				
<u>'unding Type</u>	<u>Budget</u>			-			<u>T(</u>	<u>OTAL</u>	<u>Future</u> <u>Phases</u>
OCA .	713,700		0	0	0	(0	0	
TOTAL FUNDING	713,700							0	
TOTAL PONDING	713,700								
OPERATING BUDGET IN	MPACT Pe	rsonnel	Non Per	sonnel Re	venues	Expenditu	res/(Rev	enues)	
		\$0	\$0		\$0		\$0		
OCA/LIFE CYCLE DETA	<u>ILS</u>								
<u>DCA</u>					Amount in	<u>Life</u>	Cycle		
Name		G 1:	Year		Study	— Amou	ant in Stu	dy:	
Hard - City Wide - Trans., Traffic Calming, Noise, St				713,700	10,602,0)00	int Incl H		
Update etc.	•	•					in the stu		
TOTAL PUNDING				712 700	10 (00 (noo I cal	m mc st	uuy	

713,700 10,602,000

TOTAL FUNDING

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



Number: 21027

1 1/ 31 31 31 1/ 31 1					1101	11001.	
Ducinet Names V A N 4	6 T T T T T T T T T T T T T T T T T T T	G! A.D.	X 7 11 75 4		Project Co	ost: \$182	,900
Project Name: Installation		ng Signs at Roug	ge Valley Trai	<u> </u>		New Asset/Ex	pansion
Commission: Developme	nt Services			Usef	ul Life:	0 Pre Ap	proval:
Department: Engineering				Category: Ma		1	F
Project Mgr: Henry Sung	•		Cost	Validation: Int		review	
	2 3 4 4			Validation: Otl			
	6□ 7▼ 8□		110401101110		(speeil)		
Chis request is for Rouge Value or and ped nterpretative signs, mapping BUILDING MARKHAM'	alley Trail propose estrians a consister g, pavement markin	d Improvements con nt information leading and symbols; the	ng them along th	neir route. The san remain to be	ignage incl		
			NOTES				
PROJECT COSTS (\$)	<u>2021</u>	Future Phases	225 signs - \$7	78k			
Cost/Quote:	147,850	0	13 special ma	ps - \$9k			
Internal Charges:	22,516	0	7 interpreter s Information s				
External Consulting:	9,758	0		pacts will be det	ermined at	the time of con	nstruction
Sub Total:	180,124	0	award.				
HST Impact:	2,774	0					
Total Project Cost:	182,900						
OURCE(S) OF FUNDING	G (\$)		Compo	nents			<u>Future</u>
unding Type	Budget					TOTAL	<u>Phases</u>
CA	118,885	0	0	0	0	0	0
on-DC Growth	64,015	0	0	0	0	0	0
TOTAL FUNDING	182,900					0	0
OPERATING BUDGET I	MPACT Pe				_	s/(Revenues)	
		\$0 \$	0	\$0	\$	0	
OCA/LIFE CYCLE DETA DCA	ALS			A	T if a		
Name		Yea		Amount in Study	<u>Life C</u>		
Hard - Special Projects - C	City Wide - Bike Lar	nes on City	118,885	•		t in Study:	
and Regional Land			110.005	11 205 256	Amount	Incl HST	
TOTAL FUNDING			118,885	11,325,356	Year in	the study	
DCA and/or Life Cycle	: Explain if there is	s a change in the year	ar and/or cost:				



WARKHAM 2021 PROJECT FUNDING REQUEST FORM

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MARKITALI						IN	umber:	2	1028	
D :		.				Project (Cost:	\$344	,300	
Project Name: LPAT Tr	ansportation Pe	er Review					Studie	s/Pilot P	rograms	
Commission: Developme	ent Services				Ţ	Jseful Life:	-		proval:	
Department: Engineerin					Category:		U	пслр	provar. —	
Project Mgr: Joseph Pal	misano			Cost		Other(spec:	ify in Not	toe)		
Ward(s): $CW \square 1$	2 □ 3 ✔ 4 □			Requirement '	•					
5 🗆	6 7 8			Requirement	v andation.	Offici(speci	1y 111 1400	.cs)		
DETAILED DESCRIPTION										
Budget to hire external trans Appeal Tribunal (LPAT) an BUILDING MARKHAM	d to help prepare th	e City's pos	ition at rel		ns and heari		aled to the	e Local	Planning	
	2021	E (D)		NOTES						
PROJECT COSTS (\$)	<u>2021</u>	Future P	nases	Current appea						
Cost/Quote:	0			1. Yonge-Stee 2. Arveh Deve					n - \$75K	
Internal Charges: External Consulting:	39,000 300,000		0	These appeals include both Transportation and Servicing						
	·			components.						
Sub Total:	339,000		$\frac{0}{0}$							
HST Impact: Total Project Cost:	5,280									
=	344,300									
OURCE(S) OF FUNDING	<u>G (\$)</u>			Compon	ents				Future	
<u>'unding Type</u>	<u>Budget</u>						<u>TC</u>	<u>)TAL</u>	Phases	
OCA	344,300		0	0	0	(0	0	0	
TOTAL FUNDING	344,300						-	0	0	
ODEDATING DUDGET I	Per Per	rsonnel	Non Perso	onnel Rev	venues	Expenditu	res/(Revo	enues)		
OPERATING BUDGET I	MPACI	\$0	\$0		\$0		\$0			
OCA/LIFE CYCLE DETA	AILS									
<u>DCA</u>			T 7		Amount in	<u>Life</u>	<u>Cycle</u>			
Name Hard - City Wide - Trans.	Servicing Enviro	Cycling	Year	Amount 344,300	Study 10,602,0	Amou	ant in Stud	dy:		
Traffic Calming, Noise, S				344,300	10,002,0		int Incl H	ST		
Update etc. TOTAL FUNDING				344,300	10,602,0	${00}$ Year	in the stu	ıdy		
DCA and/or Life Cycle	Explain if there is	a change in	the year a	and/or cost:						



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MARKHAM	2021 PROJ	ECT FU	NDIN(G REQUE	ST FORM	Number:	21	030
	. Cualas & Astin	. T	404 : 0m A	D		oject Cost:	\$15 ,	300
Project Name: Markhan		e 1 ranspor	tation A	wareness P	rogra	Studie	s/Pilot P	rograms
Commission: Developme					Useful	Life: 0	Pre App	oroval:
Department: Engineerin	g				Category: Annu	ıal	17	
Project Mgr: Fion Ho					Validation: Othe		tes)	
	2 3 4 4		F		alidation: Othe			
] 6							
DETAILED DESCRIPTION The Active Transportation A			nromote	and encourage	e active transpor	tation in Markh	am	
BUILDING MARKHAM	'S FUTURE TOGI	ETHER: S	Safe & Sus	stainable Comm	unity			
PROJECT COSTS (\$)	2021	Future Pha	nege]	NOTES				
Cost/Quote:	15,000	<u>r uture i na</u>	N		tribution to joint Region is contrib		CAT for	Markham
Internal Charges:	0		0	ycies \$15K. (Region is contin	outing \$50K).		
External Consulting:	0		0					
Sub Total:	15,000		0					
HST Impact:	264		0					
Total Project Cost:	15,300		0					
OURCE(S) OF FUNDING	G (\$)			Compone	ents			Entuno
Funding Type	<u>Budget</u>					<u>T(</u>	<u>)TAL</u>	<u>Future</u> <u>Phases</u>
OCA	9,945		0	0	0	0	0	0
Non-DC Growth	5,355		0	0	0	0	0	0
TOTAL FUNDING	15,300						0	0
	Per Per	sonnel N	on Perso	nnel Rev	enues Expo	enditures/(Rev	enues)	
OPERATING BUDGET I	MPACI	\$0	\$0	9	60	\$0		
OCA/LIFE CYCLE DETA	AILS							
<u>DCA</u>			Vaan		mount in	Life Cycle		
Name Hard - Special Projects - 0	City Wide - Bike I an	es on City	Year	Amount 9,945	Study 11,325,356	Amount in Stu	dy:	
and Regional Land	City Wide Bike Ear	es on City				Amount Incl H	ST	
TOTAL FUNDING				9,945	11,325,356	Year in the stu	ıdy	
DCA and/or Life Cycle	e: Explain if there is	a change in t	he year a	nd/or cost:				



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					Number:	21	031
_				I	Project Cost:	\$10 ,	200
Project Name: Markhan	n Cycling Day				Studie:	s/Pilot P	rograms
Commission: Developme	ent Services			Usefi	ıl Life: 0		oroval:
Department: Engineerin	<u>ıg</u>			Category: An		тте Арј	provar. —
Project Mgr: Fion Ho			Cost		ner(specify in Not	res)	
	2 3 4 4				ner(specify in Not		
			1		· 1 · J		
DETAILED DESCRIPTION The request is for the Annual	,		own from a child	ren cycling eve	nt started in 2008	with les	s than 100
articipants into a communi	ty and major GTA	event that attracted	over 1800 registr	rants in 2019.			
BUILDING MARKHAM	'S FUTURE TOG	ETHER: Safe &	z Sustainable Comm	nunity			
PROJECT COSTS (\$)	2021	Future Phases	NOTES				
Cost/Quote:	10,000	0	1 3	is a bigger budg est will be fundi	et but Markham v	vill cont	ribute \$10K
Internal Charges:	0	0	omy and the re	est will be fundi	aisea.		
External Consulting:	0	0					
Sub Total:	10,000	0					
HST Impact:	176	0					
Total Project Cost:	10,200	0					
OURCE(S) OF FUNDIN	<u>G (\$)</u>		Compon	ents			
unding Type	Budget				<u>TC</u>	<u>OTAL</u>	<u>Future</u> <u>Phases</u>
CA	6,630	0	0	0	0	0	0
on-DC Growth	3,570	0	0	0	0	0	0
TOTAL FUNDING	10,200				<u> </u>	0	0
	Do	rsonnel Non Po	ersonnel Rev	venues Ex	penditures/(Revo	ennes)	
OPERATING BUDGET 1	IMPACT FE					orracs)	
	<u>IMPACT</u>			\$0	\$0		
OCA/LIFE CYCLE DETA	<u>IMPACT</u>		\$0	\$0	\$0		
	<u>IMPACT</u>		\$0 A		\$0 Life Cycle		
DCA/LIFE CYCLE DETA DCA Name Hard - Special Projects -	AILS	\$0 \$	\$0 A	\$0 Amount in	\$0 Life Cycle Amount in Stud	dy:	
DCA/LIFE CYCLE DETA DCA Name	AILS	\$0 \$	\$0 ear Amount	\$0 Amount in Study 11,325,356	\$0 Life Cycle Amount in Stud	dy:	
DCA/LIFE CYCLE DETA DCA Name Hard - Special Projects - and Regional Land TOTAL FUNDING	IMPACT AILS City Wide - Bike Lan	\$0 Sees on City	ear Amount 6,630 6,630	\$0 Amount in Study 11,325,356	\$0 Life Cycle Amount in Stud	dy:	
DCA/LIFE CYCLE DETA DCA Name Hard - Special Projects - and Regional Land	IMPACT AILS City Wide - Bike Lan	\$0 Sees on City	ear Amount 6,630 6,630	\$0 Amount in Study 11,325,356	\$0 Life Cycle Amount in Stud	dy:	
DCA/LIFE CYCLE DETA DCA Name Hard - Special Projects - and Regional Land TOTAL FUNDING	IMPACT AILS City Wide - Bike Lan	\$0 Sees on City	ear Amount 6,630 6,630	\$0 Amount in Study 11,325,356	\$0 Life Cycle Amount in Stud	dy:	
DCA/LIFE CYCLE DETA DCA Name Hard - Special Projects - and Regional Land TOTAL FUNDING	IMPACT AILS City Wide - Bike Lan	\$0 Sees on City	ear Amount 6,630 6,630	\$0 Amount in Study 11,325,356	\$0 Life Cycle Amount in Stud	dy:	
DCA/LIFE CYCLE DETA DCA Name Hard - Special Projects - and Regional Land TOTAL FUNDING	IMPACT AILS City Wide - Bike Lan	\$0 Sees on City	ear Amount 6,630 6,630	\$0 Amount in Study 11,325,356	\$0 Life Cycle Amount in Stud	dy:	



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2021 PROJECT FUNDING REQUEST FORM 21032 **Number:**

Project Name: New Traf	fic Signals (Desi	an)]	Project Cos	t: \$59,	,100		
		gn <i>)</i>			1	New Asset/Ex	pansion		
Commission: Developme				Usef	ul Life: 30	O Pre Ap	proval:		
Department: Engineering				Category: Ma	ajor	-	-		
Project Mgr: <u>Justin Chin</u>				/alidation: Ex		eview			
Ward(s): $CW \square 1 \square$	2 3 4		Requirement V	-					
5 🗸	6 🗹 7□ 8□		Requirement v	<u></u>	martion asse	SSITICIT			
DETAILED DESCRIPTION	ON (SCOPE OF P	ROJECT):							
Design for new traffic signal ntersections meet the Proving afety, operations and accompany per the Accessibility for Community of the Communi	ncial critiera to war amodate future gro Ontarians with Disa	rant traffic signals wth needs. The int bilities Act (AODA	and are therefore ersection will also	recommended include civil ve completed in	by staff in o	order improve orporate desig	intersection elements		
	••••		NOTES						
PROJECT COSTS (\$)	<u>2021</u>	Future Phases	Total costs spe						
Cost/Quote:	0	530,340	each intersection						
Internal Charges:	8,250	73,653							
External Consulting:	50,000	31,820							
Sub Total:	58,250	635,813							
HST Impact:	880	9,894							
Total Project Cost:	59,100	645,700							
OURCE(S) OF FUNDING	<u>G (\$)</u>		Compone	ents			Future		
Funding Type	<u>Budget</u>					TOTAL	<u>Phases</u>		
OCA	59,100	0	0	0	0	0	645,70		
TOTAL FUNDING	59,100				- -	0	645,70		
OPERATING BUDGET I	MPACT			enues Ex	xpenditures , \$6,0	/(Revenues)			
DCA/LIFE CYCLE DETA DCA	<u>ILS</u>				T.10. C				
		Ye		mount in Study	<u>Life Cy</u>	<u>cle</u>			
Name			29,550	1,038,589	Amount	in Study:			
Name Hard - Intersection - Futur	re Signalized Intersec	ctions (4) -	27,550	-,,	Amount 1	Incl UCT			
Hard - Intersection - Futur Greensborough Hard - Intersection - Futur			29,550	2,869,534	Amount l				
Hard - Intersection - Future Greensborough									
Hard - Intersection - Futur Greensborough Hard - Intersection - Futur Wismer	re Signalized Intersec	ctions (7) -	29,550	2,869,534					



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Year in the study

MARKHAM	2021 PROJ	ECT FUNL	DING REQ	QUEST FO	<i>PRM</i> Nu	mber: 2	1033
Project Name: Secondary	v Plan Transpor	tation Studies	for Langstaf	f Gatewa	Project C	ost: \$570	6,300
	<u> </u>					Studies/Pilot	Programs
Commission: Developme				Ţ	Jseful Life:	0 Pre Ap	proval: \square
Department: Engineering				Category:	Major		
Project Mgr: Joseph Palm			C	ost Validation:	Other(specif	y in Notes)	
.,	2 3 4 4			ent Validation:		•	
	6□ 7□ 8□		1.			,,	
n conjunction with the budg plan development studies for	et request for the F the Langstaff Gate	Planning compone			sportation com	nponent of the s	econdary
BUILDING MARKHAM'	S FUTURE TOG	ETHER: Safe	& Sustainable C	Community			
PROJECT COSTS (\$)	2021	Future Phases	NOTES Cost Valid	lation: based or	n similar transı	portation studie	es for
Cost/Quote:	0	0	secondary	plans.	•	•	
Internal Charges:	67,500	0				een directed to vay. A Transpo	
External Consulting:	500,000	0				form the develo	
Sub Total:	567,500	0		or the Secondar			1
HST Impact:	8,800	0					
Total Project Cost:	576,300	0					
OURCE(S) OF FUNDING	G (\$)		Com	ponents			
Funding Type	Budget					TOTAL	<u>Future</u> <u>Phases</u>
OCA	576,300	0	0	0	0	0	0
TOTAL FUNDING	576,300					0	0
OPERATING BUDGET I	MPACT Per	rsonnel Non	Personnel	Revenues	Expenditur	es/(Revenues)	
CI ZIGITH (O DODGET II		\$0	\$0	\$0	9	\$0	
OCA/LIFE CYCLE DETA	ILS						
<u>DCA</u>		.	7	Amount in	Life (<u>Cycle</u>	
Name	Complete Comme		Year Amoun	2 1 1 2 2	Amour	nt in Study:	
Hard - City Wide - Trans., Traffic Calming, Noise, Su			576,3	300 10,602,0		at Incl HST	

576,300

10,602,000

Update etc.

TOTAL FUNDING

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



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V IÀRKHAM	2021 1 KOJ	ECIFUNI		ZCI			Number	: 21	1034
Project Name: Secondary	y Plan Transpa	tation Studios	for Vongo	Corri	dor	Projec	t Cost:	\$576	5,300
	-	tation Studies	Tor Tonge	Corri	<u>uoi</u>		Stud	ies/Pilot I	Programs
Commission: Developme					U	seful Life	: 0	Pre Ap	proval:
Department: <u>Engineering</u> Project Mgr: Joseph Paln			-		Category:	Major			
, <u> </u>	2 3 4		-	Cost V	Validation:	Other(sp	ecify in N	otes)	
	6 7 8		Require	ement V	alidation:	Other(spe	ecify in N	otes)	
ETAILED DESCRIPTIO		DOIFCT).			-				
conjunction with the budg an development studies for UILDING MARKHAM'S	the Yonge Corrid	or (includes Yon		Yonge	North).	oortation (componen	nt of the so	econdary
ROJECT COSTS (\$)	2021	Future Phase	NOTE						
Cost/Quote:	0	0	Cost Va		n: based on	similar tr	ansportati	on studie	s for
Internal Charges:	67,500	0	Requirement validation: Planning has been directed to prepare a Secondary plan for the Yonge Corridor. A Transportation study is required to prepare to support and inform the development concerns.						
External Consulting:	500,000	0							
Sub Total:	567,500	0	for the Secondary Plan.						
HST Impact:	8,800	0							
Total Project Cost:	576,300	0							
OURCE(S) OF FUNDING	G (\$)		C	ompon	ents				Eveterno
unding Type	<u>Budget</u>						1	TOTAL	Future Phases
CA	576,300	0	()	0		0	0	
TOTAL FUNDING	576,300							0	
PERATING BUDGET I	MPACT	rsonnel Non \$0	Personnel \$0		enues \$0	Expendi	tures/(Re	evenues)	
<u>CA/LIFE CYCLE DETA</u> <u>DCA</u>	<u>ILS</u>					т:	f. C1-		
Name		,	Year Amo		mount in Study		fe Cycle		
Hard - City Wide - Trans., Traffic Calming, Noise, St			57	6,300	10,602,00)()	ount in St	-	
Update etc.	ibwatersned, Erosio	1 Study					ount Incl		
			57	6,300	10,602,00	<u>00</u> Yea	ar in the s	study	
TOTAL FUNDING									
TOTAL FUNDING DCA and/or Life Cycle:	Explain if there is	a change in the	vear and/or o	cost:		_			



Page 106 of **93**Number: 21035

Project Name: Servicing &	CTTTD F CL I		40.4 N. G. D.	_	Project (Cost: \$34	4,300
		for the Highway	y 404 N. Sec. Pl	lan		Studies/Pilot	Programs
Commission: Development	Services			U	seful Life:	0 Pre A	pproval:
Department: Engineering				Category:			F F
Project Mgr: Farshed Kaw	asia		Cost			fy in Notes)	
Ward(s): $CW \square 1 \square$	2 ✓ 3 🗆 4 🗆			-		· ·	
5 🗌 (6 7 8		Requirement `	v andadon:	Other(speci	Ty III Notes)	
ETAILED DESCRIPTION	N (SCOPE OF P	ROJECT):					
tetain a consultant to prepare econdary Plan to identify opt eomorphology; terrestrial and BUILDING MARKHAM'S	ions for: municip l aquatic habitat,	oal servicing; storm and provide a fran	water manageme	ent including otection of the	surface, sub	surface water,	
BUILDING MARKHAM S	FUTURE TOG	ETHEK: Saice	e gustamaore com	Hamey			
PROJECT COSTS (\$)	<u>2021</u>	Future Phases	NOTES	11		.'	
Cost/Quote:	0	0	plans.	n: based on	sımılar servi	cing studies for	secondary
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Update etc.			344,300	10,602,0	OO Year	in the study	
TOTAL FUNDING				=			
TOTAL FUNDING DCA and/or Life Cycle: F	7 1 : : : : : : :	1 ' 1	1/				



Page 108 of **95**

2021 PROJECT FUNDING REQUEST FORM ARKHAM 21036 Number: **Project Cost:** \$514,900 Project Name: Servicing & SWM Study for Yonge Corridor Sec. Plan Studies/Pilot Programs Commission: Development Services Pre Approval: Useful Life: Department: Engineering Category: Major Project Mgr: Farshed Kawasia Cost Validation: Other(specify in Notes) CW □ 1 ✓ 2 □ 3 □ 4 □ Ward(s): Requirement Validation: Multiple(specify) 5 🗆 6 🗆 7 🗆 8 🗆 **DETAILED DESCRIPTION (SCOPE OF PROJECT):** Retain a consultant to prepare a servicing and stormwater management study to support the development of a secondary plan for the Yonge Corridor (Yonge-Steeles and Yonge- North (Royal Orchard)) area to identify options for: municipal servicing; stormwater management including surface, sub-surface water, and fluvial geomorphology; terrestrial and aquatic habitat, and provide a framework for the protection of the natural environment **BUILDING MARKHAM'S FUTURE TOGETHER:** Safe & Sustainable Community NOTES **PROJECT COSTS (\$)** 2021 **Future Phases** Cost validation: based on similar servicing studies for secondary 0 Cost/Ouote: 0 Requirement validation: Planning has been directed to prepare a **Internal Charges:** 57,000 0 Secondary Plan for the Yonge Corridor. A servicing and **External Consulting:** 0 450,000 stormwater management study is required to be prepare to support and inform the development concept for the Secondary Plan. Sub Total: 507,000 0 0 **HST Impact:** 7,920 **Total Project Cost:** 0 514,900 SOURCE(S) OF FUNDING (\$) **Components Future Funding Type TOTAL Phases Budget** DCA 0 0 0 0 0 0 514,900 **TOTAL FUNDING** 514,900 0 0 Non Personnel **Expenditures/(Revenues)** Personnel Revenues OPERATING BUDGET IMPACT \$0 \$0 \$0 \$0 DCA/LIFE CYCLE DETAILS **DCA** Amount in Life Cycle Year **Amount** Study Amount in Study: Hard - City Wide - Trans., Servicing, Enviro., Cycling, 514,900 10,602,000 Traffic Calming, Noise, Subwatershed, Erosion Study Amount Incl HST Update etc. Year in the study TOTAL FUNDING 514,900 10,602,000

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



2021 PROJECT FUNDING REQUEST FORM

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\$514,900

21037 **Number:**

Project Cost:

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2021 PROJECT FUNDING REQUEST FORM

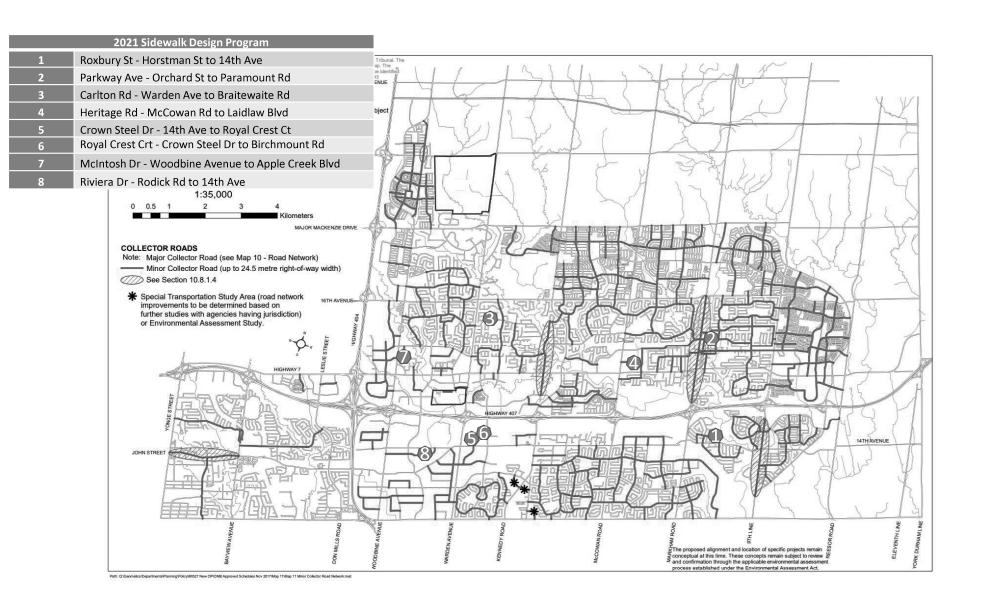
Page 112 of **99**

21038 Number: **Project Cost:** \$509,400 Project Name: Sidewalk Program (Design) New Asset/Expansion Commission: Development Services Pre Approval: Useful Life: Department: Engineering Category: Major Project Mgr: Mark Siu Cost Validation: Other(specify in Notes) CW ✓ 1 □ 2 □ 3 □ 4 □ Ward(s): Requirement Validation: Other(specify in Notes) **DETAILED DESCRIPTION (SCOPE OF PROJECT):** To complete the detailed design for new sidewalk in various areas within City to provide pedestrian and links to the City's sidewalk network. The number of locations to be designed for this budget will be based on the information provided to and approved by DSC in November 2018. Locations 1) Parkway Ave - Orchard St to Paramount Rd, 2) Carlton Rd - Warden Ave to Braitewaite Rd, 3) Heritage Rd - McCowan Rd to Laidlaw Blvd, 4) Crown Steel Dr - 14th Ave to Royal Crest Ct, 5) Royal Crest Crt - Crown Steel Dr to Birchmount Rd, 6) McIntosh Dr - Woodbine Avenue to Apple Creek Blvd, 7) Roxbury St - Horstman St to 14th Ave, 8) Riviera Dr -Rodick Rd to 14th Ave. Safe & Sustainable Community **BUILDING MARKHAM'S FUTURE TOGETHER: NOTES PROJECT COSTS (\$)** 2021 **Future Phases** Based on estimates from previous projects. An estimated 5.2 km 0 Cost/Quote: 0 will be designed as part of this request. Unit cost is consistent with recent award plus inflation. Locations are subject to change upon 0 **Internal Charges:** 61,150 Director's approval based on design and site condition. **External Consulting:** 0 440,536 0 Sub Total: 501,686 **HST Impact:** 7,753 0 **Total Project Cost:** 509,400 0

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TOTAL FUNDING	509,400				=	0	

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

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TOTAL FUNDING		509,400	2,019,500	Amount Incl HST	
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Department: Engineering					Category:		Ü		, , , , ,
Project Mgr: Fion Ho					• •	Other(spec	ify in No	tag)	
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TOTAL FUNDING				76,300	11,325,3	<u> </u>	in the stu		

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

Smart Commute initiatives

The Smart Commute initiative provides transportation demand management services to employers and businesses and has many "chapters" across the GTHA. The collective aim is to help the employees of these businesses find better ways to get to/from work other than driving alone. That requires many indirect programs and initiatives to encourage, promote, educate on carpooling, transit, walking and cycling.

In terms of KPIs, attached is the 2020 workplan of Smart Commute Markham Richmond Hill that includes performance targets.

Smart Commute "chapters" across the GTHA have different organizational forms. Some are operated by municipalities, Chamber of Commerce/Boards of Trade, non-profits, and for-profit. The common element is that they are all subsidized by the benefiting municipalities. There has been previous detailed reviews by Metrolinx to try to understand the organizational differences and help determine if there are some that are more efficient than others. Sadly, there is no clear answer.

In the case of Smart Commute Markham Richmond Hill, it was originally set up in 2004 to serve the employers and businesses around the Hwy 7/404/407 area and due to the contiguous development there, the political decision was made to share a single operation and the cost of it. Because of the political nature of its set up, SCMRH is operated jointly through the Markham and Richmond Hill Boards of Trade.

Smart Commute Markham, Richmond Hill

Overview for City of Markham (as of September 2020)



Explore your options













What is Smart Commute Markham, Richmond Hill?

- Smart Commute Markham, Richmond Hill (SCMRH) is a workplace and community travel program of York Region, in partnership with the cities of Markham and Richmond Hill. We operate as a Transportation Management Association managed by the Markham and Richmond Hill Boards of Trade.
- We connect Markham and Richmond Hill workplace employees with sustainable commute options that meet their needs. In collaboration with employers, local municipalities, and partners, we deliver innovative, cost-efficient Transportation Demand Management (TDM) strategies that contribute to employer business and sustainability goals and local policy priorities.
- The Smart Commute Workplace Program has shown great success throughout the Greater Toronto and Hamilton Area (GTHA), where employees from Smart Commute workplaces drive alone nearly 19.2%* less than the average commuter.

*Source: Transportation Tomorrow Survey, 2016











TDM during COVID-19



Since the provincial government-mandated COVID-19 restrictions began in March 2020, the SCMRH team and more than 85% of our workplaces have adopted telework as the main mode of commuting.

With a significant decrease in workplace employees travelling to work, our focus has shifted from promoting commuting by carpool and public transit to providing support for working from home and encouraging active transportation when possible.

Ongoing TDM services delivery, custom webinars and TDM guides distributed to SCMRH workplaces and community since March 2020:

- Navigating the New Normal brochure and two-part webinar series
- Telework Policy Guide for Employers
- Cycling Webinar Series
- Special edition newsletter in March, offering tips for teleworking and virtual support for route planning and best practices













2020 Completed Custom TDM Projects/Programs

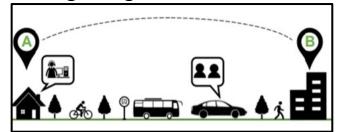
Winter Commute Week



238 individuals pledged to try a new mode of commuting.

39.4% commuted sustainably: 35% carpooled, 35% took public transit, 12% teleworked, and 7% walked.

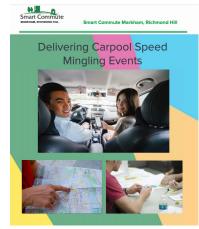
Navigating the New Normal



Guide featured tips and support on commuting sustainably during COVID-19 restrictions.

Two webinars promoted to 62 SCMRH and Board of Trade workplaces.

Carpool Mix 'n Mingle Guide



Completed June 2020

Telework Policy Guide for Employers

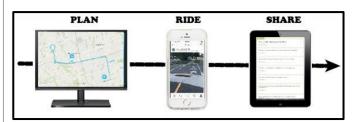
Telework Policy Guide for Employers



Smart Commute Markham, Richmond Hil

Completed July 2020

Virtual Bike Ride Campaign



Campaign encouraged commuting and recreational cycling in lieu of Bike to Work Day.

Received photo submissions and cycling tips from Markham and Richmond Hill.

Cycling Webinar Series



Eight webinars delivered to over 100 SCMRH workplace employees.

Topics included: Cycling Safety, Rules of the Road, and Cycling in York Region, featuring representative from YRT.

Internal Telework Policy Guide



Completed July 2020

Shuttle Bus Program Report

Smart Commute Markham, Richmond Hi





Currently in progress













Carpool Parking Pass Program Statistics

Metric	Total number of users in carpools	Total vehicle kilometre travel savings	Total CO2 reduced	Total commuter savings
2019 Statistics	441	3,448,109 kms	788,583 kg	\$1,213,734
2020 Statistics (as of August)	484	3,909,869 kms	894,187 kg	\$1,376,274
Percent Increase 2019 - 2020	9.8%	13%	13%	13%

Note: Statistics are based on SCMRH workplaces in Markham and Richmond Hill











Workplace and Community Engagement*

Custom TDM Workshops/Community and Workplace Outreach Events	Total
 Custom TDM Workshops and Resources CAN-BIKE sessions Cycling 101/Active Transportation Workshops Employee Commuter Options Workshops New in 2020: Cycling Webinar Series (four topics delivered to three Markham workplaces and over 85 participants) Navigating the New Normal Webinar Series Transit Options survey and outreach with YRT at WSP Thornhill Custom workplace brochures for ten Markham workplaces 	84
Workplace Hosted Events	30
 TDM Outreach Events during SCMRH Annual Campaigns New in 2020: Winter Commute Week (February), Virtual Bike Ride Campaign (June), and Design the New Normal, in partnership with SCNTV and SCCY (July-August) 	56
 Community engagement events Markham Board of Trade events Markham Mayor's Annual Luncheon and Business Address Markham Cycling and Advisory Committee meetings and Active Transportation Master Plan update webinars 	33
Total Events	203









Clockwise from top left: Lunch 'n Learn workshop at Qualcomm; Orientation Welcome Fair at Seneca College - Markham Campus; Carpool Mix 'n Mingle at Crown Property - Cochrane Drive; Transit Options survey with YRT at WSP Thornhill.

The aforementioned events occurred either in late 2019 or early 2020, prior to COVID-19 workplace restrictions.

*2019-2020 Statistics













SCMRH Workplaces















AMD



York Region





Morguard





Sheraton







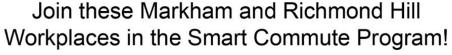
Seneca







PHILIPS















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Markham

Board of Trade











ENBRIDGE



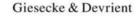












65% of Markham's top 20 employers are Smart Commute workplaces

Source: Markham Voice, 2019 Spring Issue.















Workplace Success Story: Crown Property Management

- Corporate Sponsor Workplace since 2017.
- Three property locations in Markham (Allstate Corporate Centre, 675 Cochrane Drive and 101 McNabb Street) featuring prominent corporate tenants including Allstate Insurance, General Motors, Huawei and TD Insurance.
- All three CROWN property locations in Markham have achieved a 2019 **Gold Smart Commute Workplace Designation**. Each property features electric vehicle charging stations and on-site sheltered bike parking.

 Dedicated carpool parking spaces are available at the Allstate Corporate Centre and 675 Cochrane locations whereas 101 McNabb facilitates an exclusive shuttle bus service for tenants.
- Carpool Parking Pass Program (CPPP): Crown has implemented the CPPP at Allstate Corporate Centre (2017) and 675 Cochrane (2019) with 33 registered users forming 12 carpool groups. As of August 2020, CPPP Crown tenants have saved 21 parking spaces, 527,040 vehicular kilometres travelled, reduced 120,534 kg in CO2, which has resulted in \$185,518 in commuter savings.
- **Bike Share Feasibility Study completed late 2019:** SCMRH delivered a Bike Share Feasibility Study to explore the option of implementing a bike share program at the Allstate Corporate Centre location for tenant employees. More than one third of tenant employees were interested in having the program implemented and biking during the work day.
- SCMRH hosted three on-site promotions during Earth Week for all three Crown Markham property locations and two carpool mix & mingles to promote carpool parking at Allstate Corporate Centre and 675 Cochrane.



Earth Week promotion in April 2019 at Allstate Corporate Centre.











New Workplaces: Estee Lauder Companies and Comfort Inn



Estee Lauder Companies

Markham locations: 100 Alden Road, 200 Bentley Street, and 145 Idema Road Date of signed agreement: August 2019



Comfort Inn Toronto Northeast

8330 Woodbine Avenue Date of signed agreement: February 2020

- Referred by the **City of Markham's Economic Development** department, in 2018 SCMRH provided TDM consultation to ELC's planned relocation to Hillmount Road in Markham.
- Workplace Travel Survey was conducted in November and December 2019, resulting in a 67% response rate.
- Data analysis performed and a comprehensive survey report, including TDM recommendations, was delivered to ELC in January 2020.
- **218 personalized travel plans** customized for carpoolers and public transit users to access the Hillmount Road site.
- Custom workplace brochure of sustainable commuting amenities at the Hillmount site was created and shared with all ELC employees in April 2020, which received very positive feedback.
- Custom TDM resources, webinars and virtual route planning support using the new online trip tracking tool are planned in 2020/2021 for ELC employees.

- Initial consultation phone meeting was conducted with Comfort Inn management in January 2020.
- Site is currently undergoing a redevelopment and will feature retail and commercial properties, hotels and restaurants.
- **Custom workplace brochure** of sustainable commuting amenities at the current location was created and shared with employees in June 2020.
- SCMRH plans to continue supporting redevelopment efforts in 2020 with a private network on the new online trip tracking tool.













SCMRH Workplaces

	2019	2020	Percentage Variance (2019-2020)
Total number of SCMRH workplaces*	62	62	
Number of SCMRH workplace employees**	81,091	78,037	-4%
Total number of SCMRH workplaces in Markham	42	42	
Number of SCMRH workplaces employees in Markham	60,948	58,105	-5%

^{*}In 2020, Comfort Inn Toronto Northeast joined SCMRH. Seneca College - Markham Campus started the relocation to Newnham campus throughout 2020.

^{**}Percentage decrease due to the relocation of Seneca College - Markham campus to Newnham campus, which had more employees than Comfort Inn.











Workplace TDM Programming Planned for 2021

Service/Workshop	Estimated Outreaches	Estimated Engagement
Workplace-hosted Virtual Active Transportation Challenge	4 – 5	20 - 30 participants per challenge
Commute-related Lunch 'n Learn or Webinar	3 - 5	15 – 20 employees per workplace
Custom Workplace Commuter Brochure		3 - 5 brochures
Cycling Workshop and Webinars	8 -10	15 – 20 employees per workplace
Comprehensive Survey Promotion*	2 - 3	20 – 25 employees per workplace
Online Trip Tracking Tool Webinars	5 - 8	20 - 25 employees per workplace

^{*}To be determined. Onsite outreaches and workshops may be replaced with virtual activities.











Online Trip Tracking Tool Planned for 2021

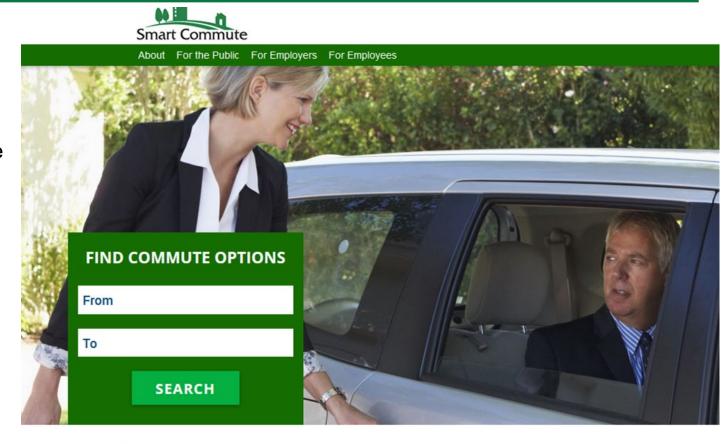
Smart Commute will be launching a new upgraded online trip **tracking tool** in a collaborated effort between the Regional Smart Commute group and all Smart Commute TMAs across the GTHA.

The new tool is more than just a carpool matching forum – it is a true travel options portal where users can instantly find information on various options to get from A to B. Included in users' search results will not only be carpool partner matches, but options for vanpools, bike, walking and transit buddy matching.

In addition to being able to explore travel options, users will also be able to log trips and receive rewards.

Users will also have the ability to find one-off single trip carpool matches or a regular carpool partner. The new tool's sophisticated matching will find passengers close to a driver's origin, destination and drive route, according to schedule and personal preferences.

Smart Commute is currently in the final stages of preparing for the launch of the new online trip tracking tool.



Find a sustainable, healthy way to commute.











Transit

Cycle

Walk

Telework













Online Trip Tracking Tool Planned for 2021



Estimated annual	new members
registered	

260 - 295

(Average based on 2019 – 2020

statistics)



Estimated annual sustainable trips logged

5,025 - 5,655

(Average based on 2019 – 2020

statistics)



Estimated annual number of registered carpoolers*

47 - 95

(Average based on 2019 – 2020)

statistics)



Estimated mode shift

*Based on the Carpool Parking Pass Program

Note: COVID-19 taken into account for estimations

1 – 1.5% decrease in SOV











Ride and Seek Campaign - September 14 to October 9, 2020



The Ride and Seek Campaign is a collaboration with Smart Commute Central York (SCCY) and Smart Commute North Toronto, Vaughan (SCNTV), with full support from York Region.

York Region workplace employees and the community are encouraged to explore the region's nine municipalities, and share photos of their bike at over 80 pre-selected landmarks between September 14 and October 9. A webinar with maps of landmarks, suggested bike routes, and cycling resources will be provided. Participants are also encouraged to submit their suggestions for increased bike parking and improvements to cycling infrastructure in Markham during the campaign. Bike parking submissions will be made available to City's staff for future planning.











Annual Campaigns Planned for 2021









Campaign	Estimated Outreaches**	Estimated Trips Logged/Participants**	Estimated Resources Provided
Winter Commute Week (February)	2-3 webinars	200 trips logged	
Bike to Work Day (Last Monday in May)	1 main event or smaller group rides*	50 participants for main event; 10 participants for smaller group rides	Deliver electronic posters/postcards to 62 SCMRH workplace
Bike Month (June)	5-10 cycling webinars; virtual trip logging challenge	150-250 trips logged	champions for internal distribution to employee population
Smart Commute Month (September)	TBD*	600-700 survey responses	

^{*}Depending on government regulations for public gatherings at the time, SCMRH will plan and deliver an event accordingly to meet safety requirements.













^{**}Due to COVID-19 restrictions, estimated numbers of participants at events are reduced. To be determined in early 2021.

Communications Planned for 2021

	Mode of Communication	Frequency/number of postings
	E-newsletter – direct workplace employees and community	Quarterly (Winter, Spring, Summer and Fall) to 3,304 SCMRH subscribers
1	Facebook, Twitter, Instagram and YouTube posts	40-45 per year Two to four videos per year
	Commuter-related blog posts	Four to six posts per year
0	Website updates (campaigns, webinars, blogs, etc)	Four to six updates per year
₩. ₩	Advisory committee meetings or electronic updates (provides feedback and guidance on TDM programming)	Four per year
<u></u>	Annual presentations to region and municipalities	As requested











Community-based and Stakeholder TDM Programming Planned for 2021

SCMRH is committed to the following in delivering custom TDM services:

- Continue to collaborate with York Region District School Board, York Catholic District School Board and York Region Health, and other Smart Commute TMAs in York Region to engage elementary and secondary school students in Markham to deliver programming (e.g., Winter Walk to School Day, Bike to School Week, iWalk to School Day)
- Liaise with advocacy and community groups that promote active transportation (e.g., Markham Cycles and mode-specific pilots)
- Work with stakeholders near rapid transit corridors, mobility hubs, or transit terminals (e.g., work with York Region Transit to highlight first and last mile infrastructure to transit hubs during Bike to Work Day)
- Partner with municipalities' economic development departments and land developers to deliver TDM services for new developments in Markham
- Continue to leverage Markham Board of Trade's member base and work with the organization to provide
 TDM Consultations and transportation solutions for large, medium and small companies











2021 Funding

Funder/sponsorship from workplaces	Amount
York Region	\$80,000
City of Markham	\$75,000
City of Richmond Hill	\$50,000
Enhanced Services/Corporate Sponsorship Estimated Enhanced Services/Corporate Sponsorship	\$3,820* \$12,650**
TOTAL	\$221,470











^{*}Pre-paid sponsorship based on multi-year agreements between 2019 and 2021.

^{**}Estimated figures to be confirmed and based on figures in the 2020 work plans.

Thank You to Our Funders, Sponsors & Partners

FUNDERS







SPONSORS











CO-MANAGED BY















Resolution

- That the presentation provided by Wincy Tsang, Manager, Smart Commute Markham, Richmond Hill Transportation Management Association (TMA) entitled "Smart Commute Markham, Richmond Hill Overview for City of Markham (as of October 2020)", be received; and,
- That staff be authorized to issue a purchase order to Smart Commute Markham, Richmond Hill for the amount of \$75,000; and,
- That the Regional Municipality of York, the City of Richmond Hill and Smart Commute Markham, Richmond Hill be advised accordingly; and,
- That staff be authorized and directed to do all things necessary to give effect to this resolution.







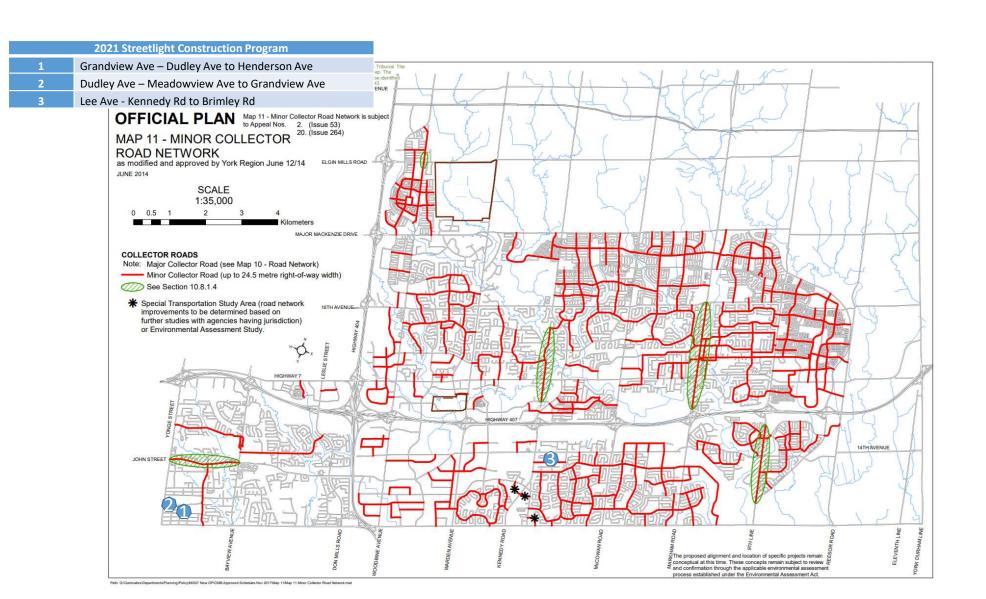




2021 PROJECT FUNDING REQUEST FORM

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21040 Number: **Project Cost:** \$497,800 Project Name: Streetlight Program (Construction) New Asset/Expansion Commission: Development Services Pre Approval: Useful Life: Department: Engineering Category: Major Project Mgr: Mark Siu Cost Validation: Recent awards CW ✓ 1 □ 2 □ 3 □ 4 □ Ward(s): Requirement Validation: Condition assessment 5 🗆 6 🗆 7 🗆 8 🗆 **DETAILED DESCRIPTION (SCOPE OF PROJECT):** To provide and enhance the lighting on streets through additional streetlights. Safe & Sustainable Community **BUILDING MARKHAM'S FUTURE TOGETHER: PROJECT COSTS (\$)** 2021 **Future Phases** Based on estimates from previous projects. Location 1) Cost/Quote: 387,200 0 Grandview - Dudley Ave to Henderson Ave, 2) Dudley Ave -Meadowview Ave to Grandview Ave, 3) Lee Ave - Kennedy RD to **Internal Charges:** 59.817 0 Brimley RD. Note that the locations are tentative and subject to **External Consulting:** 0 43,232 change based on design and site conditions. Upon Director's approval, staff to be able to revise location if required provided that Sub Total: 490,249 0 the budget is not impacted. 7,576 0 **HST Impact:** Operating impacts will be determined at the time of construction **Total Project Cost:** 497,800 0 award. SOURCE(S) OF FUNDING (\$) **Components Future Funding Type TOTAL Phases Budget** DCA 497,800 0 0 0 0 0 0 TOTAL FUNDING 497,800 0 0 Personnel Non Personnel Revenues Expenditures/(Revenues) **OPERATING BUDGET IMPACT** \$0 \$0 \$0 \$0 DCA/LIFE CYCLE DETAILS **DCA** Amount in **Life Cycle** Year Name **Amount** Study Amount in Study: Hard - Illumination - City-wide Illumination Requires 497,800 3,344,000 Amount Incl HST 3,344,000 TOTAL FUNDING 497,800 Year in the study DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:





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	2021 DDO	ECT EIM	DINC D	COLL	CT EODA	1	1 45		
<u>(Markham</u>	2021 PROJ	JING K	LQUL	LSI FUKW	Number:	21	.041		
Project Name: Various v	Project Cost:				\$45,800				
		g muauves				New A	Asset/Ex	pansion	
Commission: Development Services			Useful Life: 0 Pre Approval:						
Department: Engineering	g		-		Category: An	nual	1	•	
Project Mgr: Fion Ho			=			ner(specify in No	tes)		
Ward(s): CW ✓ 1 □ 2 □ 3 □ 4 □			Requirement Validation: Other(specify in Notes)						
	6 7 8	- 0 0\	-						
In June 2020 council directe includes Villages & Valley I and signage.	ed staff to implemen	nt temporary bike							
BUILDING MARKHAM'	S FUTURE TOG	ETHER: Safe	e & Sustainab	le Comm	unity				
PROJECT COSTS (\$)	2021	Future Phases	NOTES						
Cost/Quote:	45,000	0	Projec	Project estimates: 80 signs @ \$150 per sign = \$12K + Pavement marking (shallows) \$3K. Each project is \$15K. 3 projects = \$15K x 3 estimated at \$45K to design, manufacture and install signs.					
Internal Charges:	0	0							
External Consulting:	0	0							
Sub Total:	45,000	0							
HST Impact:	792	0							
Total Project Cost:	45,800	0							
SOURCE(S) OF FUNDING	G (\$)		(Compon	ents			Enture	
Funding Type	<u>Budget</u>					TO	<u>OTAL</u>	Future Phases	
DCA	29,770	0		0	0	0	0	0	
Non-DC Growth	16,030	0		0	0	0	0	0	
TOTAL FUNDING	45,800						0	0	
ODED ATING DUDGET I	MDA CT Pe	rsonnel Non	Personnel	Rev	enues Ex	penditures/(Rev	enues)		
OPERATING BUDGET IMPACT		\$0	\$0	0 \$0		\$0			
DCA/LIFE CYCLE DETA	AILS								
<u>DCA</u>		,	Year Am	A ount	mount in	Life Cycle			
Name Hard - Special Projects - 0	Citv Wide - Bike Lan		1 cai Ain	29,770	Study 11,325,356	Amount in Stu	dy:		
and Regional Land TOTAL FUNDING						Amount Incl HST			
				29,770	11,325,356				
DCA and/or Life Cycle	: Explain if there is	a change in the	year and/or	cost:					



21042 **Number:**

Project Name: II 404	Callagter Dagel	(Dagiew)			Project (Cost:	\$1,47	75,000
Project Name: Hwy 404		(Design)				New	Asset/E	kpansion
Commission: Developme	ent Services			U	Jseful Life:	0	Pre Aı	proval:
Department: Engineerin	g			Category:				1
Project Mgr: Marija Ilic			Cost	Validation:		rde		
Ward(s): $CW \square 1 \square$	2 ✓ 3 □ 4 □		Requirement	•			ent	
5 🗆	6 7 8		Requirement	vanuation.	Condition a	33033111	CIII	
petailed Design for Honda of Circular intersection to BUILDING MARKHAM	Blvd extension from Woodbine Ave, Ro	n the Trans Canad ad E1 — Road D t	•	pass) see attac		1 19th	Ave to R	oad D, Road
			NOTES					
ROJECT COSTS (\$)	<u>2021</u>	Future Phases		ollector Road	ls (EA) will b	e filed	by fall 2	020. Detailed
Cost/Quote:	0	24,575,520	Design is to b	oe completed	for the rema	ining s	ection of	Honda Blvd.
Internal Charges:	141,136	2,506,672						
External Consulting:	1,310,750	2,011,041						
Sub Total:	1,451,886	29,093,233						
HST Impact:	23,069	467,923						
Total Project Cost:	1,475,000	29,561,200						
OURCE(S) OF FUNDING	<u>G (\$)</u>		Compo	nents				_
unding Type	<u>Budget</u>]	TOTAL	<u>Future</u> <u>Phases</u>
CA	1,475,000	0	0	0	()	0	29,561,200
TOTAL FUNDING	1,475,000						0	29,561,200
PERATING BUDGET I	MPACT Pe	rsonnel Non I	Personnel Re	evenues	Expenditu	res/(Re	evenues)	
DI ERATING BUDGET I	WIACI	\$0	\$0	\$0		\$0		
CA/LIFE CYCLE DETA	AILS							
<u>DCA</u>				Amount in	<u>Life</u>	Cycle		
Name			ear Amount	Study	– Amou	nt in S	tudy:	
Hard - Roads - Honda Bl	vd - Extension to 19tl	n Avenue	2020 1,475,000		00 Amou	nt Incl	-	
TOTAL FUNDING			1,475,000	401,2	00			
					— Year	in the s	study	
DCA and/or Life Cycle	Explain if there is	a change in the y	ear and/or cost:					
Approved DC Backgrou	and study only inclu	ides Honda Blvd	as a collector road	d and as per	DCBS it will	be fun	ded 80%	by
developer.								

HWY 404 NORTH COLLECTOR ROADS - DESIGN

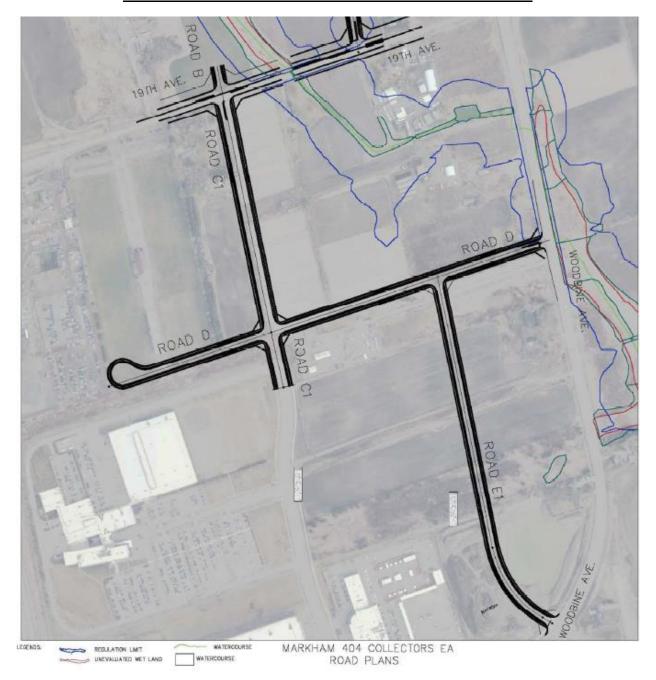


Exhibit 6-11: Recommended Collector Road Alignments



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2021 PROJECT FUNDING REQUEST FORM ARKHAM 21178 Number: **Project Cost:** \$51,800 Project Name: Traffic Operational Improvements - Annual New Asset/Expansion Commission: Development Services Pre Approval: Useful Life: Department: Engineering Category: Annual Project Mgr: David Porretta Cost Validation: Internal peer review CW ✓ 1 □ 2 □ 3 □ 4 □ Ward(s): Requirement Validation: Condition assessment **DETAILED DESCRIPTION (SCOPE OF PROJECT):** This project accommodated ad-hoc initiatives and requests that arise throughout the year from staff, residents or Council to improve traffic operations and safety for all users of the City's transportation network. Improvements include sign and traffic control devices, pavement markings for roadways and cycling facilities, and minor concrete and asphalt civil works to address and/or enhance pedestrians and cyclist safety. **BUILDING MARKHAM'S FUTURE TOGETHER:** Safe & Sustainable Community **NOTES PROJECT COSTS (\$) 2021 Future Phases** Budget request includes traffic control signs/devices/equipment Cost/Ouote: 50,904 0 (\$20k); road/cycling pavement markings (\$15k), minor concrete/asphalt civil works (\$15k). **Internal Charges:** 0 0 **External Consulting:** 0 0 Sub Total: 50,904 0 896 **HST Impact:** 0 **Total Project Cost:** 51,800 0 SOURCE(S) OF FUNDING (\$) **Components Future Funding Type TOTAL Phases Budget** 0 0 0 0 Tax 0 0 51.800 **TOTAL FUNDING** 51,800 0 0 Expenditures/(Revenues) Personnel Non Personnel Revenues OPERATING BUDGET IMPACT \$0 \$15,000 \$0 \$15,000 **DCA/LIFE CYCLE DETAILS DCA** Amount in Life Cycle Year **Amount** Study Name 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:



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2021 PROJECT FUNDING REQUEST FORM 21043 **Number: Project Cost:** \$101,800

A consultant will be hired to assist with refresh of City's Diversity Action Plan - a strategic action that is endorsed in this Council term's trategic plan. The consultant will work with staff to: consult with internal/external stakeholders; analyze key comparators/relevant lata/consultation results; formulate recommendations; draft final documents, reports and presentations. Construction Construction	Diversity						
Department: Human Resources Froject Mgr: Mona Nazif Category: Major Cost Validation: Other(specify in Notes)			1esii			Studies/Pilot F	Programs
Department: Human Resources					Useful Life:	0 Pre Ap	proval:
Ward(s):				Category		r	r
Requirement Validation: Other(specify in Notes) PETAILED DESCRIPTION (SCOPE OF PROJECT): A consultant will be hired to assist with refresh of City's Diversity Action Plan - a strategic action that is endorsed in this Council term's trategic plan. The consultant will work with staff to: consult with internal/external stakeholders; analyze key comparators/relevant ata/consultation results; formulate recommendations; draft final documents, reports and presentations. BUILDING MARKHAM'S FUTURE TOGETHER: Engaged, Diverse & Thriving City PROJECT COSTS (\$) 2021						fy in Notes)	
DETAILED DESCRIPTION (SCOPE OF PROJECT): A consultant will be hired to assist with refresh of City's Diversity Action Plan - a strategic action that is endorsed in this Council term's trategic plan. The consultant will work with staff to: consult with internal/external stakeholders; analyze key comparators/relevant ata/consultation results; formulate recommendations; draft final documents, reports and presentations. BUILDING MARKHAM'S FUTURE TOGETHER: Engaged, Diverse & Thriving City	Ward(s): $CW \boxed{\bullet} 1$	2 3 4 4				· · · · · · · · · · · · · · · · · · ·	
Acconsultant will be hired to assist with refresh of City's Diversity Action Plan - a strategic action that is endorsed in this Council term's trategic plan. The consultant will work with staff to: consult with internal/external stakeholders; analyze key comparators/relevant ata/consultation results; formulate recommendations; draft final documents, reports and presentations. PROJECT COSTS (\$)	5 🗆	□ 6□ 7□ 8□		Requirement vandation	. Other(speci	Ty III (voices)	
trategic plan. The consultant will work with staff to: consult with internal/external stakeholders; analyze key comparators/relevant ata/consultation results; formulate recommendations; draft final documents, reports and presentations. BUILDING MARKHAM'S FUTURE TOGETHER:	DETAILED DESCRIPTION	ON (SCOPE OF P	ROJECT):				
PROJECT COSTS (\$) 2021 Future Phases It is anticipated that this project will take approximately 18 months or less. Budget is estimated with reference to a variety of internal strategic plans, such as the original Diversity Action Plan, ILMP Refersh, Older Adult Strategy Plan and Markham Municipal Energy Plan- Getting to Zero strategic plan development. The original Diversity Action Plan was for 2010 to 2019. Total Project Cost:	trategic plan. The consulta lata/consultation results; fo	ant will work with s rmulate recommend	taff to: consult with lations; draft final d	internal/external stakehold locuments, reports and pres	ders; analyze k		
It is anticipated that this project will take approximately 18 months or less. Budget is estimated with reference to a variety of internal roles. Budget is estimated with reference to a variety of internal or less. Budget is estimated with reference to a variety of internal roles. Budget is estimated with reference to a variety of internal strategic plans, such as the original Diversity Action Plan, ILMP Refresh, Older Adult Strategy Plan and Markham Municipal Energy Plan- Getting to Zero strategic plan development. The original Diversity Action Plan was for 2010 to 2019. Total project and \$25k funded from this project anticipated to cost \$125k, \$100k will be funded from this project and \$25k funded from the 2021 operating budget. OURCE(S) OF FUNDING (\$)	BUILDING MARKHAM	'S FUTURE TOG	ETHER: Engage	d, Diverse & Thriving City			
Cost/Quote: 100,000	PROJECT COSTS (\$)	2021	Future Phases				
Internal Charges: 0				*	1 0		•
External Consulting:	_						
Sub Total: 100,000	-	•					
HST Impact: 1,760 101,800							
Total Project Cost: 101,800							
Components Future Phases	= -	<u> </u>					
Non Personnel Non Personnel Study Stud	Total Project Cost.	101,800					
Name Budget TOTAL Phases Part Phases Phases Part Phases Part Phases Part P	OURCE(S) OF FUNDIN	G (\$)		Components			
TOTAL FUNDING 101,800 Personnel Non Personnel Revenues \$\ \sqrt{\text{Expenditures}/(Revenues)}\$ \$\sqrt{\text{SO}}\$ \$\ \sqrt{\text{SO}}\$ \$\ \sqrt{\text{SO}}\$ \$\ \text{SO}\$ \$\ \text{SO}\$ CCA/LIFE CYCLE DETAILS DCA \ \ \text{Name} \text{Year } \ \text{Amount in Study: } \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	unding Type	Budget				TOTAL	
Personnel Non Personnel Revenues Expenditures/(Revenues) \$0 \$0 \$0 \$0 CCA/LIFE CYCLE DETAILS DCA Name Year Amount Study Amount in Study: Amount Incl HST Year in the study	ax	101,800	0	0 0	() 0	0
Personnel Non Personnel Revenues Expenditures/(Revenues) \$0 \$0 \$0 \$0 CCA/LIFE CYCLE DETAILS DCA Name Year Amount Study Amount in Study: Amount Incl HST Year in the study	TOTAL FUNDING	101.800					
SO SO SO SO SO SO SO SO	TOTALLICATION						
\$0							
DCA/LIFE CYCLE DETAILS DCA Name Year Amount Study Amount in Study: Amount Incl HST Year in the study Year in the study		Pe	rsonnel Non Pe	ersonnel Revenues	Expenditu	res/(Revenues)	
DCA Amount in Year Amount Study Life Cycle Name Year Amount in Study: Amount in Study: Amount Incl HST Year in the study	OPERATING BUDGET	IMPACT Pe			Expenditu		
Name Year Amount Study Amount in Study: Amount Incl HST Year in the study		IMPACT			Expenditu		
Amount Incl HST Year in the study	OCA/LIFE CYCLE DETA	IMPACT		50 \$0		\$0	
Year in the study	DCA/LIFE CYCLE DETA DCA	IMPACT	\$0 \$	Amount in	ı <u>Life</u>	\$0 Cycle	
	DCA/LIFE CYCLE DETA DCA	IMPACT	\$0 \$	Amount in	n <u>Life</u> — Amou	\$0 Cycle Int in Study:	
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:	DCA/LIFE CYCLE DETA DCA	IMPACT	\$0 \$	Amount in	n <u>Life</u> — Amou	\$0 Cycle Int in Study: Int Incl HST	
	DCA/LIFE CYCLE DETA DCA	IMPACT	\$0 \$	Amount in	n <u>Life</u> — Amou	\$0 Cycle Int in Study: Int Incl HST	
	DCA/LIFE CYCLE DETA DCA Name	AILS	\$0 \$ Yes	Amount ir ar Amount Study	n <u>Life</u> — Amou	\$0 Cycle Int in Study: Int Incl HST	
	DCA/LIFE CYCLE DETA DCA Name	AILS	\$0 \$ Yes	Amount ir ar Amount Study	n <u>Life</u> — Amou	\$0 Cycle Int in Study: Int Incl HST	
	DCA/LIFE CYCLE DETA DCA Name	AILS	\$0 \$ Yes	Amount ir ar Amount Study	n <u>Life</u> — Amou	\$0 Cycle Int in Study: Int Incl HST	
	DCA/LIFE CYCLE DETA DCA Name	AILS	\$0 \$ Yes	Amount ir ar Amount Study	n <u>Life</u> — Amou	\$0 Cycle Int in Study: Int Incl HST	
	DCA/LIFE CYCLE DETA DCA Name	AILS	\$0 \$ Yes	Amount ir ar Amount Study	n <u>Life</u> — Amou	\$0 Cycle Int in Study: Int Incl HST	



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Number:	21044
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Proiect Name:	ITS Life Cycle Asset Replacement		Project (Cost:	\$1,739,900
	<u> </u>			Repa	ir/Replace
	Corporate Services	Ţ	Useful Life:	6	Pre Approval:
Department: Project Mgr:		Category:	Major		
, ,		Cost Validation:	Recent awa	rds	
ward(s).		Requirement Validation:	Documentat	tion of l	ife cycle years

DETAILED DESCRIPTION (SCOPE OF PROJECT):

This project is to replace IT hardware and software assets that are due for replacement based on condition assessment. Some of the assets have been discontinued by Manufacturer and replacement is required in order to avoid any service interruptions.

BUILDING MARKHAM'S FUTURE TOGETHER:

Exceptional Services by Exceptional People

PROJECT COSTS (\$)	<u>2021</u>	Future Phases
Cost/Quote:	1,611,496	0
Internal Charges:	100,000	0
External Consulting:	0	0
Sub Total:	1,711,496	0
HST Impact:	28,362	0
Total Project Cost:	1,739,900	0

NOTES

The request includes replacement of the following:

1. Data Centre Core Network Switches, 2. Data Centre Server Hardware and Storage System (for Data Backup), 3. IT Infrastructure Vulnerability Assessment, 4. Smartphones Replacement, 5. Internal Charges - Staff for Project Resources The \$55,000 operating budget impact is for additional HW and SW mainteance expenses.

For details, see supporting document.

SOURCE(S) OF FUNDING	(\$)	Components					
Funding Type	Budget					TOTAL	<u>Future</u> <u>Phases</u>
Building Fees	104,400	0	0	0	0	0	0
Development Fees	139,200	0	0	0	0	0	0
Operating Funded Life Cycle	1,391,900	0	0	0	0	0	0
Waterworks	104,400	0	0	0	0	0	0
TOTAL FUNDING	1,739,900				=	0	0

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)	
OI EXAMINO DEDGET IVII MET	\$0	\$55,000	\$0	\$55,000	

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DCA/LIFE CYCLE DETAILS

<u>DCA</u>	Amount in	<u>Life Cycle</u>
Name	Year Amount Study	Amount in Study: 3,281,500
		Amount Incl HST 1,391,900
		Year in the study
DCA and/or Life Cycle: Explain if there is a	a change in the year and/or cost:	
· · · · · · · · · · · · · · · · · · ·	e Reserve Study due to assessment of 2021 res nanges in project priorization and condition ass	1 , 1
delayed implementation of 2020 projects, ch	8 F3 F	essincitis.
delayed implementation of 2020 projects, ch		essments.
delayed implementation of 2020 projects, ch		essments.

DETAILS FOR CAPITAL PROJECT IT LIFECYCLE ASSET REPLACEMENT

				Source of Funding				
ltem	Quantity	Total Costs	Life Cycle	Water Works	Building	Engineering	Planning	
2021 IT Lifecy			ment					
Datacentre Core Network Switch Replacement. Replacement of 8+ years old Primary and Secondary Data Centre Core Network switches. The switches are critical hardware that could have major services outage	237	\$836,000	\$668,800	\$50,160	\$50,160	\$33,440	\$33,44	
impact. Covering existing hardware under maintenance services contract will incur additional operating budget impact. In addition, these switches do not allow us to implement enhanced security control and are identified as high Cyber Security Risk. The Total cost includes hardware, required licenses and Professional services for Implementation and operating budget impact								
2 Data Centre Server Hardware and Storage System (for Data Backup) Replacement:	1	\$693,496	\$554,797	\$41,610	\$41,610	\$27,740	\$27,7	
 Replacement of 7+ years old backup Disk Storage System in both Primary and Backup data centre is needed in order to obtain extended support and maintenance services on these hardware. If the equipment is not replaced, the City could incur significant costs for extended support and maintenance services. In addition, disk usage on these storage system has continued to increase. The lack of sufficient free disk space will cause backup failure. Primary and Secondary Data Centre Server hardware are 8+ years old. The hardware are listed as end of life by Manufacturer, incurring significant costs to cover the hardware on Warranty and Maintenance. 								
Total cost includes server hardware, disk storage system, software, user licenses and Implementation. 3 IT Infrastructure Vulnerability Assessment Conduct a comprehensive Vulnerability Assessment exercise on the City Network to find	1	\$55,000	\$44,000	\$3,300	\$3,300	\$2,200	\$2,2	
deficiencies as a result of new risks and vulnerabilities being introduced when new IT system are added to the network and in the view of more intrusive cyber attacks. In addition, the Auditor had recommended that the city should conduct these assessments on a regular basis. Last vulnerability assessment was conducted in year 2016.								
4 City Wide Smartphone Replacement	135	\$27,000	\$21,600	\$1,620	\$1,620	\$1,080	\$1,0	
Lifecycle replacement of 20% of corporate smartphones. Mainly due to wear and tear related issues such as degrading battery life.								
5 Internal Charges - 1 Staff for Project Resources This resource is required in order to implement IT Capital Projects		\$ 100,000	80,000	6,000	6,000	4,000	4,00	
Total		\$1,711,496	\$1,369,197	\$102,690	\$102,690	\$68,460	\$68,46	
-								
HST Impact	1.76%	\$28,362	\$22,690	\$1,702	\$1,702	\$1,134	\$1,13	



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21045 **Number: Project Cost:** \$122,100 Project Name: Development Charges Background Study Studies/Pilot Programs Commission: Corporate Services

Pre Approval: Useful Life: Department: Finance Category: Minor Project Mgr: Kevin Ross Cost Validation: Third party estimate Ward(s): CW ✓ 1 □ 2 □ 3 □ 4 □ Requirement Validation: Legislative compliance

DETAILED DESCRIPTION (SCOPE OF PROJECT):

To commence a Development Charges Background Study for the Hard Services, Soft Services and Area Specific Development Charge by-laws prior to the expiration of the current by-laws. Development charges by-laws expire after 5 years.

BUILDING MARKHAM'S FUTURE TOGETHER:

Stewardship of Money & Resources

PROJECT COSTS (\$)	<u>2021</u>	Future Phases
Cost/Quote:	120,000	0
Internal Charges:	0	0
External Consulting:	0	0
Sub Total:	120,000	0
HST Impact:	2,112	0
Total Project Cost:	122,100	0

NOTES

In accordance with the Development Charges Act, 1997 new development charge by-laws must be enacted every 5 years. The City's current Hard Services, Soft Services and Area Specific bylaws will expire in December 2022.

SOURCE(S) OF FUNDING	Components					E4	
Funding Type	<u>Budget</u>					TOTAL	<u>Future</u> <u>Phases</u>
DCA	109,890	0	0	0	0	0	0
Non-DC Growth	12,210	0	0	0	0	0	0
TOTAL FUNDING	122,100				=	0	0

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)	
OI EMITTING DED GET TIMETE	\$0	\$0	\$0	\$0	

	\$0	\$0	\$0	\$0	
DCA/LIFE CYCLE DETAILS					
<u>DCA</u>			Amount in	<u>Life Cycle</u>	
Name		Year Amor			
				Amount in Study:	
				Amount Incl HST	
				Year in the study	
DCA and/or Life Cycle: Explain in	f there is a change	in the year and/or co	ost:		



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21046 Number: **Project Cost:** \$943,700 Project Name: Internal Project Management Studies/Pilot Programs Commission: Corporate Services Pre Approval: Useful Life: Department: Finance Category: Annual Project Mgr: Kevin Ross/Graham Seaman Cost Validation: Other(specify in Notes) CW ✓ 1 □ 2 □ 3 □ 4 □ Ward(s): Requirement Validation: Other(specify in Notes) 5 🗆 6 🗆 7 🗆 8 🗆 **DETAILED DESCRIPTION (SCOPE OF PROJECT):** Project to allocate internal resource costs to Development Charges associated with the administration and procurement management aspects of capital growth. This project represents 90% of the total costs and the remaining 10% will be funded from the Operating Budget. **BUILDING MARKHAM'S FUTURE TOGETHER:** NOTES **PROJECT COSTS (\$)** 2021 **Future Phases** Requirement validation: Internal resource costs of 10 staff Cost/Quote: 0 0 associated with capital growth (development charges) projects. 943,700 **Internal Charges:** 0 **External Consulting:** 0 0 Sub Total: 943,700 0 0 **HST Impact:** 0 **Total Project Cost:** 943,700 0 SOURCE(S) OF FUNDING (\$) **Components Future Funding Type TOTAL Phases Budget** DCA 943,700 0 0 0 0 0 0 TOTAL FUNDING 943,700 0 0 Personnel Non Personnel Revenues Expenditures/(Revenues) **OPERATING BUDGET IMPACT** \$0 \$0 \$0 \$0 DCA/LIFE CYCLE DETAILS **DCA** Amount in **Life Cycle** Year Name **Amount** Study 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:



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21047 **Number: Project Cost:** \$149,800

Project Name:	Building Condition Audit - FTE				. , , , , , , , ,
3				Studi	es/Pilot Programs
Commission:	Corporate Services		seful Life:	1	Pre Approval:
Department:	Asset Management			1	Tie Approvai.
Project Mgr:	Atiq Rahman	Category:	Annual		
Ward(s):	CW ✓ 1□ 2□ 3□ 4□	Cost Validation:	Internal pee	r reviev	v
ward(s).		Requirement Validation:	Other(specif	fy in No	otes)
	5 □ 6 □ 7 □ 8 □	-	` •		

DETAILED DESCRIPTION (SCOPE OF PROJECT):

This is a recovery for a Facility Engineering position. The building audit program aims to audit approximately 200,000 sq. ft facility every year, with plan to audit all of 2 million sq. ft facility porfolio once every 10 years. These audits are required to create and update life cycle inventories and replacement plans for each building. Approximately 800,000 sq. ft facility was audited in last 3 years. Staff identified that using an internal staff position is more cost effective than outsourcing the same work as this position is able to complete other projects and services as needed.

BUILDING MARKHAM'S FUTURE TOGETHER:

Exceptional Services by Exceptional People

PROJECT COSTS (\$)	<u>2021</u>	Future Phases
Cost/Quote:	149,800	0
Internal Charges:	0	0
External Consulting:	0	0
Sub Total:	149,800	0
HST Impact:	0	0
Total Project Cost:	149,800	0

NOTES \$149,800 - Salary Recovery for one Senior Facility Engineer. Amount is consistent with the 2020 Life Cycle Reserve Study update.

SOURCE(S) OF FUNDING (\$)		Components						
Funding Type	<u>Budget</u>	Salary Recovery				TOTAL	<u>Future</u> <u>Phases</u>	
Operating Funded Life Cycle	149,800	149,800	0	0	0	149,800	0	
TOTAL FUNDING	149,800				- =	149,800	0	

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

DCA/LIFE CYCLE DETAILS

DCA			Amount in	Life Cycle	
Name	Year	Year Amount	Study	Amount in Study:	1,462,100
				Amount Incl HST	149,800
				Year in the study	2021
DCA and/or Life Cycle: Explain if there is a change	e in the year a	nd/or cost:			



Page 164 of **5**38

2021 PROJECT FUNDING REQUEST FORM ARKHAM 21048 Number: **Project Cost:** \$366,900 Project Name: Civic Centre Repair and/or Replacement Projects Repair/Replace Commission: Corporate Services Pre Approval: Useful Life: Department: Asset Management Category: Major Project Mgr: Jason Ramsaran Cost Validation: Published guidelines CW □ 1□ 2 ✓ 3□ 4□ Ward(s): Requirement Validation: Condition assessment 5 🗆 6 🗆 7 🗆 8 🗆 **DETAILED DESCRIPTION (SCOPE OF PROJECT):** Program includes various life cycle works to maintain the Civic Centre Facility in a state of good repair and in alignment to the Asset Management Plan/Policy, Items for replacement in the Budget year will be determined in the previous year, upon completion of annual condition assessment. Funding request is based on historical budgets, life cycle database and trending. Budget request is subject to change, based on condition assessment in previous year. **BUILDING MARKHAM'S FUTURE TOGETHER:** Exceptional Services by Exceptional People NOTES **PROJECT COSTS (\$)** 2021 **Future Phases** \$243,100 - Flooring/carpet for various areas Cost/Ouote: 360,588 0 \$7,500 -Kitchen equipments \$81,600 - Exterior bollards (1990) and railings (2006) **Internal Charges:** 0 0 \$34,700 - Mechanical (pumps, plumbing, building equipments) **External Consulting:** 0 0 Sub Total: 360,588 0 **HST Impact:** 6,346 0 **Total Project Cost:** 366,900 0 SOURCE(S) OF FUNDING (\$) **Components Future Funding Type** Flooring and Furniture and Exterior Site Features Mechanical TOTAL **Phases Budget** Operating Funded Life Cycle 0 366,900 243,100 7.500 81,600 34,700 366,900 TOTAL FUNDING 366,900 366,900 0 Personnel Non Personnel Revenues Expenditures/(Revenues) **OPERATING BUDGET IMPACT** \$0 \$0 \$0 \$0 DCA/LIFE CYCLE DETAILS **DCA** Amount in Life Cvcle Year **Amount** Study Name Amount in Study: 868,800 366,900 Amount Incl HST Year in the study 2021 DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:

Page 166 d 53

Number:	21050

Project Cost: \$1,996,800 Project Name: Cornell C.C. Parking Garage - Construction Repair/Replace Commission: Corporate Services Pre Approval: Useful Life: 25 Department: Asset Management Category: Major Project Mgr: Dana Honsberger Cost Validation: Third party estimate Ward(s): Requirement Validation: Condition assessment 5 ✓ 6 □ 7 □ 8 □ **DETAILED DESCRIPTION (SCOPE OF PROJECT):** This multiyear project is to address significant leaks at the Cornell C.C. parking garage. Phase 1 includes an engineering investigation to determine the best solution to address ongoing structural and maintenance issues. Phase 1 also included design work for the structure. Phase 2 will be on-going structrual and maintenance repairs, and solution to the P3 deck coating. Safe & Sustainable Community **BUILDING MARKHAM'S FUTURE TOGETHER: PROJECT COSTS (\$)** 2021 **Future Phases** Due to space and parking limitations, Cornell C.C. has a 3 storey Cost/Ouote: 1,865,392 0 parking structure that support users visiting the community centre. In 2018, the parking garage experienced significant leaks along the **Internal Charges:** 87,400 0 existing joints in its precast concrete panels and the garage also had **External Consulting:** 11,000 0 significant damage to the traffic topping at the P3 level. This project includes two phases; design and construction. Cost Sub Total: 1,963,792 0 estimates are preliminary and may change. 0 **HST Impact:** 33,024 **Total Project Cost:** 1,996,800 0 SOURCE(S) OF FUNDING (\$) **Components Future Funding Type** Cost Chargeback Consulting **HST**TOTAL **Phases Budget** Carry Forward 119,000 5,209 656 0 111,167 1,968 119,000 DCA 782,704 731.189 34,259 4.311 12,945 782,704 Tax 1,095,096 1,023,020 47,932 6.033 1,095,096 0 18,111 TOTAL FUNDING 1,996,800 1,996,800 0 **Personnel** Non Personnel Revenues Expenditures/(Revenues) OPERATING BUDGET IMPACT \$0 \$0 \$0 \$0 **DCA/LIFE CYCLE DETAILS DCA** Amount in **Life Cycle** Year **Amount** Study Name 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:



Cornell C.C. Parking Garage Rehabilitation

August 21, 2020





Agenda

- Background
- Current Conditions
- Required Repairs
- Proposed Solutions
- Recommendation
- 2020 Budget and Scope
- Moving Forward (2020 and 2021 Budget)
- Future Maintenance and Repairs Table





Background

- Cornell Parking Garage was constructed in 2012
- Parking spaces 305
- Average daily usage in 2019 was approximately 877 vehicles.
- Original construction cost was approximately \$10,000,000.







Current Condition

- The traffic topping on the P3 level is damaged causing leaks along the precast concrete beams with metal connectors.
- This allows salt to penetrate into the concrete causing deterioration, and water to penetrate which freezes and thaws causing concrete to potentially spall
- Engineering assessments (by consultants specializing in parking garages)
 done in 2019 confirm:
 - Structural integrity has not been compromised
 - Garage is in serviceable condition
 - Deterioration of topping & vertical elements are generally in line with the age of the structure
 - Condition of the garage does not pose an immediate risk with respect to structural safety



Required Repairs

The parking structure is in need of maintenance & repair due to wear and tear from vehicles, rain, snow, snow removal operations, de-icing chemicals, and abrasion from sand and other materials tracked in

Waterproofing

- Damage is accelerated and heightened due to type of topping we currently have.
- The original control joint sealant material is no longer elastic and is contributing to widespread water leakage and chloride contamination.
- The P3 level traffic deck coating is no longer waterproof and is affecting the topping below.



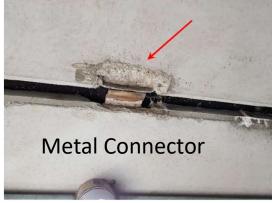


Required Repairs

Structural Repairs

- Structural deterioration is mainly limited to a few precast concrete beams with metal connectors between them. This deterioration is related to corrosion from ongoing leaks.
- Precast wall panel deterioration has allowed water to penetrated the thin brick veneer causing it to crack and loosen.











Total Cost of Annual Ownership Model

- Solution Implementation Cost = capital cost as approved by Council
- Life Cycle Costs over 60 yrs (A) = cost to replace component (B)
- Maintenance/Repairs over 60 yrs = cost which includes: chipping/repairing concrete, deck coating repairs, control joint sealant repair, concrete panel repairs with brick, etc. (c)
- Cost per year after construction = **total cost of annual ownership**(Life Cycle Costs over 60 yrs + Maintenance/Repairs over 60 yrs) / 60yrs (B+C)/A



BUILDING MARKHAM'S FUTURE TOGETHER 2020 – 2023 Strategic Plan



Proposed Solutions

Options	Description	Cost (includes 1% yearly inflation)
1) New Precast Parking Level w/ Heated Deck	Add another precast parking level with a heated deck to help melt ice and snow. Requires extension of existing stairwells and elevator.	 Construction Cost = \$4,826,000 Life Cycle Costs over 60 yrs (A) =\$24,063,964(B) Maintenance/Repairs over 60 yrs = \$7,596,699(C) Cost per year after construction = \$527,678(B+C)/A
2) Steel Roof Structure	Addition of a steel roof structure that incorporates a standard roof, roofing membrane that covers the surface of the roof.	 Construction Cost = \$2,199,500 Life Cycle Costs over 60 yrs (A) =\$15,550,015(B) Maintenance/Repairs over 60 yrs = \$7,814,703(C) Cost per year after construction = \$389,412 (B+C)/A



BUILDING MARKHAM'S FUTURE TOGETHER 2020 – 2023 Strategic Plan



Options	Description	Cost (includes 1% yearly inflation)
3) Steel Roof Structure w/ Metal Roof and Solar Panels	Add a steel roof structure over the P3 level that will support a full solar array field.	 Construction Cost = \$3,590,000 Life Cycle Costs over 60 yrs (A) =\$24,999,563(B) Maintenance/Repairs over 60 yrs = \$9,627,729(C) Cost per year after construction = \$577,122(B+C)/A
4) Replace existing traffic deck coating with like for like	Replaces deteriorated patches of P3 deck coating with similar coating. Doesn't withstand plow abrasion.	 Construction Cost = \$530,000 Life Cycle Costs over 60 yrs (A) =\$11,554,191(B) Maintenance/Repairs over 60 yrs = \$6,530,116(C) Cost per year after construction = \$301,405 (B+C)/A
5) Methyl Methacrylate Traffic Deck Coating Recommended	Involves replacing existing P3 deck coating with new system that is more durable against snow plow use.	 Construction Cost = \$1,230,000 Life Cycle Costs over 60 yrs (A) =\$9,576,587 (B) Maintenance/Repairs over 60 yrs = \$6,457,448(C) Cost per year after construction = \$267,234(B+C)/A



Recommendation

The methyl methacrylate traffic deck coating is recommended due to:

- Lowest annual total cost of ownership
- Replacement of this coating occurs every 14 years minimizing shut down time of the facility
- Cure time of this product is faster, again minimizing the shut down time of the facility
- This product is considered more durable than the current traffic deck coating
- Option involves completely removing the existing traffic deck coating system and installing a new system that is more durable and intended for snow plow use.





2020 Budget & Scope

- Budget Request \$249,000
 - 1. Allocated for engineering investigations to determine the best solution to address ongoing structural issues
 - 2. Design of the recommended solution
- To date **\$61,018** has been spent on engineering investigation and loose concrete and loose brick removal.
- \$68,600 allocated to retain consultant, design, tender documents.
- Budget Remaining = \$119,000 reduce current account #20117 by this amount and carry forward into 2021 project





Moving Forward

2021 Construction & Repairs

Project Funding Request = \$1,996,816 with HST Impact

Cost of Project - \$1,748,450

Internal Charges - \$87,400

External Consulting - \$11,000

Carry Forward - \$119,000 precast panel repair

- 3-4 months Construction emphasis on minimizing disruption to facility
- Top deck will be closed for parking during new topping/surface construction
- No permit required





Future Maintenance & Repairs (Continuity Table)

(As per Consultant Estimates)

Wards Harra	Short Term Repairs				Long Term Repairs						
Work Item	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
P3 Traffic Deck Coating Replacement		\$1,200,000									
Precast Wall Panel Targeted Repairs		\$224,500									
Precast Wall Panel Over Cladding					\$400,000						
Precast Wall Panel Loose Brick Removals	\$50,000	\$10,000	\$10,000	\$10,000							
Loose Overhead Concrete Removal	\$15,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000
Control Joint Sealant Replacement		\$150,000				\$15,000			\$15,000		
Structural Repairs for Precast Double-Tee Connectors and Structural Connectors		\$80,000				\$50,000			\$30,000		
P2 Traffic Deck Coating Repairs		\$5,000		\$10,000		\$280,000					
P3 Traffic Deck Coating Repairs									\$110,000		
Miscellaneous Repairs Allowance			\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000
Capital Costs		\$1,424,500			\$400,000						
Operation Costs	\$65,000	\$255,000	\$25,000	\$35,000	\$15,000	\$360,000	\$15,000	\$15,000	\$170,000	\$15,000	\$15,000
Total	\$65,000	\$1,679,500	\$25,000	\$35,000	\$415,000	\$360,000	15,000	\$15,000	\$170,000	\$15,000	\$15,000



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2021 PROJECT FUNDING REQUEST FORM 21051 Number: \$584.400

	. C	4: ama 0 C4	. II 3		Project C	ost:	\$584,40	00
Project Name: Corporat		uons & Systen	n ∪pgrades			Repair/R	eplace	
Commission: Corporate S				U	seful Life:	7 P	re Appro	val: 🗆
Department: Asset Man	**			Category:	Major			
Project Mgr: Eric Lizott			Cos	st Validation:		review		
	2 3 4 4			t Validation:			;	
	6□ 7□ 8□		1.	-		<u> </u>		
ETAILED DESCRIPTION	· · · · · · · · · · · · · · · · · · ·							
anding required to comple 8. This program typically ining. Funding request in	includes security a	udits, access cont	rol, CCTV, gate	s, policy prote	ocol and proc			
UILDING MARKHAM	'S FUTURE TOGE	ETHER: Safe	& Sustainable Cor	nmunity				
ROJECT COSTS (\$)	<u>2021</u>	Future Phases	NOTES	City Wide Sec	unity & Systa	m Unarad	as EC 9	100
Cost/Quote:	514,190	0		llery, Ops Yai				
Internal Charges:	61,200	0	other location					
External Consulting:	0	0		arkham Muse appurtenance				
Sub Total:	575,390	0		e may be adju				
HST Impact:	9,050	0	corporate se	curity policy,	standards, gu	idelines ar	nd goals.	Staff a
Total Project Cost:	584,400	0	expecting ar findings from	increasing tr		y expendit	ures base	ed on
					isiiiianii			
	G (h)				isuitant.			
URCE(S) OF FUNDING	G (\$)		Comp		isuitant.			'uture
	G (\$) Budget	Security Operations & System Upgrades				TOT		uture Phases
nding Type			Comp	onents		TOT 584,4	AL I	
erating Funded Life Cycle	Budget	& System Upgrades	Comp Internal Chargeback	onents Markham Muse	um		00	<u>Phases</u>
erating Funded Life Cycle	584,400 584,400	& System Upgrades 497,800	Comp Internal Chargeback 61,200	onents Markham Muse	um	584,4 	00 -	
erating Funded Life Cycle COTAL FUNDING	8udget 584,400 584,400 Per	& System Upgrades 497,800	Comp Internal Chargeback 61,200	Markham Muse 25,400	um 0 Expenditure	584,4 	00 -	<u>Phases</u>
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erating Funded Life Cycle COTAL FUNDING PERATING BUDGET I	584,400 584,400 Per	& System Upgrades 497,800 sonnel Non F	Comp Internal Chargeback 61,200 Personnel R \$0	Markham Muse 25,400 evenues \$0 Amount in	um 0 Expenditure	584,4 584,4 es/(Reven	00 -	<u>Phases</u>
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nding Type erating Funded Life Cycle FOTAL FUNDING PERATING BUDGET I CA/LIFE CYCLE DETA DCA	584,400 584,400 Per	& System Upgrades 497,800 sonnel Non F	Comp Internal Chargeback 61,200 Personnel R \$0	Markham Muse 25,400 evenues \$0 Amount in	Expenditure Life (584,4 584,4 584,6 es/(Reven	00 00 00 00 00 00 00 00	2,100
nding Type erating Funded Life Cycle FOTAL FUNDING PERATING BUDGET I CA/LIFE CYCLE DETA DCA	584,400 584,400 Per	& System Upgrades 497,800 sonnel Non F	Comp Internal Chargeback 61,200 Personnel R \$0	Markham Muse 25,400 evenues \$0 Amount in	Expenditure Life (Amoun	584,4 584,4 es/(Reven \$0	100 = 1,46 = 58	Phases



Before

After





High definition view, clearly see faces and actions

BUILDING MARKHAM'S FUTURE TOGETHER 2020 – 2023 Strategic Plan



Before



After



Clear labels, all cameras working, visible from Civic Centre



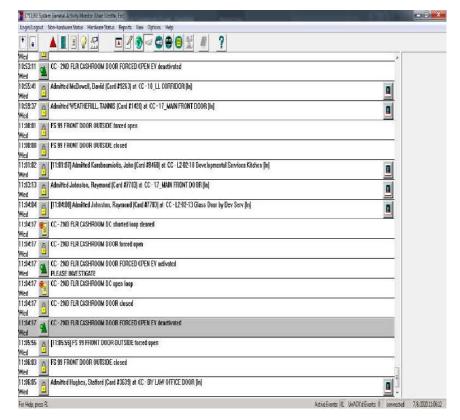
BUILDING MARKHAM'S FUTURE TOGETHER ■ 2020 – 2023 Strategic Plan

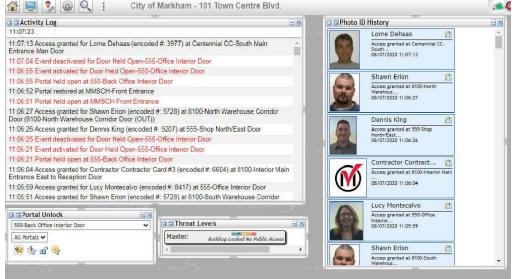


C-Cure to S2 upgrade

Before

After

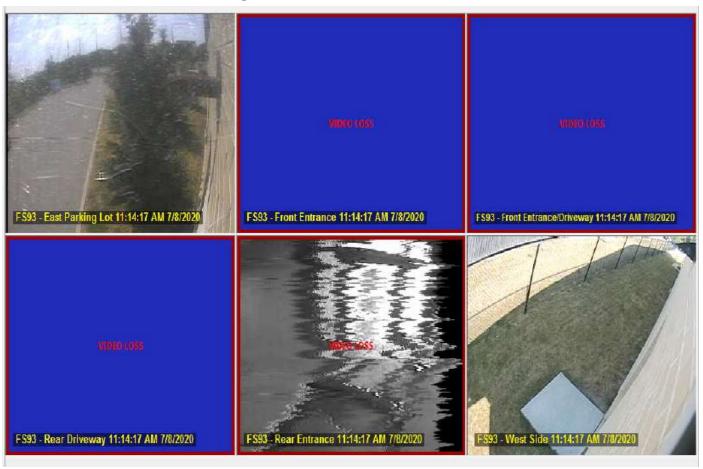




More detail, web based, photo ID, quick action



Fire Station 93 – failing/failed camera





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2021 PROJECT FUNDING REQUEST FORM 21052 Number: **Project Cost:** \$38,000 Project Name: Fire Facilities Repair and/or Replacement Projects Repair/Replace Commission: Corporate Services Pre Approval: Useful Life: 15 Department: Asset Management Category: Minor Project Mgr: Jason Vasilaki Cost Validation: Published guidelines CW ✓ 1 □ 2 □ 3 □ 4 □ Ward(s): Requirement Validation: Condition assessment 5 🗆 6 🗆 7 🗆 8 🗆 **DETAILED DESCRIPTION (SCOPE OF PROJECT):** Program includes various life cycle works to maintain the fire facilities in a state of good repair and in alignment to the Asset Management Plan/Policy. Items for repairs or/and replacement in the Budget year will be determined in the previous year, upon completion of annual condition assessment. Funding request is based on historical budgets, life cycle database and trending. Budget request is subject to change, based on condition assessment in previous year. Exceptional Services by Exceptional People **BUILDING MARKHAM'S FUTURE TOGETHER:** NOTES **PROJECT COSTS (\$)** 2021 **Future Phases** \$7,400 FS 91 - Caulking (2013) & Painting - Apparatus Bay Floor Cost/Ouote: 37,343 0 (2015)\$4,100 FS 96 - Repair Damaged Wall (2012) **Internal Charges:** 0 0 \$6,100 - Fire Training Centre - windows (1988) **External Consulting:** 0 0 \$20,400 Furniture & equipment replacements where needed Sub Total: 37,343 0 **HST Impact:** 657 0 **Total Project Cost:** 38,000 0 SOURCE(S) OF FUNDING (\$) **Components Future** Fire Training Centre Furniture, Equipments TOTAL **Funding Type** FS91 **Phases Budget** Operating Funded Life Cycle 0 38,000 7,400 4,100 6.100 20,400 38,000 **TOTAL FUNDING** 38,000 38,000 0 Non Personnel Expenditures/(Revenues) Personnel Revenues OPERATING BUDGET IMPACT \$0 \$0 \$0 \$0 DCA/LIFE CYCLE DETAILS **DCA** Amount in Life Cycle Year **Amount** Study Name Amount in Study: 108,400 Amount Incl HST 38,000 2021 Year in the study 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 ARKHAM 21053 Number: **Project Cost:** \$44,900 Project Name: Library Facilities Repair and/or Replacement Projects Repair/Replace Commission: Corporate Services Pre Approval: Useful Life: 10 Department: Asset Management Category: Minor Project Mgr: Jason Vasilaki Cost Validation: Internal peer review CW ✓ 1 □ 2 □ 3 □ 4 □ Ward(s): Requirement Validation: Condition assessment 5 6 7 8 **DETAILED DESCRIPTION (SCOPE OF PROJECT):** Program includes various life cycle works to maintain the library facilities in a state of good repair and in alignment to the Asset Management Plan/Policy, Items for repair and/or replacement in the Budget year will be determined in the previous year, upon completion of annual condition assessment. Funding request is based on historical budgets, life cycle database and trending. Budget request is subject to change, based on condition assessment in previous year. Exceptional Services by Exceptional People **BUILDING MARKHAM'S FUTURE TOGETHER: NOTES PROJECT COSTS (\$)** 2021 **Future Phases** \$39,800 Thornhill Village Library - change tables and safety Cost/Ouote: 39,112 0 features (2006) \$14,000; fire alarm panel (2006) \$25,000 \$5,100 Internal Chargeback **Internal Charges:** 5,100 0 **External Consulting:** 0 0 Sub Total: 44,212 0 **HST Impact:** 688 0 **Total Project Cost:** 44,900 0 SOURCE(S) OF FUNDING (\$) **Components Future Funding Type** Thornhill Village Internal Chargeback **TOTAL Phases Budget** Operating Funded Life Cycle 39,800 0 0 44,900 0 44,900 5.100 TOTAL FUNDING 44,900 44,900 0 Personnel Non Personnel Revenues **Expenditures/(Revenues) OPERATING BUDGET IMPACT** \$0 \$0 \$0 \$0 DCA/LIFE CYCLE DETAILS **DCA** Amount in Life Cvcle Year **Amount** Study Name Amount in Study: 158,000 44,900 Amount Incl HST 2021 Year in the study DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:



2021 PROJECT FUNDING REQUEST FORM

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21054 Number: **Project Cost:** \$20,400 Project Name: Municipal Building Backflow Prevention - Annual Testing Repair/Replace Commission: Corporate Services Pre Approval: Useful Life: Department: Asset Management Category: Minor Project Mgr: Jason Vasilaki Cost Validation: Recent awards CW ✓ 1 □ 2 □ 3 □ 4 □ Ward(s): Requirement Validation: Legislative compliance 5 🗆 6 🗆 7 🗆 8 🗆 **DETAILED DESCRIPTION (SCOPE OF PROJECT):** Testing of all backflow devices within Markham facilities must be completed, annually as outlined in By-law 2007-142. Budget request is subject to change based on requirements identified in the previous year. Safe & Sustainable Community **BUILDING MARKHAM'S FUTURE TOGETHER: PROJECT COSTS (\$)** 2021 **Future Phases** \$20,400 Testing all backflow devices installed within Markham Cost/Quote: 20.047 0 facilities **Internal Charges:** 0 0 Amount is consistent with the 2020 Life Cycle Reserve Study **External Consulting:** 0 0 update. 20,047 Sub Total: 0 0 **HST Impact:** 353 **Total Project Cost:** 20,400 0 SOURCE(S) OF FUNDING (\$) **Components Future Funding Type Testing TOTAL Phases Budget** Operating Funded Life Cycle 20,400 20,400 0 0 0 20,400 0 TOTAL FUNDING 20,400 20,400 0 Personnel Non Personnel Revenues Expenditures/(Revenues) OPERATING BUDGET IMPACT \$0 \$0 \$0 \$0 DCA/LIFE CYCLE DETAILS **DCA** Amount in **Life Cycle** Year Name **Amount** Study Amount in Study: 1,462,100 Amount Incl HST 20,400 Year in the study 2021 DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:

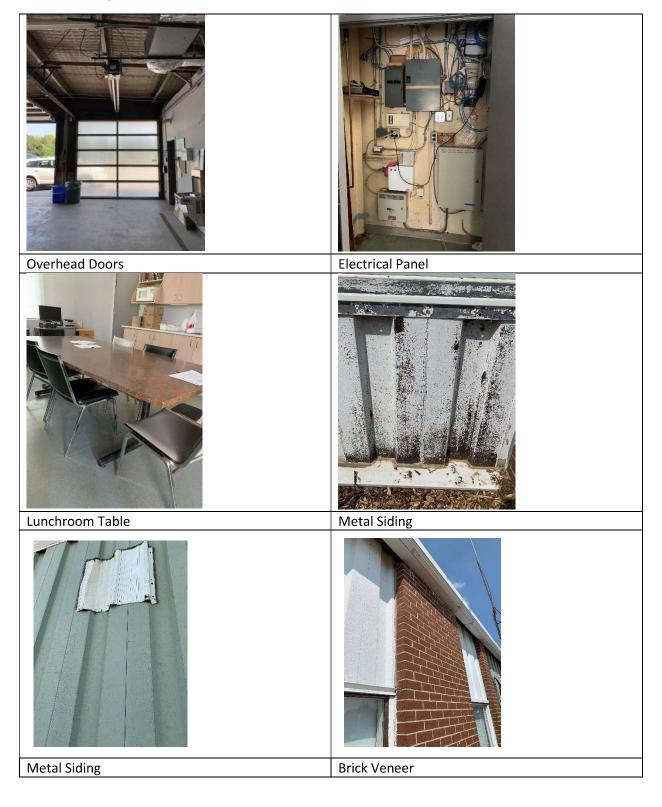


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2021 PROJECT FUNDING REQUEST FORM ARKHAM 21055 Number: **Project Cost:** \$538,100 Project Name: Operations Facilities Repair and/or Replacement Projects Repair/Replace Commission: Corporate Services Pre Approval: Useful Life: 15 Department: Asset Management Category: Minor Project Mgr: Dana Honsberger Cost Validation: Internal peer review CW ✓ 1 □ 2 □ 3 □ 4 □ Ward(s): Requirement Validation: Visual inspection 5 🗆 6 🗆 7 🗆 8 🗆 **DETAILED DESCRIPTION (SCOPE OF PROJECT):** Program includes various life cycle works to maintain the Operations Facilities in a state of good repair and in alignment to the Asset Management Plan/Policy. Items for repair and/or replacement in the Budget year will be determined in the previous year, upon completion of annual condition assessment. Funding request is based on historical budgets, life cycle database and trending. Budget request is subject to change, based on condition assessment in previous year. Exceptional Services by Exceptional People **BUILDING MARKHAM'S FUTURE TOGETHER: NOTES PROJECT COSTS (\$)** 2021 **Future Phases** \$57,900 – Central, Millennium/Milne Parks Shops, greenhouses Cost/Ouote: 478,675 0 (counters, sealant, doors, overhead doors, water heater, electrical, asphalt, ventilation, poly flooring (1987 to 2000)) **Internal Charges:** 51,000 0 \$104,000 - Princess & West Parks Shop (kitchen and washroom **External Consulting:** 0 equip, office/lunch room furniture (1990 to 2006), Building envelope/siding (1973), overhead door/electrical (1990) Sub Total: 529,675 0 \$325,200 - 555 Miller Ave & Sign Shop (various mech/ventilation 0 **HST Impact:** 8,425 and electrical items, air handling unit (1990), drywall and stairs **Total Project Cost:** 0 538,100 (1988), table saw (1991) *\$51,000 Internal Chargeback. SOURCE(S) OF FUNDING (\$) **Components Future** Central & Milne Princess & West shop 555 Miller Ave, Sign Int. Chargeback TOTAL **Funding Type Phases Budget** Operating Funded Life Cycle 0 538,100 57,900 104,000 325,200 51,000 538,100 TOTAL FUNDING 538,100 0 538,100 Personnel Non Personnel Revenues **Expenditures/(Revenues) OPERATING BUDGET IMPACT** \$0 \$0 \$0 \$0 DCA/LIFE CYCLE DETAILS **DCA** Amount in Life Cvcle Year **Amount** Study Name Amount in Study: 538,100 Amount Incl HST 538,100 Year in the study 2021 DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:

Operations Facilities Life Cycle Repair/Replacement 2021 Budget Backup Pictures

West Park Shop

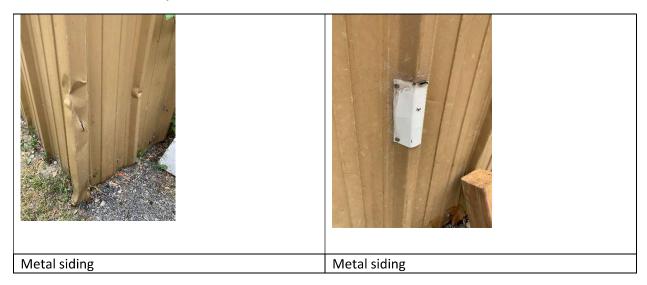


428	
Painted metal door with frame	

Milne Park Shop

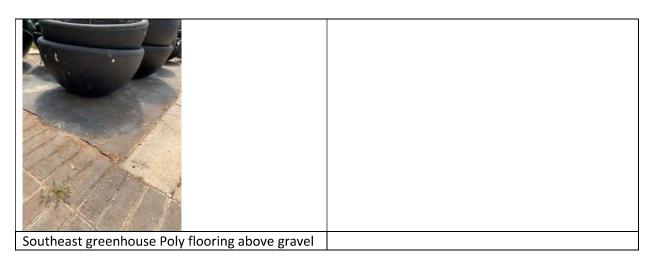


Princess Street Parks Shop



Central Park Shop





555 Miller Ave - Main Building

Garage door disconnect



Electrical disconnect switch

555 Miller Ave – Sign Shop





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Project Oss: S72,200 Spreading Studies	V ARKHAM	2021 PKOJ	ECTFUND	ING KEQ	JUESI FU)KIVI	Numbe	er: 21	1056
Commission: Corporate Services	Project Name: Operation	ns Fuel Sites Me	nitoring			Proje	ect Cost:	\$72,	200
Department: Asset Management Project Mgr: Vicky Chan Category: Major Category: Major Category: Major Cost Validation: Requirement Validation: Engislative compliance ETAILED DESCRIPTION (SCOPE OF PROJECT): So			mwmg				Re	pair/Replac	e
Project Mgr: Vicky Chan Ward(s): Cw ☑ 1 □ 2 □ 3 □ 4 □ Requirement Validation: S □ 6 □ 7 □ 8 □ Requirement Validation: ETAILED DESCRIPTION (SCOPE OF PROJECT): uis project is a carryover from the 2015 Fuel Facilities project (#15261). Removal of the old fuel tanks has resulted in further testin d monitoring required by The Ministry of the Environment, Conservation and Parks (MECP) at 555 Miller and 428 John Street. The year 2 of a projected 3 year monitoring program. UILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community ROJECT COSTS (\$) 2021 Future Phases Cost/Quote: 10,000 30,000 Internal Charges: 0 0 0 External Consulting: 61,000 0 0 Sub Total: 71,000 30,000 HST Impact: 1,250 528 Total Project Cost: 72,200 30,500 DURCE(S) OF FUNDING (\$) Components Budget Total Project Cost: 72,200 72,200 0 0 0 72,200 FOTAL FUNDING 72,200 FUNDAL Phases x 72,200 72,200 0 0 0 0 72,200 FOTAL FUNDING 72,200 FOTAL FUNDING 72,200 FUNDAL Phases x 72,200 72,200						Useful Lit	fe: 0	Pre Ap	proval: \Box
Ward(s):					Category:	Major		•	
Requirement Validation: Legislative compliance	• • •			(Cost Validation	: Recent	awards		
ETAILED DESCRIPTION (SCOPE OF PROJECT): is project is a carryover from the 2015 Fuel Facilities project (#15261). Removal of the old fuel tanks has resulted in further testin d monitoring required by The Ministry of the Environment, Conservation and Parks (MECP) at 555 Miller and 428 John Street. The year 2 of a projected 3 year monitoring program. ULLDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community ROJECT COSTS (\$) 2021 Future Phases Cost/Quote: 10,000 30,000 Internal Charges: 0 0 0 External Consulting: 61,000 0 0 Sub Total: 71,000 30,000 HST Impact: 1,250 528 Total Project Cost: 72,200 30,500 EURCE(S) OF FUNDING (\$) Components CIRCE(S) OF FUNDING (\$) Components Components	.,			Requirem	ent Validation:	Legislat	ive comp	oliance	
is project is a carryover from the 2015 Fuel Facilities project (#15261). Removal of the old fuel tanks has resulted in further testind dimonitoring required by The Ministry of the Environment, Conservation and Parks (MECP) at 555 Miller and 428 John Street. The year 2 of a projected 3 year monitoring program. Conservation and Parks (MECP) at 555 Miller and 428 John Street. The year 2 of a projected 3 year monitoring program. Conservation and Parks (MECP) at 555 Miller and 428 John Street. The year 2 of a projected 3 year monitoring program. Further testing may include further delination requirements by MECP. These are estimates only and requirements by legislative authority (MECP) may change depending upon test results. Components				-					
ROJECT COSTS (\$) 2021 Future Phases Cost/Quote: 10,000 30,000 Internal Charges: 0 0 0 External Consulting: 61,000 30,000 HST Impact: 1,250 528 Total Project Cost: 72,200 30,500 FURCE(\$) OF FUNDING (\$) FOTAL FUNDING 72,200 FOTAL FUNDING 72,200 PERATING BUDGET IMPACT So \$0 \$0 \$0 \$0 \$0 So \$0 \$0 So \$0 So \$0 \$0 So \$0 Life Cycle Amount in Study: Amount Incl HST Year in the study	d monitoring required by 7 year 2 of a projected 3 year	The Ministry of the running programmer monitoring programmer.	Environment, Coram.	nservation an	d Parks (MECI				
Cost/Quote: 10,000 30,000 Further testing may include further delination requirements by MECP. This is year 2 of a projected 3 year monitoring program. Further testing may include further delination requirements by MECP. These are estimates only and requirements by legislative authorit (MECP) may change depending upon test results. Total Project Cost: 72,200 30,500 Total Project Cost: 72,200 30,500 Total Project Cost: 72,200 72,200 0 0 0 0 72,200 Total Funding Type Rudget Total Project Cost: 72,200 Total Funding Type									
Cost/Quote: 10,000 30,000 Internal Charges: 0 0 0 External Consulting: 61,000 0 0 MECP. These are estimates only and requirements by legislative authorit (MECP) may change depending upon test results.	ROJECT COSTS (\$)	<u>2021</u>	Future Phases		ar 2 of a projec	rted 3 vear	monitor	ing progran	1
External Consulting: 61,000	Cost/Quote:	10,000	30,000	Further te					
MECP may change depending upon test results. Sub Total: 71,000 30,000 HST Impact: 1,250 528 Total Project Cost: 72,200 30,500	Internal Charges:	0	0		actimates only	and raqui	ramanta l	hy logislotiy	a authorit
Sub Total: 71,000 30,000	External Consulting:	61,000	0		•				e aumorm
Total Project Cost: 72,200 30,500	Sub Total:	71,000	30,000			. 0 1			
Components Future Phases	_	1,250	528						
Future Future Phases P	Total Project Cost:	72,200	30,500						
TOTAL Phases Phases Phases Phases Part Phases Part Phases Part Phases Part Phases Part Phases Part Pa	URCE(S) OF FUNDING	G (\$)		Con	nponents				IF4-
PERATING BUDGET IMPACT Personnel Non Personnel Revenues Expenditures/(Revenues)	nding Type	<u>Budget</u>						TOTAL	<u>Phases</u>
PERATING BUDGET IMPACT \$0 \$0 \$0 \$0 \$0 CA/LIFE CYCLE DETAILS DCA Name Year Amount in Study: Amount in Study: Amount in Study: Amount in Study: Year in the study		72,200	72,200	0	0		0	72,200	
\$0 \$0 \$0 \$0 CA/LIFE CYCLE DETAILS DCA Name Year Amount in Study Amount in Study: Amount in Study: Amount Incl HST Year in the study	OTAL FUNDING	72,200					=	72,200	
DCA Year Amount in Study Name Year Amount Study Amount in Study: Amount Incl HST Year in the study		MPACT				Expend	,	Revenues)	
Name Year Amount Study Amount in Study: Amount Incl HST Year in the study		ILS					'C C 1		
Amount in Study: Amount Incl HST Year in the study			Ye	ear Amou		_	•		
Year in the study	-				·			-	
·						Aı	mount Inc	el HST	
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:						Y	ear in the	e study	
	DCA and/or Life Cycle:	Explain if there is	a change in the ye	ear and/or cos	st:				



2021 PROJECT FUNDING REQUEST FORM

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ARKHAM 21057 Number: **Project Cost:** \$51,000 Project Name: Other Facilities Repair and/or Replacement Projects Repair/Replace Commission: Corporate Services Pre Approval: Useful Life: 10 Department: Asset Management Category: Minor Project Mgr: Khwaja Waker Cost Validation: Other(specify in Notes) CW ✓ 1 □ 2 □ 3 □ 4 □ Ward(s): Requirement Validation: Condition assessment 5 6 7 8 **DETAILED DESCRIPTION (SCOPE OF PROJECT):** Program includes various life cycle works to maintain various other facilities in a state of good repair and in alignment to the Asset Management Plan/Policy. Items for repair and/or replacement in the Budget year will be determined in the previous year, upon completion of annual condition assessment. Funding request is based on historical budgets, life cycle database and trending. Budget request is subject to change, based on condition assessment in previous year. Exceptional Services by Exceptional People **BUILDING MARKHAM'S FUTURE TOGETHER: NOTES PROJECT COSTS (\$)** 2021 **Future Phases** \$51,000 - Foundation (1990) at Elson Miles Farmhouse (tenanted Cost/Ouote: 50,118 0 site). **Internal Charges:** 0 0 **External Consulting:** 0 0 Sub Total: 50,118 0 0 **HST Impact:** 882 **Total Project Cost:** 0 51,000 SOURCE(S) OF FUNDING (\$) **Components Future Funding Type** Elson Miles **TOTAL Phases Budget** Operating Funded Life Cycle 0 0 0 0 51,000 51,000 51,000 TOTAL FUNDING 51,000 51,000 0 Personnel Non Personnel Revenues Expenditures/(Revenues) **OPERATING BUDGET IMPACT** \$0 \$0 \$0 \$0 DCA/LIFE CYCLE DETAILS **DCA** Amount in Life Cvcle Year **Amount** Study Name Amount in Study: 53,300 51,000 Amount Incl HST 2021 Year in the study 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 ARKHAM 21058 Number: **Project Cost:** \$89,800 Project Name: Parking Lot Light Replacement Repair/Replace Commission: Corporate Services Pre Approval: Useful Life: 25 Department: Asset Management Category: Minor Project Mgr: Khwaja Waker Cost Validation: Internal peer review CW ✓ 1 □ 2 □ 3 □ 4 □ Ward(s): Requirement Validation: Condition assessment 5 🗆 6 🗆 7 🗆 8 🗆 **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 poles/fixtures 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. Replacement fixtures will be LED and darksky compliant. Stewardship of Money & Resources **BUILDING MARKHAM'S FUTURE TOGETHER:** NOTES **PROJECT COSTS (\$)** 2021 **Future Phases** \$79,600 Citywide parking lot light poles, fixtures and underground Cost/Ouote: 78,223 0 cable replacement, incl. Victoria Square CC (1975) \$10,200 Internal Chargeback **Internal Charges:** 10,200 0 Amount is consistent with the 2020 Life Cycle Reserve Study **External Consulting:** 0 update. Sub Total: 88,423 0 **HST Impact:** 1,377 0 **Total Project Cost:** 0 89,800 SOURCE(S) OF FUNDING (\$) **Components Future Funding Type** Parking lot light Internal Chargeback **TOTAL Phases Budget** Operating Funded Life Cycle 0 0 0 89,800 79,600 10,200 89,800 TOTAL FUNDING 89,800 89,800 0 Personnel Non Personnel Revenues Expenditures/(Revenues) **OPERATING BUDGET IMPACT** \$0 \$0 \$0 \$0 DCA/LIFE CYCLE DETAILS **DCA** Amount in Life Cvcle Year **Amount** Study Name Amount in Study: 1,462,100 89,800 Amount Incl HST 2021 Year in the study DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:



Project Name: Roofing Maintenance and Repair

2021 PROJECT FUNDING REQUEST FORM

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\$122,400

21059 **Number:**

Project Cost:

					Repair/Replac	e
Commission: Corporate S	ervices		ī	Jseful Life:	1 Pre An	proval:
Department: Asset Manag	• •		Category:		- 11011p	r
Project Mgr: Michael Rya	an				.1.	
Ward(s): $CW \checkmark 1$	2□ 3□ 4□		Cost Validation:			
5 🗆	6□ 7□ 8□		Requirement Validation:	Condition as	sessment	
DETAILED DESCRIPTIO	N (SCOPE OF P	ROJECT):				
roject scope includes annua epair helps ensure maximum			roof leak repairs at all City	of Markham f	facilities. Mainte	enance and
BUILDING MARKHAM'S	S FUTURE TOO	ETHED. Excepti	ional Services by Exceptional l	People		
OILDING WARRIAM S	TOTORE 1001	ETHER. Except		Сорго		
ROJECT COSTS (\$)	<u>2021</u>	Future Phases	NOTES \$122,400 - Roofing Main	itenance and R	 Penair	
Cost/Quote:	120,283	0	Historic average is \$70.3			verage
Internal Charges:	0	0	roofing replacement budg	get can be redu	uced from \$1M	range to an
External Consulting:	0	0	average of \$500K range,	which has bee	n reflected in 20	020 and
Sub Total:	120,283	0	2021 requests. Amount requested is cons	sistent with 20)20 Life Cycle R	Reserve
HST Impact:	2,117		Study update.	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Zo Ziio Cycle i	10001 10
Total Project Cost:	<u> </u>					
=	122,400	0				
OURCE(S) OF FUNDING	(\$)		Components			Futuro
unding Type	Budget	Roofing Repair and Maintenance			TOTAL	<u>Future</u> <u>Phases</u>
perating Funded Life Cycle	122,400	122,400	0 0	0	122,400	0
TOTAL FUNDING	122,400				122,400	0
	Par	rsonnel Non Pe	rsonnel Revenues	Evnanditur	es/(Revenues)	
OPERATING BUDGET IN	<u>МРАСТ</u>			-		
CATTER CVCLE DETAIL		\$0 \$	0 \$0		\$0	
CA/LIFE CYCLE DETA DCA	<u>ILS</u>			7.10		
Name		Yea	Amount in ar Amount Study	<u>Life (</u>	<u> </u>	
- Tame			or ramount Study	— Amour	nt in Study:	122,400
				Amoun	nt Incl HST	122,400
				Year i	in the study	2021
DCA and/or Life Cycle:	Explain if there is	a change in the yea	er and/or cost:			
Deri and/of Ene Cycle.	Explain it there is	a change in the yea	ir and/or cost.			



2021 PROJECT FUNDING REQUEST FORM

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21060 **Number:**

D :						Project (Cost:	\$757	,400
Project Name: Roofing I	Replacement Pro	ojects					Rep	air/Replac	e
Commission: Corporate S	Services				I	Useful Life:	20		proval:
Department: Asset Mana	agement				Category:		20	ПСАр	provar. –
Project Mgr: Michael Ry	yan			,					
Ward(s): $CW \boxed{\bullet} 1$	2 🗆 3 🗆 4 🗆				Cost Validation:				
5 🗆	6 7 8			Requiren	nent Validation:	Condition a	issessn	nent	
This project includes roofing alignment to the Asset Manaupon completion of annual of	g and accessories ragement Plan/Police	eplacement y. Roofs for nt. Funding	works at r replacei request is	ment in the based on	budget year wil historical budge	ll be determi	ned in	the previo	us year,
Budget request is subject to									
BUILDING MARKHAM	S FUTURE TOG	ETHER:	Exception	nal Service	s by Exceptional I	People			
PROJECT COSTS (\$) Cost/Quote: Internal Charges: External Consulting: Sub Total:	2021 676,101 69,400 0 745,501	Future P	0 0 0 0 0 0	\$275,400 \$125,000 projects) \$69,400	- Armadale Con - Varley Art Ga - City wide (con and Roof chimn internal Chargeb s consistent with	allery - East a nsulting for one ey replacements.	and We on dem ent at I	est Roof A nand 2021/ Heintzman	2022 roof House
HST Impact: Total Project Cost:	11,899			1					
=	757,400		<u>0</u>						
SOURCE(S) OF FUNDING	G (\$)			Cor	nponents				T. 4
Funding Type	Budget	Armada	ile BUR	Varley Art Gal	ery Heintzman House : City Wide	and Int. Ch	argeback	TOTAL	<u>Future</u> <u>Phases</u>
					<u>Denr</u>				
Operating Funded Life Cycle	757,400	287,6	500	275,400	125,000	69,40	0 ′	757,400	
TOTAL FUNDING	757,400						_	757,400	
OPERATING BUDGET I	MPACT Pe	rsonnel	Non Per	sonnel	Revenues	Expenditu	res/(R	evenues)	
OFERATING BUDGET I	WFACI	\$0	\$0		\$0		\$0		
DCA/LIFE CYCLE DETA	AILS								
<u>DCA</u>			T 7		Amount in	<u>Life</u>	Cycle		
Name			Year	r Amou	nt Study	— Amoi	ınt in S	Study:	757,400
						Amou	int Inc	I HST	757,400
							in the		2021
DCA and/or Life Cycle	· Evploin if there is	a changa ir	the weer	and/or co	at•	1001			2021
Dea and/or line cycle	. Explain if there is	s a change ii	i tile year	and/or co					

2021 Budget Request Back-up Pictures

<u>Heintzman House – Chimney Repairs</u>



Photo 1: Brick spalls at the larger chimney.



Photo 2: View of the larger chimney from the opposite direction, structural support installed at the chimney.



Photo 3: Brick spalls at smaller chimney.

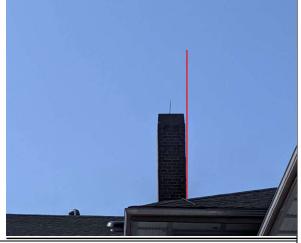


Photo 4: Smaller chimney is not quite vertical.

<u>Armadale Community Centre – Roof Replacement</u>



Varley Art Gallery – Roof Replacement



Photo 1: Deteriorated insulation beneath ballast (stones).



Photo 2: Vegetation on roof indicative of roof poor drainage.

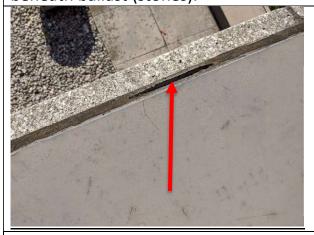


Photo 3: Split in the sealant between the precast panels and metal flashing.



Photo 4: Ballast reducing sheet (black material) deteriorated, should be sandwiched between the ballast (stones) and insulation (Pink material).



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Number: 21061 **Project Cost:** \$15,300 Project Name: Satellite Community Centre Repair and/or Replacement Repair/Replace Commission: Corporate Services Pre Approval: Useful Life: 15 Department: Asset Management Category: Minor Project Mgr: Sameem Shah Cost Validation: Other(specify in Notes) CW ✓ 1 □ 2 □ 3 □ 4 □ Ward(s): Requirement Validation: Condition assessment 5 🗆 6 🗆 7 🗆 8 🗆 **DETAILED DESCRIPTION (SCOPE OF PROJECT):** Program includes various life cycle works to maintain the satellite community centres in a state of good repair and in alignment to the Asset Management Plan/Policy. Items for repair and/or replacement in the Budget year will be determined in the previous year, upon completion of annual condition assessment. Funding request is based on historical budgets, life cycle database and trending. Budget request is subject to change, based on condition assessment in previous year. Exceptional Services by Exceptional People **BUILDING MARKHAM'S FUTURE TOGETHER: NOTES PROJECT COSTS (\$)** 2021 **Future Phases** \$15,300 - Victoria Square - Consultant to design renovation of existing washrooms for accessibility compliance. Cost/Ouote: 15,035 0 Any upgrades beyond standard finishes are the responsibilities of **Internal Charges:** 0 0 the Board **External Consulting:** 0 0 Sub Total: 15,035 0 **HST Impact:** 265 0 **Total Project Cost:** 15,300 0 SOURCE(S) OF FUNDING (\$) **Components Future Funding Type** Victoria Square CC **TOTAL Phases Budget** 0 0 0 Operating Funded Life Cycle 0 15,300 15,300 15,300 **TOTAL FUNDING** 15,300 15,300 0 Non Personnel Expenditures/(Revenues) Personnel Revenues OPERATING BUDGET IMPACT \$0 \$0 \$0 \$0 DCA/LIFE CYCLE DETAILS **DCA** Amount in Life Cycle Year **Amount** Study Name Amount in Study: 65,600 Amount Incl HST 15,300 2021 Year in the study DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:



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21062 **Number:**

Duniant Name of the control of the c	11 5	1/ 5	4 50 4		Project (Cost:	\$6,700
Project Name: Tennis Clu		and/or Replacei	nent Project	<u> </u>		Repair/Re	eplace
Commission: Corporate S				Į	Jseful Life:	10 Pro	e Approval:
Department: Asset Mana Project Mary Sameon Sh				Category:	Minor		
Project Mgr: Sameem Sh			Cos	t Validation:		r review	
Ward(s): CW ✓ 1				Validation:			
5	6 7 8 8		•				
ergram includes various life lanagement Plan/ Policy. Ite empletion of annual condition quest is subject to change, leserve Study update.	e cycle works to ma ems for repair or/ar on assessment. Fun based on condition	nintain the Tennis Ond replacement in the ding request is base assessment in previous tension of the control of	he Budget year ed on historica	will be deter budgets, life bunt requeste	mined in the cycle databa d is consister	previous yea ase and trend	ar, upon ding. Budget
ROJECT COSTS (\$)	<u>2021</u>	Future Phases	NOTES \$5,200 Arma	dala Tonnia	Clubhousa b	uilding anya	lone and
Cost/Quote:	6,584	0	windows (19		Ciubiiouse Di	munig enve	tope and
Internal Charges:	0	0		ona Valley To			
External Consulting:	0	0		ainting (2000 09), exterior p			
Sub Total:	6,584	0	As per Tenn	is Clubhouse	Policy, 50%	of the costs	to be funded l
HST Impact:	116	0					placement wil
Total Project Cost:	6,700	0	proceed subj	ect to satisfac	ctory club fin	ance review	.
OURCE(S) OF FUNDING	(\$)		Compo	onents			— E-4
anding Type	<u>Budget</u>	<u>Armadale</u>	Pomona Valley			TOTA	Future AL Phases
nung Type							
	3,350	2,600	750	0	(3,35	50
erating Funded Life Cycle		2,600 2,600	750 750	0	(
perating Funded Life Cycle ther External	3,350						50
perating Funded Life Cycle ther External TOTAL FUNDING	3,350 3,350 6,700	2,600 rsonnel Non Pe	750			3,35	<u>00</u>
perating Funded Life Cycle ther External FOTAL FUNDING PERATING BUDGET IN CA/LIFE CYCLE DETA	3,350 3,350 6,700 Per	2,600 rsonnel Non Pe	750	evenues	(3,35 6,70 res/(Revenu	<u>00</u>
perating Funded Life Cycle ther External FOTAL FUNDING PERATING BUDGET IN CA/LIFE CYCLE DETA DCA	3,350 3,350 6,700 Per	2,600 sonnel Non Pe \$0 \$	750 ersonnel R	evenues \$0	Expenditur	3,35 6,70 res/(Revenu	<u>00</u>
perating Funded Life Cycle ther External FOTAL FUNDING PERATING BUDGET IN CA/LIFE CYCLE DETA	3,350 3,350 6,700 Per	2,600 rsonnel Non Pe	750 ersonnel R	evenues \$0	Expenditure <u>Life</u>	3,35 6,70 res/(Revenu	00 es)
perating Funded Life Cycle ther External FOTAL FUNDING PERATING BUDGET IN CA/LIFE CYCLE DETA DCA	3,350 3,350 6,700 Per	2,600 sonnel Non Pe \$0 \$	750 ersonnel R	evenues \$0	Expenditure Life — Amou	3,35 6,70 res/(Revenu \$0	10,800
perating Funded Life Cycle ther External FOTAL FUNDING PERATING BUDGET IN CA/LIFE CYCLE DETA DCA	3,350 3,350 6,700 Per	2,600 sonnel Non Pe \$0 \$	750 ersonnel R	evenues \$0	Expenditure Life Amou	3,35 6,70 res/(Revenu \$0 Cycle nt in Study:	10,800 3,400
	3,350 3,350 6,700 Per MPACT ILS	2,600 Sonnel Non Pe	rsonnel R	evenues \$0	Expenditure Life Amou	3,35 6,70 res/(Revenu \$0 Cycle nt in Study:	10,800 3,400



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21064 Number: **Project Cost:** \$101,700 Project Name: Air Cylinders 45+ Minutes Replacement Repair/Replace Commission: Community & Fire Services Pre Approval: Useful Life: 15 Department: Fire & Emergency Services Category: Minor Project Mgr: Chris Nearing Cost Validation: Third party estimate CW ✓ 1 □ 2 □ 3 □ 4 □ Ward(s): Requirement Validation: Legislative compliance 5 🗆 6 🗆 7 🗆 8 🗆 **DETAILED DESCRIPTION (SCOPE OF PROJECT):** Legislative life cycle replacement of 47 carbon fibre breathing air cylinders for Self Contained Breathing Apparatus (SCBA). This request combines the 2021 replacement of 24 units and the 2022 replacement of 23 units in order to meet the minimum order requirement of 42 units. Safe & Sustainable Community **BUILDING MARKHAM'S FUTURE TOGETHER:** NOTES **PROJECT COSTS (\$)** 2021 **Future Phases** Carbon fibre wrapped air cylinders for self contained breathing Cost/Ouote: 99,900 0 apparatus must be replaced every 15 years according to Legislation. 24 cylinders are due for replacement in 2021 and 23 cylinders are **Internal Charges:** 0 0 due for replacement in 2022 @ \$2,163.83/unit. Current inventory is **External Consulting:** 0 0 286 x 45 min, 10 x 60 min, 4 x 15 min cylinders. Amounts and units are consistent with the 2021 Life Cycle Reserve Study update. 99,900 Sub Total: 0 These units were last replaced in 2006/2007. 0 **HST Impact:** 1,758 **Total Project Cost:** 101,700 0 SOURCE(S) OF FUNDING (\$) **Components Future Funding Type TOTAL Phases Budget** Operating Funded Life Cycle 101,700 101,700 0 0 0 101,700 0 TOTAL FUNDING 101,700 101,700 0 Personnel Non Personnel Revenues Expenditures/(Revenues) OPERATING BUDGET IMPACT \$0 \$0 \$0 \$0 DCA/LIFE CYCLE DETAILS **DCA** Amount in **Life Cycle** Year Name **Amount** Study Amount in Study: 101,800 Amount Incl HST 101,700 Year in the study 2021 DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:



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Project Name: Arizona Vortex Tripod Replacement Commission: Community & Fire Services Department: Fire & Emergency Services	Project Cost: \$7,400
Commission: Community & Fire Services Department: Fire & Emergency Services	
Department: Fire & Emergency Services	Repair/Replace
Department: Fire & Emergency Services	Useful Life: 5 Pre Approval:
Project Mgr: Chris Nearing Catego	ory: Minor
	on: Third party estimate
Requirement Validation	on: Visual inspection
DETAILED DESCRIPTION (SCOPE OF PROJECT):	
Replacement of 1 portable technical rescue equipment (versitile anchoring/pulley device) the	hat has multiple use applications in technic
rescue situations.	Tr
BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community	
PROJECT COSTS (\$) 2021 Future Phases NOTES	
Cost/Quote: 7,300 0 Typically the Vortex in rescues, but is also suit	is used as an edge transition in high angle itable for confined space and any difference
	There are two units in service department was last replaced in 2016. Amount is
	21 Life Cycle Reserve Study update.
Sub Total: 7,300 0	
HST Impact: 128 0	
Total Project Cost: 7,400	
SOURCE(S) OF FUNDING (\$) Components	
Funding Type Budget	Future TOTAL Phase
Operating Funded Life Cycle 7,400 0	0 0 0
TOTAL FUNDING 7,400	
Personnel Non Personnel Revenues	Expenditures/(Revenues)
OPERATING BUDGET IMPACT \$0 \$0 \$0	\$0
DCA/LIFE CYCLE DETAILS	
<u>DCA</u> Amount	
Name Year Amount Study	Amount in Study: 7,400
Name Fully	
Name Tear Amount Study	Amount Incl HST 7,400
Name Teal Timount Study	Amount Incl HST 7,400 Year in the study 202



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2021 PROJECT FUNDING REQUEST FORM ARKHAM 21066 Number: **Project Cost:** \$89,200 Project Name: Bunker Gear Life Cycle Replacement Repair/Replace Commission: Community & Fire Services Pre Approval: Useful Life: Department: Fire & Emergency Services Category: Annual Project Mgr: Chris Nearing Cost Validation: Recent awards CW ✓ 1 □ 2 □ 3 □ 4 □ Ward(s): Requirement Validation: Legislative compliance 5 □ 6 □ 7 □ 8 □ **DETAILED DESCRIPTION (SCOPE OF PROJECT):** Replacement of 32 sets of bunker gear purchased in 2014. Request based on condition assessment in 2020 and legislative requirement to provide firefighters with structural firefighting protective equipment (bunker suit). Legislation: Health and Safety Act; Employer to maintain equipment and Section 21 Guidance Notes, Section 4 outlines standards for personal protective equipment, NFPA 1971 Standard on protection Ensembles for Structural Firefighting, minimum level of protection from thermal, physical, environmental and blood-borne pathogens. MFES has a contract for the supply and delivery of bunker gear 2018-2022. **BUILDING MARKHAM'S FUTURE TOGETHER:** Safe & Sustainable Community NOTES **PROJECT COSTS (\$)** 2021 **Future Phases** Project cost is based on unit price of \$2,787 x 32 suits, as per Cost/Quote: 87,627 0 vendor quote on 8/25/2020. Total inventory including spare bunker suits approx. 410 sets (suits ordered at 7 year mark to maintain 0 0 **Internal Charges:** adequate spare equipment, eliminates purchasing 2 full sets of **External Consulting:** 0 0 bunker gear for each firefighter). Sub Total: 87,627 0 **HST Impact:** 1,542 0 **Total Project Cost:** 89,200 0 SOURCE(S) OF FUNDING (\$) **Components Future Funding Type Budget** TOTAL **Phases** Operating Funded Life Cycle 0 0 0 0 0 0 89,200 TOTAL FUNDING 89,200 0 0 Personnel Non Personnel Revenues **Expenditures/(Revenues) OPERATING BUDGET IMPACT** \$0 \$0 \$0 \$0 **DCA/LIFE CYCLE DETAILS DCA** Amount in Life Cycle Year Amount Study Name Amount in Study: 75,900 89,200 Amount Incl HST Year in the study 2021 DCA and/or Life Cycle: Explain if there is a change in the year and/or cost: Budget requested reflects updated quote provided by vendor on August 25, 2020.



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ARKHAM 21067 Number: **Project Cost:** \$101,700 Project Name: Firefighting Tools & Equipment Replacement Repair/Replace Commission: Community & Fire Services Pre Approval: Useful Life: Department: Fire & Emergency Services Category: Annual Project Mgr: Chris Nearing Cost Validation: Other(specify in Notes) CW ✓ 1 □ 2 □ 3 □ 4 □ Ward(s): Requirement Validation: Other(specify in Notes) 5 🗆 6 🗆 7 🗆 8 🗆 **DETAILED DESCRIPTION (SCOPE OF PROJECT):** Annual replacement and purchase of firefighting tools & equipment. Examples include but are not limited to the following: hose, ladders, nozzles, hand tools, water rescue equipment, ropes, fire extinguishers, hydraulic rescue tools, oxygen equipment, air cylinders, SCBA masks & breathing valves, portable pumps, electric & gas operated saws, cribbing, hose appliances, portable radios, medical bags, fans, thermal camera & related equipment, laser temperature probes, travel restraint and lock out kits. Safe & Sustainable Community **BUILDING MARKHAM'S FUTURE TOGETHER:** NOTES **PROJECT COSTS (\$)** 2021 **Future Phases** Purchases occur due to condition assessment/legislative Cost/Ouote: 99,982 0 requirements/circumstances. Because of the nature of the department activities, equipment may require purchase/replacement **Internal Charges:** 0 0 due to damage and condition, beyond economical repair or **External Consulting:** 0 0 technological change. Amount is consistent with the 2021 Life Cycle Reserve Study update. This project funding meets the current Sub Total: 99,982 0 needs of the Fire Department and keeps all tools and equipment in a 1,760 0 **HST Impact:** good state of operational order. **Total Project Cost:** 0 101,700 SOURCE(S) OF FUNDING (\$) **Components Future Funding Type TOTAL Phases Budget** 0 0 0 0 Operating Funded Life Cycle 0 0 101,700 **TOTAL FUNDING** 101,700 0 0 Non Personnel **Expenditures/(Revenues)** Personnel Revenues OPERATING BUDGET IMPACT \$0 \$0 \$0 \$0 DCA/LIFE CYCLE DETAILS **DCA** Amount in Life Cycle Year **Amount** Study Name Amount in Study: 101,800 Amount Incl HST 101,700 2021 Year in the study DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:



Page 230 **215**3 2021 PROJECT FUNDING REQUEST FORM 21068 **Number: Project Cost:** \$5,400 Project Name: Hazardous Materials Photo Ion Detector Replacement Repair/Replace Commission: Community & Fire Services Pre Approval: Useful Life: Department: Fire & Emergency Services Category: Minor Project Mgr: Chris Nearing Cost Validation: Third party estimate Ward(s): CW ✓ 1 □ 2 □ 3 □ 4 □ Requirement Validation: Legislative compliance 5 🗆 6 🗆 7 🗆 8 🗆 **DETAILED DESCRIPTION (SCOPE OF PROJECT):** Life Cycle replacement of 1 photo ionization detector. Air monitoring equipment is required for hazardous material response, and also utilized during every structure fire response to monitor hydrogen cyanide levels, which is a product of combustion. Safe & Sustainable Community **BUILDING MARKHAM'S FUTURE TOGETHER:** NOTES **PROJECT COSTS (\$)** 2021 **Future Phases** Amount is based on most recent award price. This unit was last Cost/Quote: 5,292 0 replaced in 2016. **Internal Charges:** 0 0 **External Consulting:** 0 0 Sub Total: 5,292 0 **HST Impact:** 0 93 **Total Project Cost:** 5,400 0

SOURCE(S) OF FUNDING (\$	<u> </u>		Compon	ents			F4
Funding Type	Budget					TOTAL	<u>Future</u> <u>Phases</u>
Operating Funded Life Cycle	5,400	0	0	0	0	0	0
TOTAL FUNDING	5,400				<u> </u>	0	0

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

DCA/LIFE CYCLE DETAILS

<u>DCA</u>	Amo	unt in	Life Cycle	
Name	Year Amount St	udy	Amount in Study:	4,700
			Amount Incl HST	5,400
			Year in the study	2021
	f there is a change in the year and/or cost: ward price, and amount will be updated in the nex	xt Life C	ycle Reserve Study.	
	f there is a change in the year and/or cost: ward price, and amount will be updated in the nex	xt Life C	ycle Reserve Study.	



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Department: Fire & Emergency Services Project Mgr: Chris Nearing Ward(s): CW	Project Name: Replacement of Equipment due to Staff Retirements Community & Fire Services Department: Fire & Emergency Services Project Mgr: Chris Nearing Ward(s): CW 2 1 2 3 4 7 8	z Fire Services	nt due to Staff	Retirements		-	ost: \$99	,600
Commission: Community & Fire Services Department: Fire & Emergency Services Project Mgr: Chris Nearing Ward(s): Cw 1 2 3 4 5 6 6 7 8 Category: Annual Cost Validation: Third party estimate Requirement Validation: Legislative compliance DETAILED DESCRIPTION (SCOPE OF PROJECT): Purchase of personal protective clothing, uniforms and equipment for each recruit following the retirement of a firefighter. Legislative Compliance DETAILED DESCRIPTION (SCOPE OF PROJECT): Purchase of personal protective clothing, uniforms and equipment for each recruit following the retirement of a firefighter. Legislative Compliance DETAILED DESCRIPTION (SCOPE OF PROJECT): Purchase of personal protective clothing, uniforms and equipment for each recruit following the retirement of a firefighter. Legislative Compliance DETAILED DESCRIPTION (SCOPE OF PROJECT): Purchase of personal protective equipment and practices to protect firefighters. Section (Suidance Notes, Section 4 in its entirety outlines standards for personal protective equipment and practices to protect firefighters. NFPA 1971 Standard on Protective Ensembles for Structural Firefighting, establishes minimal levels of protection from thermal, physical, environmental and blood-borne pathogens. BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community PROJECT COSTS (\$) 2021 Future Phases Cost/Quote: 97,920 0 0 Internal Charges: 0 0 0 0 Sub Total: 97,920 0 0 External Consulting: 0 0 0 0 Sub Total: 97,920 0 0 External Charges: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Repair/Replace Community & Fire Services Useful Life: 1 Pre Approval:	z Fire Services		<u> </u>				
Department: Fire & Emergency Services Project Mgr: Chris Nearing Ward(s):	Department: Fire & Emergency Services Project Mgr: Chris Nearing Ward(s): Cw V 1 2 3 4 5 6 7 8 Cost Validation: Third party estimate BETAILED DESCRIPTION (SCOPE OF PROJECT): Purchase of personal protective clothing, uniforms and equipment for each recruit following the retirement of a firefighter. Legislation OH&S 25.(2)(h) An employer shall take every precaution reasonable in the circumstances for the protection of a worker. Section 21 Guidance Notes, Section 4 in its entirety outlines standards for personal protective equipment and practices presonal protective equipment and practices protection from thermal, physical, environmental and blood-borne pathogens. BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community PROJECT COSTS (S) 2021 Future Phases Cost/Quote: 97,920 0 Internal Charges: 0 0 0 Sub Total: 97,920 0 HST Impact: 1,723 0 Total Project Cost: 99,600 0 Sub Total: 97,920 0 HST Impact: 1,723 0 Total Project Cost: 99,600 0 Components Funding Type Budget Total Project Proj	ency Services					Repair/Replace	ce
Project Mgr: Chris Nearing Ward(s): CW 1 2 3 4 Cost Validation: Third party estimate Requirement Validation: Legislative compliance DETAILED DESCRIPTION (SCOPE OF PROJECT): Purchase of personal protective clothing, uniforms and equipment for each recruit following the retirement of a firefighter. Legislative Compliance OH&S 25.(2)(h) An employer shall take every precaution reasonable in the circumstances for the protection of a worker. Section of Guidance Notes, Section 4 in its entirety outlines standards for personal protective equipment and practices to protect firefighters. NFPA 1971 Standard on Protective Ensembles for Structural Firefighting, establishes minimal levels of protection from thermal, physical, environmental and blood-borne pathogens. BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community PROJECT COSTS (s) 2021 Future Phases Cost/Quote: 97,920 0 Internal Charges: 0 0 0 Sub Total: 97,920 0 HST Impact: 1,723 0 0 Total Project Cost: 99,600 0 0 0 0 0 0 0 SOURCE(S) OF FUNDING (s) Components Funding Type Budget TOTAL Physical P	Project Mgr: Chris Nearing Ward(s): Wa				Į	Jseful Life:	1 Pre A ₁	pproval:
Ward(s):	Ward(s): CW 1				Category:	Annual		
Requirement Validation: Legislative compliance	Requirement Validation: Legislative compliance			Co	st Validation:	Third party es	stimate	
PROJECT COSTS (s) Cost/Quote: 97,920 0 External Consulting: 0 0 Sub Total: 97,920 0 HST Impact: 1,723 0 Sub Total: 97,920 0 HST Impact: 1,723 0 Total Project Cost: 99,600 0 SUBCECE(S) OF FUNDING (s) Funding Type Budget TOTAL FUNDING 99,600 0 DOCALIFE CYCLE DETAILS DCA Name Personnel Marker Amount in Study: 99,926 Amount in Study: 99,9	PROJECT COSTS (\$) 2021 Future Phases Cost/Quote: 97,920 External Consulting: 0 Sub Total: 97,920 HST Impact: 1,723 Total Project Cost: 99,600 DEXTOTAL FUNDING (\$) Evertaing Funded Life Cycle 99,600 COURCE(S) OF FUNDING (\$) Formating Funded Life Cycle 99,600 COPERATING BUDGET IMPACT Sub Collaboration Personnel Sub Collaboration Sub Collab			Requireme	nt Validation:	Legislative co	ompliance	
Purchase of personal protective clothing, uniforms and equipment for each recruit following the retirement of a firefighter. Legisla OH&S 25.(2)(h) An employer shall take every precaution reasonable in the circumstances for the protection of a worker. Section of Guidance Notes, Section 4 in its entirety outlines standards for personal protective equipment and practices to protect firefighters. NFPA 1971 Standard on Protective Ensembles for Structural Firefighting, establishes minimal levels of protection from thermal, physical, environmental and blood-borne pathogens. BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community PROJECT COSTS (\$) 2021 Future Phases Cost/Quote: 97,920 0 0	Purchase of personal protective clothing, uniforms and equipment for each recruit following the retirement of a firefighter. Legislation OH&S 25.(2)(h) An employer shall take every precaution reasonable in the circumstances for the protection of a worker. Section 21 Guidance Notes, Section 41 in its entirety outlines standards for personal protective equipment and practices to protect friefighters. NFPA 1971 Standard on Protective Ensembles for Structural Firefighting, establishes minimal levels of protection from thermal, physical, environmental and blood-borne pathogens. BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community PROJECT COSTS (\$) 2021 Future Phases Cost/Quote: 97,920 0 Internal Charges: 0 0 0 External Consulting: 0 0 0 BIST Impact: 1,723 0 0 HST Impact: 1,723 0 0 HST Impact: 1,723 0 0 HST Impact: 1,723 0 0 Total Project Cost: 99,600 0 0 SOURCE(S) OF FUNDING (\$) Components Funding Type Budget TOTAL Future Phases Operating Funded Life Cycle 99,600 0 0 0 0 0 0 0 TOTAL FUNDING 99,600 OPERATING BUDGET IMPACT Personnel Non Personnel Revenues Expenditures/(Revenues) SOURCE(S) OF SOURCE DETAILS DCA Name Year Amount in Study 99,600 Amount Incl HST 99,600 Amount Incl HST 99,600							
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External Consulting:	External Consulting:	97,920	0	approximat	ely \$8,300 per	firefighter bas	sed on 2020 qu	otations.
Sub Total: 97,920 0	Sub Total: 97,920 0	0	0				r 2021. Some	retiree
HST Impact: 1,723 0 0	HST Impact: 1,723 0 0	0	0	equipment	is repurposed a	is spare.		
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SOURCE(S) OF FUNDING (\$) Components	Components Future Funding Type Budget TOTAL Phases	1,723	0					
Funding Type Budget TOTAL Phis	Funding Type Budget	99,600	0					
Funding Type Budget TOTAL Phase Properating Funded Life Cycle 99,600 0 0 0 0 0 0 0 0 0	Funding Type Budget TOTAL Phases	(\$)		Comp	onents			Futuro
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SO \$0 \$0 \$0 DCA/LIFE CYCLE DETAILS DCA Name Year Amount in Study Amount in Study: 99,6 Amount Incl HST 99,6	SO \$0 \$0 \$0 DCA/LIFE CYCLE DETAILS DCA Name Year Amount in Study: 99,600 Amount Incl HST 99,600 Year in the study 2021	99,600					0	
DCA/LIFE CYCLE DETAILS DCA Name Year Amount in Study Amount in Study: 99,6 Amount Incl HST 99,6	DCA/LIFE CYCLE DETAILS DCA Name Year Amount in Study Amount in Study: 99,600 Amount Incl HST 99,600 Year in the study 2021	PACT Per				-		
DCA NameYearAmount in StudyLife CycleYearAmount in StudyAmount in Study:99,6Amount Incl HST99,6	DCA NameYearAmount in StudyLife Cycle StudyAmount in Study:99,600Amount Incl HST99,600Year in the study2021	C	\$0	\$0	\$0	ان	0	
Name Year Amount Study Amount in Study: 99,6	Name Year Amount Study Amount in Study: 99,600 Amount Incl HST 99,600 Year in the study 2021	<u> </u>			A mount in	Life C	volo	
Amount Incl HST 99,6	Amount Incl HST 99,600 Year in the study 2021		Y	ear Amount			-	
	Year in the study 2021						-	
Year in the study 2	·						L	
DCA and/on Life Civales Explain if there is a change in the year and/on cost	DCA and/of Life Cycle: Explain if there is a change in the year and/of cost:	Transia if there is	a ahanga in tha w	an and/an acat		Year in	the study	2021
Dea and/of the Cycle. Explain if there is a change in the year and/of cost:		Apiani ii mere is	a change in the y	vai and/of cost:				
DCA and/or Life Cycle: E			e clothing, unifor shall take every ts entirety outline ctive Ensembles lood-borne patho FUTURE TOGI 2021 97,920 0 97,920 1,723 99,600 Sudget 99,600 99,600 PACT Per	Coloning Coloning	e clothing, uniforms and equipment for each recrushall take every precaution reasonable in the circuits entirety outlines standards for personal protection cive Ensembles for Structural Firefighting, establicood-borne pathogens. FUTURE TOGETHER: Safe & Sustainable Company of the content of the circuits entirety outlines standards for personal protection to the circuits entirety outlines standards for personal protection to the circuits entirety outlines standards for personal protection to the circuits entirety outlines standards for personal protection to the circuits entirety outlines standards for personal protection to the circuits entirety outlines standards for personal protection to the circuits entirety outlines standards for personal protection entirety outlines standards for p	e clothing, uniforms and equipment for each recruit following the shall take every precaution reasonable in the circumstances for the standards for personal protective equipment active Ensembles for Structural Firefighting, establishes minimal good-borne pathogens. FUTURE TOGETHER: Safe & Sustainable Community 2021	e clothing, uniforms and equipment for each recruit following the retirement of shall take every precaution reasonable in the circumstances for the protection at sentirety outlines standards for personal protective equipment and practices to ctive Ensembles for Structural Firefighting, establishes minimal levels of protection od-borne pathogens. FUTURE TOGETHER: Safe & Sustainable Community 2021	eclothing, uniforms and equipment for each recruit following the retirement of a firefighter. shall take every precaution reasonable in the circumstances for the protection of a worker. So the entirety outlines standards for personal protective equipment and practices to protect fireficitive Ensembles for Structural Firefighting, establishes minimal levels of protection from the cood-borne pathogens. FUTURE TOGETHER: Safe & Sustainable Community Safe & Sustainable Community



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21070 Number: **Project Cost:** \$19,000 Project Name: Rescue Equipment - Thermal Image Cameras Repair/Replace Commission: Community & Fire Services Pre Approval: Useful Life: 10 Department: Fire & Emergency Services Category: Minor Project Mgr: Chris Nearing Cost Validation: Third party estimate CW ✓ 1 □ 2 □ 3 □ 4 □ Ward(s): Requirement Validation: Condition assessment 5 🗆 6 🗆 7 🗆 8 🗆 **DETAILED DESCRIPTION (SCOPE OF PROJECT):** Life Cycle replacement of two thermal image cameras last replaced in 2011. Safe & Sustainable Community **BUILDING MARKHAM'S FUTURE TOGETHER: PROJECT COSTS (\$)** 2021 **Future Phases** Thermal Image Cameras(TIC's) give firefighters the ability to view Cost/Quote: 18,700 0 an infrared image through smoke and other low visibility atmospheres encountered in firefighting. They are utilized to search **Internal Charges:** 0 0 for victims, detect the seat of a fire and to detect smouldering fires **External Consulting:** 0 0 inside a wall as well as detecting overheating electrical wiring. Total inventory is 16 cameras, assigned to all front run apparatus, Sub Total: 18,700 0 Command vehicles and one spare. Project cost is based on unit 0 **HST Impact:** 329 price of \$9,489 x 2 units as per quote received in July 2020. **Total Project Cost:** 19,000 0 SOURCE(S) OF FUNDING (\$) **Components Future** Funding Type **TOTAL Phases Budget** Operating Funded Life Cycle 19,000 0 0 0 0 0 0 TOTAL FUNDING 19,000 0 0 Personnel Non Personnel Revenues Expenditures/(Revenues) **OPERATING BUDGET IMPACT** \$0 \$0 \$0 \$0 DCA/LIFE CYCLE DETAILS **DCA** Amount in **Life Cycle** Year Name **Amount** Study Amount in Study: 18,200 19,000 Amount Incl HST Year in the study 2021 DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:



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21072 Number: **Project Cost:** \$221,800 Project Name: Angus Glen C.C. Arena Seating Replacement Repair/Replace Commission: Community & Fire Services Pre Approval: Useful Life: 15 Department: Recreation Services Category: Minor Project Mgr: Scott Hill Cost Validation: Third party estimate $CW \square 1 \square 2 \square 3 \square 4 \square$ Ward(s): Requirement Validation: Condition assessment 5 □ 6 🗸 7 □ 8 □ **DETAILED DESCRIPTION (SCOPE OF PROJECT):** This project is to replace existing arena spectator seating at Angus Glen C.C. The seating is located in both the West and East arena pads. The spectator seating provides a comfortable space for patrons and spectators to sit and watch games, activities and programs on the arena pad. Safe & Sustainable Community **BUILDING MARKHAM'S FUTURE TOGETHER:** NOTES **PROJECT COSTS (\$)** 2021 **Future Phases** The existing arena spectator seating was installed in 2003. There Cost/Ouote: 218,000 0 are 450 seats maximum being replaced, the seats are connected on a frame so they cannot be replaced individually, they have to be **Internal Charges:** 0 0 replace by row. A condition assessment shows the seats have wear **External Consulting:** 0 0 and tear in the hinges and cracking of the seat itself. The useful life of the seats has been surpassed by three (3) years. The Sub Total: 218,000 0 configuration of seating will be reviewed to take into consideration 0 **HST Impact:** 3,837 social distancing measures in light of COVID19. The amount **Total Project Cost:** 221,800 0 requested is consistent with the recent quote. SOURCE(S) OF FUNDING (\$) **Components Future Funding Type TOTAL Phases Budget** Gas Tax 221,800 0 0 0 0 0 0 TOTAL FUNDING 221,800 0 0 Personnel Non Personnel Revenues Expenditures/(Revenues) OPERATING BUDGET IMPACT \$0 \$0 \$0 \$0 DCA/LIFE CYCLE DETAILS **DCA** Amount in **Life Cycle** Year Name **Amount** Study Amount in Study: 768,500 Amount Incl HST 221,800 Year in the study 2021 DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:



2021 DDO IECT FUNDING DECUEST FORM

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V <u>ARKHAM</u>	2021 FKU	JECII	' UNDIT	VU KE	QUEST FU	/ I\	Number:	2	1073
	on C.C. Sand E	ilton Co-	nnonont D	onless-	ont	Proje	ect Cost:	\$45	,600
Project Name: Angus Gle		mer Cor	пропепт к	epiacem	lent		Repair	/Replac	ee
Commission: Community						Useful Lif	Fe: 15	Pre Ap	proval:
Department: Recreation S	Services				Category:	Minor		•	-
Project Mgr: Scott Hill					Cost Validation	Third pa	arty estimate		
	2 3 4 5				nent Validation:				
5 ETAILED DESCRIPTIO	6 ✓ 7 □ 8 □			-					
nis project is to replace two pol and two (2) leisure pool tration, meaning that dirt pol an array of laterals, which a UILDING MARKHAM'S	components with high rate sand fi- enetrates the sand acts as a sieve. The	nin the sand lters at And l bed and in the work in	d filter syste gus Glen C. is captured i acludes; mat	C. High-r n the tiny erial, labo	ate sand filters c spaces between	lean wate grains of	r via a proces sand. At the	ss know bottom	n as depth
	0004		D	NOTES	<u> </u>				
ROJECT COSTS (\$)	<u>2021</u>	<u>Future</u>	<u>Phases</u>	The exis	ting filters were				
Cost/Quote:	44,800		0		the sand wear dappens, the sand				
Internal Canadian	0		0		g sand and later				
External Consulting:	0		0		rate sand filter	system. Tl	he amount re	quested	l is consist
Sub Total:	44,800 788		0 0	with the	recent quote.				
HST Impact: Total Project Cost:									
=	45,600		<u> </u>						
OURCE(S) OF FUNDING	(\$)			Co	mponents				Futumo
nding Type	Budget						<u>TO</u>	<u>OTAL</u>	Future Phases
erating Funded Life Cycle	45,600		0	0	0		0	0	
TOTAL FUNDING	45,600							0	
PERATING BUDGET IN	P P	ersonnel	Non Per	sonnel	Revenues	Expend	litures/(Reve	enues)	
PERATING DUDGET IN	WIFACI	\$0	\$0		\$0		\$0		
CA/LIFE CYCLE DETA	<u>ILS</u>								
<u>DCA</u>			T .7		Amount in	<u>I</u>	ife Cycle		
Name			Year	r Amou	ınt Study	— Aı	mount in Stud	dy:	768,500
						Ar	nount Incl H	ST	45,600
						Ye	ear in the stu	ıdy	2021
DCA and/or Life Cycle:	Explain if there	is a change	e in the vear	and/or co	ost:	Ye	ear in the stu	ıdy	2021
DCA and/or Life Cycle:	Explain if there	is a change	e in the year	and/or co	ost:	Ye	ear in the stu	ıdy	2021



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21074 Number: **Project Cost:** \$57,000 Project Name: Angus Glen C.C. Snow Pit Heating Coil Replacement Repair/Replace Commission: Community & Fire Services Pre Approval: Useful Life: 15 Department: Recreation Services Category: Minor Project Mgr: Scott Hill Cost Validation: Third party estimate Ward(s): Requirement Validation: Condition assessment 5 □ 6 🗸 7 □ 8 □ **DETAILED DESCRIPTION (SCOPE OF PROJECT):** This project is to replace the heating coil located inside the snow dump pit in the Zamboni room. The glycol is heated with reclaimed heat from the refrigeration plant and circulated through the coil to melt the snow that is dumped from the Zamboni after ice flooding. The work includes: material, labour and all other trades required for the work. Safe & Sustainable Community **BUILDING MARKHAM'S FUTURE TOGETHER:** NOTES **PROJECT COSTS (\$)** 2021 **Future Phases** The existing coil was installed in 2003. A condition assessment of Cost/Quote: 56,000 0 the coil indicates replacement is warranted. The amount requested in consistent with the recent quote. 0 **Internal Charges:** 0 **External Consulting:** 0 0 Sub Total: 56,000 0 0 **HST Impact:** 986 **Total Project Cost:** 57,000 0 SOURCE(S) OF FUNDING (\$) **Components Future Funding Type TOTAL Phases Budget** Operating Funded Life Cycle 57,000 0 0 0 0 0 0 TOTAL FUNDING 57,000 0 0 Personnel Non Personnel Revenues Expenditures/(Revenues) **OPERATING BUDGET IMPACT** \$0 \$0 \$0 \$0 DCA/LIFE CYCLE DETAILS **DCA** Amount in **Life Cycle** Year Name **Amount** Study Amount in Study: 768,500 Amount Incl HST 57,000 Year in the study 2021 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 21075 **Number: Project Cost:** \$40,700 Project Name: Angus Glen Tennis Centre Court Re-Painting Repair/Replace Commission: Community & Fire Services Pre Approval: Useful Life: 10 Department: Recreation Services Category: Minor Project Mgr: Scott Hill Cost Validation: Third party estimate Ward(s): Requirement Validation: Condition assessment 5 □ 6 🗸 7 □ 8 □ **DETAILED DESCRIPTION (SCOPE OF PROJECT):** The purpose of this project is to re-paint all four (4) tennis courts, approximately 29,000 sq ft of court surface. The up keep and maintenance of the tennis courts ensures we maintain a quality surface for match and instructional programs. Safe & Sustainable Community **BUILDING MARKHAM'S FUTURE TOGETHER: PROJECT COSTS (\$)** 2021 **Future Phases** The existing tennis courts were constructed in 2011. Based on Cost/Quote: 40,000 0 condition assessment of the tennis courts re-painting is warranted. The amount requested is consistent with the recent quote. 0 **Internal Charges:** 0 **External Consulting:** 0 0 Sub Total: 40,000 0 0 **HST Impact:** 704 **Total Project Cost:** 40,700 0 SOURCE(S) OF FUNDING (\$) **Components Future Funding Type TOTAL Phases Budget** Operating Funded Life Cycle 40,700 0 0 0 0 0 0 TOTAL FUNDING 40,700 0 0 Personnel Non Personnel Revenues Expenditures/(Revenues) **OPERATING BUDGET IMPACT** \$0 \$0 \$0 \$0 DCA/LIFE CYCLE DETAILS **DCA** Amount in **Life Cycle** Year Name **Amount** Study Amount in Study: 68,000 40,700 Amount Incl HST Year in the study 2021 DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:



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21076 Number: **Project Cost:** \$13,200 Project Name: Armadale C.C. Gym Interior Door Repair/Replace Commission: Community & Fire Services Pre Approval: Useful Life: 20 Department: Recreation Services Category: Minor Project Mgr: Ryan Hanna Cost Validation: Third party estimate Ward(s): Requirement Validation: Condition assessment 5 □ 6 □ 7 🗸 8 □ **DETAILED DESCRIPTION (SCOPE OF PROJECT):** This project is to replace the existing gymnasium entrance's double glass doors located on the north side of the gymnasium. Also included is the installation of accessible push button linked to the double doors. This project will help support creating a more accessible entrance into the gymnasium at Armadale C.C. Safe & Sustainable Community **BUILDING MARKHAM'S FUTURE TOGETHER:** NOTES **PROJECT COSTS (\$)** 2021 **Future Phases** The existing double doors were installed in 2006. Based on Cost/Quote: 13,000 0 condition assessment replacement is warranted. The doors are being replaced ahead of their useful life schedule as a result of 0 **Internal Charges:** 0 extensive usage and associated damage to the doors. The amount **External Consulting:** 0 0 requested is consistent with the recent quote. Sub Total: 13,000 0 0 **HST Impact:** 229 **Total Project Cost:** 13,200 0 SOURCE(S) OF FUNDING (\$) **Components Future Funding Type TOTAL Phases Budget** Operating Funded Life Cycle 13,200 0 0 0 0 0 0 TOTAL FUNDING 13,200 0 0 Personnel Non Personnel Revenues Expenditures/(Revenues) **OPERATING BUDGET IMPACT** \$0 \$0 \$0 \$0 DCA/LIFE CYCLE DETAILS **DCA** Amount in **Life Cycle** Year Name **Amount** Study Amount in Study: 205,500 Amount Incl HST 13,200 Year in the study 2021 DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:



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ARKHAM 21077 Number: **Project Cost:** \$8,100 Project Name: Camp Chimo High Ropes and Harness Replacement Repair/Replace Commission: Community & Fire Services Pre Approval: Useful Life: Department: Recreation Services Category: Minor Project Mgr: Luke Hilts Cost Validation: Third party estimate Ward(s): Requirement Validation: Condition assessment 5 □ 6 □ 7 🗸 8 □ **DETAILED DESCRIPTION (SCOPE OF PROJECT):** This project is to replace the high ropes and harness equipment that are used by summer camp participants. Annually, Camp Chimo hosts 900 campers during the summer camp season. High ropes are an intrical part of the programming offered at the outdoor camp. Replacement of ropes will allow Chimo to also continue to program and remain open pre and post camp season in offering weekly program that are revenue generating. The ropes course is inspected on an annual basis. Safe & Sustainable Community **BUILDING MARKHAM'S FUTURE TOGETHER: NOTES PROJECT COSTS (\$)** 2021 **Future Phases** The existing equipment was installed in 2016. A condition Cost/Ouote: 8,000 0 assessment of the high ropes and harness indicates replacement is warranted. The amount requested is consistent with the Life Cycle **Internal Charges:** 0 0 Reserve Study Update. **External Consulting:** 0 0 Sub Total: 8,000 0 **HST Impact:** 141 0 **Total Project Cost:** 8,100 0 SOURCE(S) OF FUNDING (\$) **Components Future Funding Type TOTAL Phases Budget** 0 0 0 0 Operating Funded Life Cycle 0 0 8,100 **TOTAL FUNDING** 8,100 0 0 Non Personnel Expenditures/(Revenues) Personnel Revenues OPERATING BUDGET IMPACT \$0 \$0 \$0 \$0 DCA/LIFE CYCLE DETAILS **DCA** Amount in Life Cycle Year **Amount** Study Name Amount in Study: 8,100 Amount Incl HST 8,100 2021 Year in the study 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 21078 Number: **Project Cost:** \$121,500 Project Name: Centennial C.C. Mechanical Replacement Repair/Replace Commission: Community & Fire Services Pre Approval: Useful Life: Department: Recreation Services Category: Minor Project Mgr: Bob Bell Cost Validation: Third party estimate CW □ 1□ 2□ 3 ✓ 4□ Ward(s): Requirement Validation: Condition assessment 5 🗆 6 🗆 7 🗆 8 🗆 **DETAILED DESCRIPTION (SCOPE OF PROJECT):** This project is to replace one (1) hot water boiler, one (1) main pool heat exchanger, one (1) wading pool heat exchanger, one (1) HVAC unit that services the boardrooms, four (4) pumps and six (6) exhaust fans. The work includes; material, labour and all other trades required for the work Safe & Sustainable Community **BUILDING MARKHAM'S FUTURE TOGETHER:** NOTES **PROJECT COSTS (\$)** 2021 **Future Phases** The following items were last replaced in; 1) Boiler (1996) 2) Heat Cost/Ouote: 119,400 0 Exchanger (1999) 3) HVAC (1995) 4) Pumps (2003) and 5) Exhaust Fans (2000). A condition assessment of the equipment 0 **Internal Charges:** 0 indicates replacement is warranted. Useful life schedule has been **External Consulting:** 0 0 stretched as a result of good maintenance program. Sub Total: 119,400 0 0 **HST Impact:** 2,101 **Total Project Cost:** 121,500 0 SOURCE(S) OF FUNDING (\$) **Components Future Funding Type Boiler** Heat Exchanger & Pumps Exhaust Fan TOTAL **Phases Budget** Gas Tax 121,500 40,704 25,440 27.984 27.372 121,500 0 **TOTAL FUNDING** 121,500 0 121,500 Non Personnel **Expenditures/(Revenues)** Personnel Revenues **OPERATING BUDGET IMPACT** \$0 \$0 \$0 \$0 **DCA/LIFE CYCLE DETAILS DCA** Amount in Life Cycle Year **Amount** Name Study Amount in Study: 221,300 121,500 Amount Incl HST Year in the study 2021 DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:



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21079 **Number: Project Cost:** \$12,200 Project Name: Cornell C.C. Heat Exchanger Replacement Repair/Replace Commission: Community & Fire Services Pre Approval: Useful Life:

Department: Recreation Services Category: Minor Project Mgr: Adriano Trabucco Cost Validation: Third party estimate Ward(s):

Requirement Validation: Condition assessment 5 ✓ 6 □ 7 □ 8 □

DETAILED DESCRIPTION (SCOPE OF PROJECT):

This project is to replace two (2) heat exchangers that supply heat to the Therapy and Leisure pool at Cornell C.C.

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

PROJECT COSTS (\$)	<u>2021</u>	Future Phases
Cost/Quote:	12,000	0
Internal Charges:	0	0
External Consulting:	0	0
Sub Total:	12,000	0
HST Impact:	211	0
Total Project Cost:	12,200	0

NOTES

The existing heat exchangers were installed in 2012 and are located in the pool mechanical room. The two heat exchangers that maintain pool water temperature will fluctuate during operation which creates complaints from users. A condition assessment of the heat exchangers indicates replacement is warranted.

SOURCE(S) OF FUNDING (\$)			Compon	ents			E4
Funding Type	<u>Budget</u>					TOTAL	<u>Future</u> <u>Phases</u>
Gas Tax	12,200	0	0	0	0	0	0
TOTAL FUNDING	12,200				=	0	0

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)	
OA DAMATAN (O DOD GET MYNT MOT	\$0	\$0	\$0	\$0	

DCA/LIFE CYCLE DETAILS

<u>DCA</u>		Amount in	<u>Life Cycle</u>	
Name	Year Amount	Study	Amount in Study:	267,600
			Amount Incl HST	12,200
			Year in the study	2021
DCA and/or Life Cycle: Explain if there	e is a change in the year and/or cost:			



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21080 Number: **Project Cost:** \$37,000 Project Name: Heintzman House Washroom Refurbishment Repair/Replace Commission: Community & Fire Services Pre Approval: Useful Life: Department: Recreation Services Category: Minor Project Mgr: Martin Barrow Cost Validation: Third party estimate CW □ 1 ✓ 2 □ 3 □ 4 □ Ward(s): Requirement Validation: Condition assessment 5 6 7 8 **DETAILED DESCRIPTION (SCOPE OF PROJECT):** This project is to replace floor and wall tiles, toilets, faucet, sink, cabinet, and counter at the Heintzman House. The work includes; material, labour and all other trades required for the replacement work. The work is supported by the Heintzman board and will maintain the specific time period's appearance. Safe & Sustainable Community **BUILDING MARKHAM'S FUTURE TOGETHER:** NOTES **PROJECT COSTS (\$)** 2021 **Future Phases** The existing toilet, faucet, and sink were last replaced in 1990, Cost/Ouote: 36,400 0 while the washroom cabinet, counter, and floor tile are all original and have never been replaced. A condition assessment of the **Internal Charges:** 0 0 fixtures indicates replacement is warranted. **External Consulting:** 0 0 Sub Total: 36,400 0 0 **HST Impact:** 641 **Total Project Cost:** 37,000 0 SOURCE(S) OF FUNDING (\$) **Components Future Funding Type** Ceramic Tile Cabinets Counters Fixtures TOTAL **Phases Budget** Gas Tax 37,000 11,100 13,100 6,400 6,400 37,000 0 TOTAL FUNDING 37,000 37,000 0 Personnel Non Personnel Revenues Expenditures/(Revenues) **OPERATING BUDGET IMPACT** \$0 \$0 \$0 \$0 DCA/LIFE CYCLE DETAILS **DCA** Amount in **Life Cycle** Year Name **Amount** Study Amount in Study: 41,500 Amount Incl HST 37,000 Year in the study 2021 DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:



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Wil C C D	-1	4° T 1		4	Project (Cost: \$	84,800
	enumiain	cation U	пи керіасо	ement ———		Repair/Rep	olace
				1	Useful Life:	15 Pre	Approval:
ervices				Category:	Minor		
			Cos	• •		estimate	
			-				
			at Markham	Village C C	Arana dahur	midification w	nite haln
FUTURE TOG	ETHER:	Safe & S	ustainable Co	nmunity			
<u>2021</u>	Future P	<u>Phases</u>	NOTES The existing	two (2) dah	umidification	unita wara in	stelled in 200
83,349		0					
0		0					
0		0					
83,349		0	replacement	is warranted			
1,467		0	award plus	nflation.			
84,800		0					
(\$)			Comp	onents			- Future
<u>Budget</u>						TOTA	
84,800		0	0	0	(0 0)
04.000							
<u>84,800</u>							<u>0</u>
Po	ersonnel	Non Pers	sonnel R	evenues	Expenditu	res/(Revenue	
PACT Pe	ersonnel \$0	Non Pers		evenues \$0	Expenditu	-	
Po				\$0		res/(Revenue	
PACT Pe		\$0		\$0 Amount in	<u>Life</u>	res/(Revenue \$0 Cycle	es)
PACT Pe				\$0	Life — Amou	res/(Revenue \$0 Cycle unt in Study:	
PACT Pe		\$0		\$0 Amount in	Life — Amou	res/(Revenue \$0 Cycle	es)
2 6 1	### Services ### Services ### ### ### ### ### ### ### ### ### #	FUTURE TOGETHER: 2021 Future P 83,349 0 0 83,349 1,467 84,800 Budget	z Fire Services z Fire Services z	Coscine Services Coscine Services Coscine Services	Category: Cost Validation: Requirement Validation: Requirement Validation: Requirement Validation: (SCOPE OF PROJECT): 2) dehumidification units in the arena at Markham Village C.C. to ensure good ice quality. The work includes; material, labour FUTURE TOGETHER: Safe & Sustainable Community 2021	Useful Life: Category: Minor Cost Validation: Third party Requirement Validation: Condition a (SCOPE OF PROJECT): 2) dehumidification units in the arena at Markham Village C.C. Arena dehur to ensure good ice quality. The work includes; material, labour and all other FUTURE TOGETHER: Safe & Sustainable Community 2021	Repair/Rep To the Services Category: Minor Cost Validation: Third party estimate Requirement Validation: Condition assessment (SCOPE OF PROJECT): 2) dehumidification units in the arena at Markham Village C.C. Arena dehumidification units on the ensure good ice quality. The work includes; material, labour and all other trades requires FUTURE TOGETHER: Safe & Sustainable Community Substantial Community Substantial Community



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21082 Number: **Project Cost:** \$32,100 Project Name: Markham Village C.C. Security System Replacement Repair/Replace Commission: Community & Fire Services Pre Approval: Useful Life: Department: Recreation Services Category: Minor Project Mgr: Bob Bell Cost Validation: Third party estimate CW □ 1□ 2□ 3□ 4✔ Ward(s): Requirement Validation: Condition assessment 5 🗆 6 🗆 7 🗆 8 🗆 **DETAILED DESCRIPTION (SCOPE OF PROJECT):** This project is to replace existing security system at Markham Village. The system is comprised of cameras, DVR and a display monitor. The replacement of the security systems will support a safe environment for staff and users. New equipment will align with new corporate security standard. The work includes; material, labour and all other trades required for the work. Safe & Sustainable Community **BUILDING MARKHAM'S FUTURE TOGETHER:** NOTES **PROJECT COSTS (\$)** 2021 **Future Phases** The existing security equipment was installed in 2009. The Cost/Ouote: 31,500 0 replacement is required so that Security at the Civic Centre can monitor the building, current system is analog and new will be **Internal Charges:** 0 0 digital. Asset Management has replaced two broken cameras in **External Consulting:** 0 0 2020 cost \$1200. A condition assessment of the system indicates that replacement is warranted. The amount requested is consistent Sub Total: 31,500 0 with the Life Cycle Reserve Study Update. 0 **HST Impact:** 554 **Total Project Cost:** 32,100 0 SOURCE(S) OF FUNDING (\$) **Components Future Funding Type TOTAL Phases Budget** Operating Funded Life Cycle 32,100 0 0 0 0 0 0 TOTAL FUNDING 32,100 0 0 Personnel Non Personnel Revenues Expenditures/(Revenues) OPERATING BUDGET IMPACT \$0 \$0 \$0 \$0 DCA/LIFE CYCLE DETAILS **DCA** Amount in **Life Cycle** Year Name **Amount** Study Amount in Study: 130,200 Amount Incl HST 32,100 Year in the study 2021 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 ARKHAM 21083 Number: **Project Cost:** \$167,900 Project Name: Mt. Joy C.C. Arena Compressor Replacement Repair/Replace Commission: Community & Fire Services Pre Approval: Useful Life: 25 Department: Recreation Services Category: Minor Project Mgr: Bob Bell Cost Validation: Third party estimate Ward(s): Requirement Validation: Condition assessment 5 ✓ 6 □ 7 □ 8 □ **DETAILED DESCRIPTION (SCOPE OF PROJECT):** This project is to replace two (2) arena compressors at Mt. Joy C.C. Compressors absorbs the brine heat and when it begins to boil the compressor pulls the vaporized ammonia from the chiller, lowering the pressure within the chiller and further lowering the ammonia temperature. Compressors are critical to the ice making process and is central to making ice for users and participants. The work includes; material, labour and all other trades required for the work. Safe & Sustainable Community **BUILDING MARKHAM'S FUTURE TOGETHER: NOTES PROJECT COSTS (\$) 2021 Future Phases** The existing compressors were installed in 1996. A condition Cost/Ouote: 156,278 0 assessment of the compressors indicates that replacement is warranted. **Internal Charges:** 0 0 **External Consulting:** 0 8,682 Sub Total: 164,960 0 **HST Impact:** 2,903 0 **Total Project Cost:** 167,900 0 SOURCE(S) OF FUNDING (\$) **Components Future Funding Type TOTAL Phases Budget** 0 0 0 0 Gas Tax 0 0 167,900 **TOTAL FUNDING** 167,900 0 0 Non Personnel Expenditures/(Revenues) Personnel Revenues OPERATING BUDGET IMPACT \$0 -\$2.581 \$0 -\$2,581 **DCA/LIFE CYCLE DETAILS DCA** Amount in Life Cycle Year **Amount** Study Name Amount in Study: 182,500 Amount Incl HST 167,900 2021 Year in the study DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:



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V ARKHAM	2021 PKOJ	ECI FUNDI	NG REQUEST FO	Number:	21084
				Project Cost:	\$5,200
Project Name: Mt. Joy C.	C. Gas Monito	r Replacement		Donoi	ir/Replace
Commission: Community &	& Fire Services		_		
Department: Recreation Se	ervices			Jseful Life: 10	Pre Approval:
Project Mgr: Bob Bell			Category:	Minor	
Ward(s): CW 1	2□ 3□ 4□		Cost Validation:	Third party estimate	e
.,	6 7 8		Requirement Validation:	Condition assessme	ent
ETAILED DESCRIPTION		ROIFCT).			
his project is to replace one (pontrol system to monitor leve enas have legislative require UILDING MARKHAM'S	els of ammonia ga ements for gas mo	s in the air in the renitors to detect refr	efrigeration plant. Under CS		
ROJECT COSTS (\$)	2021	Future Phases	NOTES The gas monitor at Mt. Is	av C C was installed	in 1006 A condition
Cost/Quote:	5,100	0	The gas monitor at Mt. Joassessment of this unit in		
Internal Charges:	0	0	amount requested is cons		
External Consulting:	0	0			
Sub Total:	5,100	0			
HST Impact:	90	0			
Total Project Cost:	5,200	0			
OURCE(S) OF FUNDING	(\$)		Components		
unding Type	Budget			<u>T</u>	OTAL Future Phases
erating Funded Life Cycle	5,200	0	0 0	0	0
FOTAL FUNDING	5,200				0
	Pe	rsonnel Non Pe	ersonnel Revenues	Expenditures/(Rev	venues)
PERATING BUDGET IM	IPACT 10.		0 \$0	\$0	venues)
CA/LIFE CYCLE DETAI	I.S	Ψ	Ψ0	ΨΟ	
DCA			Amount in	<u>Life Cycle</u>	
Name		Yea		•	1 100 500
				— Amount in Stu	
				Amount Incl I	HST 5,200
				Year in the st	,



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<u>Viarkham</u>	2021 11103	DCI I CI		o neg	CLOTTO	N	umber:	21	1085
Project Name: Old Union	nville Library D	oors and Fr	rames R	enlacem	ent	Project	Cost:	\$44,	800
	-	oors and Fr	ailles K	еріасені	——————————————————————————————————————		Repair	/Replac	e
Commission: Community			—		Ţ	Jseful Life:	20	Pre Ap	proval: \Box
Department: Recreation	Services		_		Category:	Minor		-	-
Project Mgr: Scott Hill				C	ost Validation:	Third party	estimate	:	
	2 3 2 4		F		ent Validation:	-			
	6 7 8			-					
his project is to replace fift the space remains secure. D aff.	een (15) doors and	frames throu							
UILDING MARKHAM'	S FUTURE TOG	ETHER: S	Safe & Sus	stainable C	ommunity				
ROJECT COSTS (\$)	2021	Future Pha	2666	NOTES					
Cost/Quote:	44,000		[1		ng doors and fr assessment repl				
Internal Charges:	0				is consistent wi				
External Consulting:	0		0						
Sub Total:	44,000	-	0						
HST Impact:	774		0						
Total Project Cost:	44,800		0						
OURCE(S) OF FUNDING	G (\$)			Com	ponents				
ınding Type	Budget				ponenes			OTAL	Future Phases
ıs Tax	44,800		0	0	0		0	0	
TOTAL FUNDING	44,800			Ŭ	· ·				
TOTAL FUNDING	44,000							0	====
PERATING BUDGET I	мраст Ре	rsonnel N	on Perso	nnel	Revenues	Expenditu	res/(Rev	enues)	
I ERATING BUDGET I	WITACI	\$0	\$0		\$0		\$0		
CA/LIFE CYCLE DETA	ILS								
DCA Norma			Year	Amoun	Amount in Study	<u>Life</u>	<u>Cycle</u>		
Name			1 cai	Amoun	ı Study	— Amo	ant in Stu	dy:	62,200
						Amou	ınt Incl H	ST	44,800
						Year	in the stu	ıdy	2021
DCA and/or Life Cycle	: Explain if there is	a change in t	the year a	nd/or cost	:				
,	-								



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21086 Number: **Project Cost:** \$6,000 Project Name: Recreation AED Program Replacement Repair/Replace Commission: Community & Fire Services Pre Approval: Useful Life: Department: Recreation Services Category: Annual Project Mgr: Jason Tsien Cost Validation: Third party estimate CW ✓ 1 □ 2 □ 3 □ 4 □ Ward(s): Requirement Validation: Condition assessment 5 🗆 6 🗆 7 🗆 8 🗆 **DETAILED DESCRIPTION (SCOPE OF PROJECT):** The 2021 AED annual program will include the replacement of 11 AED trainer kits and 12 AED trainer pads. This project is to replace AED equipment city wide. Safe & Sustainable Community **BUILDING MARKHAM'S FUTURE TOGETHER:** NOTES **PROJECT COSTS (\$)** 2021 **Future Phases** There are currently 54 AED units in the City of Markham. The Cost/Ouote: 5,900 0 AED units have been used 6 times since 2018. 2008 and 2016 in Centennial C.C., 2010 and 2019 at the Milliken Mills C.C., 2016 0 **Internal Charges:** 0 and 2018 at Angus Glen C.C. Cost per AED trainer kits are \$600 **External Consulting:** 0 0 per unit (\$600 x 11 units = \$6,600) and trainer pads are \$266 per unit ($$266 \times 12 = $3,192$). Price is consistent with recent staff Sub Total: 5,900 0 award plus inflation. The Life Cycle Reserve Study will be adjusted 0 **HST Impact:** 104 accordingly in the next update. *This is an annual program and **Total Project Cost:** 6,000 0 funding will be requested each year. SOURCE(S) OF FUNDING (\$) **Components Future Funding Type TOTAL Phases Budget** Operating Funded Life Cycle 6,000 0 0 0 0 0 0 TOTAL FUNDING 6,000 0 0 Personnel Non Personnel Revenues Expenditures/(Revenues) OPERATING BUDGET IMPACT \$0 \$0 \$0 \$0 DCA/LIFE CYCLE DETAILS **DCA** Amount in **Life Cycle** Year Name **Amount** Study Amount in Study: 10,200 Amount Incl HST 6,000 Year in the study 2021 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 21087 **Number: Project Cost:** \$19,000 Project Name: Recreation Aquatics Equipment Replacement Repair/Replace Commission: Community & Fire Services Pre Approval: Useful Life: Department: Recreation Services Category: Annual Project Mgr: Jason Tsien Cost Validation: Internal peer review CW ✓ 1 □ 2 □ 3 □ 4 □ Ward(s): Requirement Validation: Condition assessment 5 🗆 6 🗆 7 🗆 8 🗆 **DETAILED DESCRIPTION (SCOPE OF PROJECT):** This annual replacement program for aquatics equipment is for eight (8) aquatics facilities (indoor and outdoor). Safe & Sustainable Community **BUILDING MARKHAM'S FUTURE TOGETHER: NOTES PROJECT COSTS (\$)** 2021 **Future Phases** The 3 year average spend is \$85,986. Aquatics equipment is used Cost/Quote: 18,700 0 to support programs that are revenue generating. The Life Cycle Reserve Study will be adjusted accordingly in the next update. **Internal Charges:** 0 0 *This is an annual program and funding will be requested each year. **External Consulting:** 0 0 * Funding for this project was reduced as a result of COVID19 Sub Total: 18,700 0 0 **HST Impact:** 329 **Total Project Cost:** 19,000 0 SOURCE(S) OF FUNDING (\$) **Components Future Funding Type TOTAL Phases Budget** Operating Funded Life Cycle 19,000 0 0 0 0 0 0 TOTAL FUNDING 19,000 0 0 Personnel Non Personnel Revenues Expenditures/(Revenues) **OPERATING BUDGET IMPACT** \$0 \$0 \$0 \$0 DCA/LIFE CYCLE DETAILS **DCA** Amount in **Life Cycle** Year Name **Amount** Study Amount in Study: 87,500 Amount Incl HST 19,000 Year in the study 2021 DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:



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\$163,800

21088 **Number:**

Project Cost:

Project Name: Rec	restion F	Exterior Walk	waye Ranlacam	ont		· ·	_	ΨΞΟυ	,000
			ways Replacem				Repair/	Replace)
Commission: Com					Ţ	Jseful Life:	15	Pre Apı	oroval:
Department: Reci		vices			Category:	Minor		1.	
Project Mgr: Scot				Cos	st Validation:		estimate		
Ward(s): CW		□ 3 🗸 4 🗆			t Validation:				
		✓ 7□ 8□		1					
DETAILED DESCR			· · · · · · · · · · · · · · · · · · ·						
This project is to repl Unionville Library; re accessibility ramp. To are in good condition BUILDING MARK	eplacing in o maintain . The work	the safety of the cincludes; mater	and grading to create community, it is it	te positive drai mportant that t	nage, 3) Thom he entrances a quired for the	rnlea Pool; re and walkway	eplacing ex	terior o	concrete
DDO IECT COSTS	(\$)	2021	E 4 DI	NOTES					
PROJECT COSTS		<u>2021</u>	Future Phases	The walkwa	ys were instal				
Cost/Qu		149,600	0		nd 2005 Ang the existing s				
Internal Char	_	0	0		vers will be re				
External Consult		11,400	0			-		•	
Sub To		161,000							
HST Imp	-	2,834	0						
Total Project C	ost: ===	163,800	0						
SOURCE(S) OF FU	NDING (<u>\$)</u>		Comp	onents				E4
Funding Type		<u>Budget</u>	Angus Glen	Thornlea	Old Union I	<u>ibr.</u>	<u>TO</u>	<u>TAL</u>	<u>Future</u> <u>Phases</u>
Gas Tax		163,800	124,000	29,800	10,000	() 163,	800	0
TOTAL FUNDING	G	163,800					163	,800	0
OPERATING BUD	GET IMP	PACT Per	rsonnel Non Pe	ersonnel R	evenues	Expenditu	res/(Reve	nues)	
			\$0 \$	60	\$0		\$0		
DCA/LIFE CYCLE	DETAIL	<u>S</u>							
<u>DCA</u>			Vo	ar Amount	Amount in	<u>Life</u>	Cycle		
Name			Ye	ar Amount	Study	– Amou	ınt in Stud	y:	883,300
						Amou	int Incl HS	T	163,800
						Year	in the stud	iy	2021
DCA and/or Life	- Cycle: Ex	onlain if there is	a change in the year	ar and/or cost					
2 CTT unity of Ent	2 0 0 10 1 2 1	-p-u	a change in the jet	ar and, or cost.					



Page 270 **25**5

\$161,800

21089 **Number:**

Project Cost:

Troject Name. Recreatio	n Fitness Equipi	ment Replaceme	nt				
-				<u></u>		Repair/Repl	ace
Commission: Community				Į	Jseful Life:	5 Pre	Approval: \square
Department: Recreation				Category:	Annual		
Project Mgr: Warren Wa		<u> </u>	Cos	st Validation:	Internal pee	r review	
	2 3 4 4			t Validation:			
	6 7 8		_				
DETAILED DESCRIPTIO		· ·	- 4 for ::1:4: T	1 :4 1:	14		.d:d
Annual replacement progran flooring equipment.	n for the fitness equ	ipment at City own	ed facilities. 1	ne items bein	g repiaced ar	e strength, car	dio, and
mooring equipment							
		C.C.O.	G	•.			
BUILDING MARKHAM'	S FUTURE TOGI	ETHER: Safe &	Sustainable Coi	nmunity			
PROJECT COSTS (\$)	2021	Future Phases	NOTES				
Cost/Quote:	159,000	0				nent is based one will represe	
Internal Charges:	0	0				vice membersl	
External Consulting:	0	0				nultiplied by t	
Sub Total:	159,000	0		8%, it equates ith previous y		. The formula	used is
HST Impact:	2,798	0	*This is an a	nnual progra	m and fundin	g will be requ	ested each year.
Total Project Cost:	161,800	0	* Funding fo	or this project	was reduced	as a result of	COVID19
=	101,000						
COLIDCE(C) OF FUNDING	7 (4)		~				
SOURCE(S) OF FUNDING	<u> </u>		Comp	onents			Entuno
	Budget		Comp	onents		TOTAL	Future Phases
Funding Type		0	0	0	C	· · · · · · · · · · · · · · · · · · ·	
Funding Type Operating Funded Life Cycle	Budget 161,800	0			C	· · · · · · · · · · · · · · · · · · ·	Phases 0
Funding Type	Budget	0			C	0	Phases 0
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SOURCE(S) OF FUNDING Funding Type Operating Funded Life Cycle TOTAL FUNDING OPERATING BUDGET I	161,800 161,800	rsonnel Non Pe	0 rsonnel R	0 evenues	Expenditur	0 0 0 0 ces/(Revenues	0 0
Funding Type Operating Funded Life Cycle TOTAL FUNDING OPERATING BUDGET I	Budget	rsonnel Non Pe	0 rsonnel R	0	Expenditur	0	0 0
Funding Type Operating Funded Life Cycle TOTAL FUNDING OPERATING BUDGET I	Budget	rsonnel Non Pe \$0 \$	0 rsonnel R	0 evenues	Expenditu	0 0 0 0 ces/(Revenues	0 0
Funding Type Operating Funded Life Cycle TOTAL FUNDING OPERATING BUDGET I DCA/LIFE CYCLE DETA	Budget	rsonnel Non Pe	0 rsonnel R	evenues \$0	Expenditur <u>Life</u>	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0
Funding Type Deperating Funded Life Cycle TOTAL FUNDING OPERATING BUDGET I DCA/LIFE CYCLE DETA DCA	Budget	rsonnel Non Pe \$0 \$	0 rsonnel R	evenues \$0	Expenditur Life Amou	res/(Revenues \$0 Cycle nt in Study:	0 0 0 206,600
Funding Type Deperating Funded Life Cycle TOTAL FUNDING OPERATING BUDGET I DCA/LIFE CYCLE DETA DCA	Budget	rsonnel Non Pe \$0 \$	0 rsonnel R	evenues \$0	Expenditur Life Amou	ces/(Revenues \$0 Cycle nt in Study:	2 Phases 0 0 206,600 161,800
Funding Type Operating Funded Life Cycle TOTAL FUNDING OPERATING BUDGET I DCA/LIFE CYCLE DETA DCA Name	Budget	rsonnel Non Pe \$0 \$ Yes	orsonnel R	evenues \$0	Expenditur Life Amou	res/(Revenues \$0 Cycle nt in Study:	0 0 0 206,600
Funding Type Deperating Funded Life Cycle TOTAL FUNDING OPERATING BUDGET I DCA/LIFE CYCLE DETA DCA	Budget	rsonnel Non Pe \$0 \$ Yes	orsonnel R	evenues \$0	Expenditur Life Amou	ces/(Revenues \$0 Cycle nt in Study:	2 Phases 0 0 206,600 161,800
Funding Type Operating Funded Life Cycle TOTAL FUNDING OPERATING BUDGET I DCA/LIFE CYCLE DETA DCA Name	Budget	rsonnel Non Pe \$0 \$ Yes	orsonnel R	evenues \$0	Expenditur Life Amou	ces/(Revenues \$0 Cycle nt in Study:	2 Phases 0 0 206,600 161,800
Funding Type Operating Funded Life Cycle TOTAL FUNDING OPERATING BUDGET I DCA/LIFE CYCLE DETA DCA Name	Budget	rsonnel Non Pe \$0 \$ Yes	orsonnel R	evenues \$0	Expenditur Life Amou	ces/(Revenues \$0 Cycle nt in Study:	2 Phases 0 0 206,600 161,800
Funding Type Operating Funded Life Cycle TOTAL FUNDING OPERATING BUDGET I DCA/LIFE CYCLE DETA DCA Name	Budget	rsonnel Non Pe \$0 \$ Yes	orsonnel R	evenues \$0	Expenditur Life Amou	ces/(Revenues \$0 Cycle nt in Study:	2 Phases 0 0 206,600 161,800
Funding Type Operating Funded Life Cycle TOTAL FUNDING OPERATING BUDGET I DCA/LIFE CYCLE DETA DCA Name	Budget	rsonnel Non Pe \$0 \$ Yes	orsonnel R	evenues \$0	Expenditur Life Amou	ces/(Revenues \$0 Cycle nt in Study:	2 Phases 0 0 206,600 161,800



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21090 Number: **Project Cost:** \$18,300 Project Name: Recreation Floor Cleaning Machine Replacements Repair/Replace Commission: Community & Fire Services Pre Approval: Useful Life: Department: Recreation Services Category: Minor Project Mgr: Bob Bell Cost Validation: Third party estimate CW □ 1□ 2□ 3 ✓ 4□ Ward(s): Requirement Validation: Condition assessment 5 ✓ 6 □ 7 □ 8 □ **DETAILED DESCRIPTION (SCOPE OF PROJECT):** This project is to replace floor cleaning machines located in the following locations 1) Crosby C.C; replacing one (1) Walk-Behind Floor Machine, 2) Centennial C.C - replacing one (1) Walk -Behind Floor Machine. Safe & Sustainable Community **BUILDING MARKHAM'S FUTURE TOGETHER: PROJECT COSTS (\$)** 2021 **Future Phases** The existing floor machines for each respective building were Cost/Quote: 18,000 0 purchased in the following years: Crosby C.C. (2000) and Centennial C.C. (2012). Based on condition assessment, the **Internal Charges:** 0 0 existing Floor Cleaning Machines warrant replacement. The **External Consulting:** 0 0 amount requested is consistent with recent quote. 2019 repair costs for existing cleaning machines are as follows: Crosby C.C. = Sub Total: 18,000 0 \$503.57 / Centennial C.C. = \$6.000. 0 **HST Impact:** 317 **Total Project Cost:** 18,300 0 SOURCE(S) OF FUNDING (\$) **Components Future Funding Type** Crosby Centennial **TOTAL Phases Budget** Operating Funded Life Cycle 18,300 9,150 9,150 0 0 18,300 0 TOTAL FUNDING 18,300 18,300 0 Personnel Non Personnel Revenues Expenditures/(Revenues) OPERATING BUDGET IMPACT \$0 \$0 \$0 \$0 DCA/LIFE CYCLE DETAILS **DCA** Amount in **Life Cycle** Year Name **Amount** Study Amount in Study: 679,400 Amount Incl HST 18,300 Year in the study 2021 DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:



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21091 Number: **Project Cost:** \$34.800 Project Name: Recreation Lifeguard Chair Replacement Repair/Replace Commission: Community & Fire Services Pre Approval: Useful Life: Department: Recreation Services Category: Minor Project Mgr: Adriano Trabucco Cost Validation: Third party estimate CW □ 1 ✓ 2 □ 3 □ 4 □ Ward(s): Requirement Validation: Condition assessment 5 ✓ 6 ✓ 7 □ 8 □ **DETAILED DESCRIPTION (SCOPE OF PROJECT):** This project is to replace existing lifeguard chairs in the aquatics centres of the following facilities; Angus Glen C.C, Cornell C.C. and Thornlea pool, Life Guard chairs is a legislative piece of equipment used in aquatic centres. Life Guard chairs offer lifeguards an unblocked view of the water and swimmers from an elevated position. The elevated position allows for lifeguards to maintain swimmer safetly. **BUILDING MARKHAM'S FUTURE TOGETHER:** Safe & Sustainable Community **NOTES PROJECT COSTS (\$)** 2021 **Future Phases** The following lifeguard chairs were installed in the following Cost/Ouote: 34,163 0 years: Angus Glen (2005 - original), Cornell (2012 - original) and Thornlea (2006). Based on condition assessment, the existing **Internal Charges:** 0 0 lifeguard chairs warrant replacement. The amount request is **External Consulting:** 0 0 consistent with Life Cycle Reserve Study Update. Sub Total: 34,163 0 **HST Impact:** 601 0 **Total Project Cost:** 34,800 0 SOURCE(S) OF FUNDING (\$) **Components Future Funding Type** Cornell Angus Glen Thornlea **TOTAL Phases Budget** Operating Funded Life Cycle 0 0 34,800 11.435 10,800 12.565 34,800 **TOTAL FUNDING** 34,800 34,800 0 Non Personnel Expenditures/(Revenues) Personnel Revenues OPERATING BUDGET IMPACT \$0 \$0 \$0 \$0 DCA/LIFE CYCLE DETAILS **DCA** Amount in Life Cycle Year **Amount** Study Name Amount in Study: 1,088,800 Amount Incl HST 34,800 2021 Year in the study 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 ARKHAM 21092 **Number: Project Cost:** \$11,000 Project Name: Recreation Pool Grouting Replacement Repair/Replace Commission: Community & Fire Services Pre Approval: Useful Life: Department: Recreation Services Category: Annual Project Mgr: Eric Ho Cost Validation: Internal peer review CW ✓ 1 □ 2 □ 3 □ 4 □ Ward(s): Requirement Validation: Condition assessment 5 🗆 6 🗆 7 🗆 8 🗆 **DETAILED DESCRIPTION (SCOPE OF PROJECT):** Annual program for the repair of pool grout during the pool shut down process. Safe & Sustainable Community **BUILDING MARKHAM'S FUTURE TOGETHER: PROJECT COSTS (\$)** 2021 **Future Phases** Every year each pool in Markham is shut down on a rotating basis Cost/Quote: 10,800 0 for annual maintenance and repair. These funds will support the cost of repairing and replacing grout. The amount of work required **Internal Charges:** 0 0 and the specific pools will be determined during each pool **External Consulting:** 0 0 shutdown. The budget amount is based on the 3-year average spent \$50,100. Sub Total: 10,800 0 *This is an annual program and funding will be requested each 0 **HST Impact:** 190 year. The Life Cycle Reserve Study will be adjusted accordingly in **Total Project Cost:** 11,000 0 the next update. SOURCE(S) OF FUNDING (\$) **Components Future Funding Type TOTAL Phases Budget** Operating Funded Life Cycle 11,000 0 0 0 0 0 0 TOTAL FUNDING 11,000 0 0 Personnel Non Personnel Revenues Expenditures/(Revenues) OPERATING BUDGET IMPACT \$0 \$0 \$0 \$0 DCA/LIFE CYCLE DETAILS **DCA** Amount in **Life Cycle** Year Name **Amount** Study Amount in Study: 51,000 Amount Incl HST 11,000 Year in the study 2021 DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:



Page 278 **265** 2021 PROJECT FUNDING REQUEST FORM ARKHAM 21093 Number: **Project Cost:** \$53,600 Project Name: Recreation Program Equipment Replacement Repair/Replace Commission: Community & Fire Services Pre Approval: Useful Life: Department: Recreation Services Category: Annual Project Mgr: Jason Tsien Cost Validation: Internal peer review CW ✓ 1 □ 2 □ 3 □ 4 □ Ward(s): Requirement Validation: Condition assessment 5 🗆 6 🗆 7 🗆 8 🗆 **DETAILED DESCRIPTION (SCOPE OF PROJECT):** Annual program to replace City wide program/camp equipment. Items to be replaced under this program include: preschool equipment, mats, badminton and volleyball nets, learn to skate equipment, storage carts for equipment. Safe & Sustainable Community **BUILDING MARKHAM'S FUTURE TOGETHER: PROJECT COSTS (\$)** 2021 **Future Phases** The 3 year average spent from the Annual Programs Equipment is Cost/Quote: 52,700 0 \$109,571. The equipment being replaced supports programs that are revenue generating. **Internal Charges:** 0 0 *This is an annual program and funding is requested each year. The **External Consulting:** 0 0 Life Cycle Reserve Study will be adjusted accordingly in the next update. Sub Total: 52,700 0 * Funding for this project was reduced as a result of COVID19. 0 **HST Impact:** 928 **Total Project Cost:** 53,600 0 SOURCE(S) OF FUNDING (\$) **Components Future Funding Type TOTAL Phases Budget** Operating Funded Life Cycle 53,600 0 0 0 0 0 0 TOTAL FUNDING 53,600 0 0 Personnel Non Personnel Revenues Expenditures/(Revenues) OPERATING BUDGET IMPACT \$0 \$0 \$0 \$0 **DCA/LIFE CYCLE DETAILS**

Year

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

Amount

Amount in

Study

Life Cycle

Amount in Study:

Amount Incl HST

Year in the study

113,500

53,600

2021

DCA

Name



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Project Name: Recreation Tables and Chairs Replacement Commission: Community & Fire Services Department: Recreation Services Project Mgr: Ryan Hanna Ward(s): Cw ☑ 1 ☐ 2 ☐ 3 ☐ 4 ☐ Requirement Validation: Internal Requirement Validation: Condit DETAILED DESCRIPTION (SCOPE OF PROJECT): Annual program to replace tables and chairs at all city wide recreation facilities. BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community PROJECT COSTS (\$) 2021 Future Phases Cost/Quote: 33,400 0 0 Internal Charges: 0 0 0 External Consulting: 0 0 0 Sub Total: 33,400 0 0 HST Impact: 588 0 Total Project Cost: 34,000 0 0 SOURCE(S) OF FUNDING (\$) Components Funding Type Budget	fe: 5	V	<u> </u>
Commission: Community & Fire Services Department: Recreation Services Project Mgr: Ryan Hanna Ward(s): CW 1 2 3 4 Requirement Validation: Toost Validation: Solution for this program to replace tables and chairs at all city wide recreation facilities. DETAILED DESCRIPTION (SCOPE OF PROJECT): Annual program to replace tables and chairs at all city wide recreation facilities. BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community PROJECT COSTS (\$) 2021 Future Phases Cost/Quote: 33,400 0 0 Tables and chairs are equipment to programs and rentals. External Consulting: 0 0 programs and rentals. Sub Total: 33,400 0 the next update. HST Impact: 588 0 the next update. Total Project Cost: 34,000 0 the next update. Funding Type Budget Components	fe: 5	Pre Ap	
Department: Recreation Services Project Mgr: Ryan Hanna Ward(s): CW 1 2 3 4 Requirement Validation: DETAILED DESCRIPTION (SCOPE OF PROJECT): Annual program to replace tables and chairs at all city wide recreation facilities. BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community PROJECT COSTS (\$) 2021 Future Phases Cost/Quote: 33,400 0 Internal Charges: 0 0 Internal Charges: 0 0 Sub Total: 33,400 0 HST Impact: 588 0 Total Project Cost: 34,000 0 GOURCE(S) OF FUNDING (\$) Components Components Category: Annual Internal Cost Validation: Internal Condition: Internal Charges: 0 0 SOURCE(S) OF FUNDING (\$) Components Components	fe: 5	Pre Ap	
Department: Recreation Services Project Mgr: Ryan Hanna Ward(s): CW	l peer review on assessme	V	
Ward(s): CW	l peer review on assessme		
Requirement Validation: Condition Con	on assessme		
DETAILED DESCRIPTION (SCOPE OF PROJECT): Annual program to replace tables and chairs at all city wide recreation facilities. BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community PROJECT COSTS (\$) 2021 Future Phases Cost/Quote: 33,400 0 Internal Charges: 0 0 External Consulting: 0 0 Sub Total: 33,400 0 HST Impact: 588 0 Total Project Cost: 34,000 0 GOURCE(S) OF FUNDING (\$) Components Components		SHL SHL	
Annual program to replace tables and chairs at all city wide recreation facilities. BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community PROJECT COSTS (\$) 2021 Future Phases Cost/Quote: 33,400 0 0 Internal Charges: 0 0 0 External Consulting: 0 0 0 Sub Total: 33,400 0 0 HST Impact: 588 0 0 Total Project Cost: 34,000 0 GOURCE(S) OF FUNDING (\$) Components Funding Type Budget	anlacament •		
BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community PROJECT COSTS (\$) 2021 Future Phases Cost/Quote: 33,400 0 1 Tables and chairs are equipment to programs and rentals. External Charges: 0 0 programs and rentals. Sub Total: 33,400 0 programs and rentals. *This is an annual program and further in the next update. HST Impact: 588 0 project Cost: 34,000 0 project Cost: 34,000 project Cost:	anlacament •		
The 3 year average spent on this rables and chairs are equipment to programs and rentals. External Consulting: Sub Total: HST Impact: Total Project Cost: 34,000 Total Project Cost: Budget The 3 year average spent on this rables and chairs are equipment to programs and rentals. *This is an annual program and further year. The Life Cycle Reserve Study the next update. *Funding for this project was red *Components Components *Components	anlacament :		
Cost/Quote: 33,400 0 Tables and chairs are equipment to programs and rentals. External Consulting: 0 0 the next update. Sub Total: 33,400 0 the next update. HST Impact: 588 0 Total Project Cost: 34,000 0 SOURCE(S) OF FUNDING (\$) Components Components			in \$54,600
Internal Charges: 0 0 programs and rentals. External Consulting: 0 0 programs and rentals. *This is an annual program and further year. The Life Cycle Reserve Study the next update. HST Impact: 588 0 Funding for this project was red *SOURCE(S) OF FUNDING (\$) Components *Funding Type *Budget*			
Sub Total: 33,400 0 the next update. HST Impact: 588 0 Total Project Cost: 34,000 0 SOURCE(S) OF FUNDING (\$) Funding Type Budget			
Sub Total: 33,400 HST Impact: 588 Total Project Cost: 34,000 COURCE(S) OF FUNDING (\$) Funding Type Budget the next update. * Funding for this project was red * Components Components			
Total Project Cost: 34,000 0 SOURCE(S) OF FUNDING (\$) Components Funding Type Budget		•	
SOURCE(S) OF FUNDING (\$) Funding Type Budget	uced as a res	sult of CC	OVID19.
Funding Type Budget			
Operating Funded Life Cycle 34,000 0 0	<u>T</u>	OTAL	<u>Future</u> <u>Phases</u>
	0	0	C
TOTAL FUNDING 34,000	_	0	
OPERATING BUDGET IMPACT Personnel Non Personnel Revenues Expen	ditures/(Rev	venues)	
\$0 \$0 \$0	\$0		
DCA/LIFE CYCLE DETAILS			
	<u>Life Cycle</u>		
Name Year Amount Study	mount in Stu	udy:	55,600
A	mount Incl H	HST	34,000
Y	mount mel I	tudy	2021
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:		J	
2 0.1 million 2 2110 Operior 2 mprant it alore is a change in the year and/or cost.	ear in the st		



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2021 PROJECT FUNDING REQUEST FORM ARKHAM 21095 Number: **Project Cost:** \$297,900 Project Name: Rouge River C.C. Mechanical Replacement Repair/Replace Commission: Community & Fire Services Pre Approval: Useful Life: Department: Recreation Services Category: Minor Project Mgr: Ryan Hanna Cost Validation: Recent awards Ward(s): Requirement Validation: Condition assessment 5 6 7 8 **DETAILED DESCRIPTION (SCOPE OF PROJECT):** This project is to replace four mechanical units at Rouge River C.C. 1) Replace perimeter heaters that serves the Clubhouse, the Auditorium and the Poolside Lounge. 2) Replace a three ton AHU that serves the pool changeroom 3) Replace a boiler that provides heating via the perimeter heating system for the entire building and 4) Replace two hot water tanks which supply hot water to the shower in the pool change rooms and the rest of the building. The work includes; material, labour and all other trades required for the **BUILDING MARKHAM'S FUTURE TOGETHER:** Safe & Sustainable Community NOTES **PROJECT COSTS (\$)** 2021 **Future Phases** The following items were last replaced; perimeter heaters Cost/Quote: 269,026 0 (original - 1985), 3 ton AHU (2001), boiler (2003) and two hot water tanks (2007). Based on condition assessment replacement is 0 0 Internal Charges: warranted. The amount requested is consistent with recent quote. **External Consulting:** 0 23,730 Sub Total: 292,756 0 **HST Impact:** 0 5,153 **Total Project Cost:** 297,900 0 SOURCE(S) OF FUNDING (\$) **Components Future** AHU + Heater Boiler **Funding Type** Hot Water Tanks **ConsultantTOTAL Budget Phases** Gas Tax 297,900 0 186,746 63,600 23,404 24,150 297,900 TOTAL FUNDING 297,900 297,900 0 Personnel Non Personnel Revenues Expenditures/(Revenues) **OPERATING BUDGET IMPACT** \$0 \$0 \$0 \$0 **DCA/LIFE CYCLE DETAILS DCA** Amount in Life Cycle Year Amount Study Name Amount in Study: 344,500 297,900 Amount Incl HST Year in the study 2021 DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:



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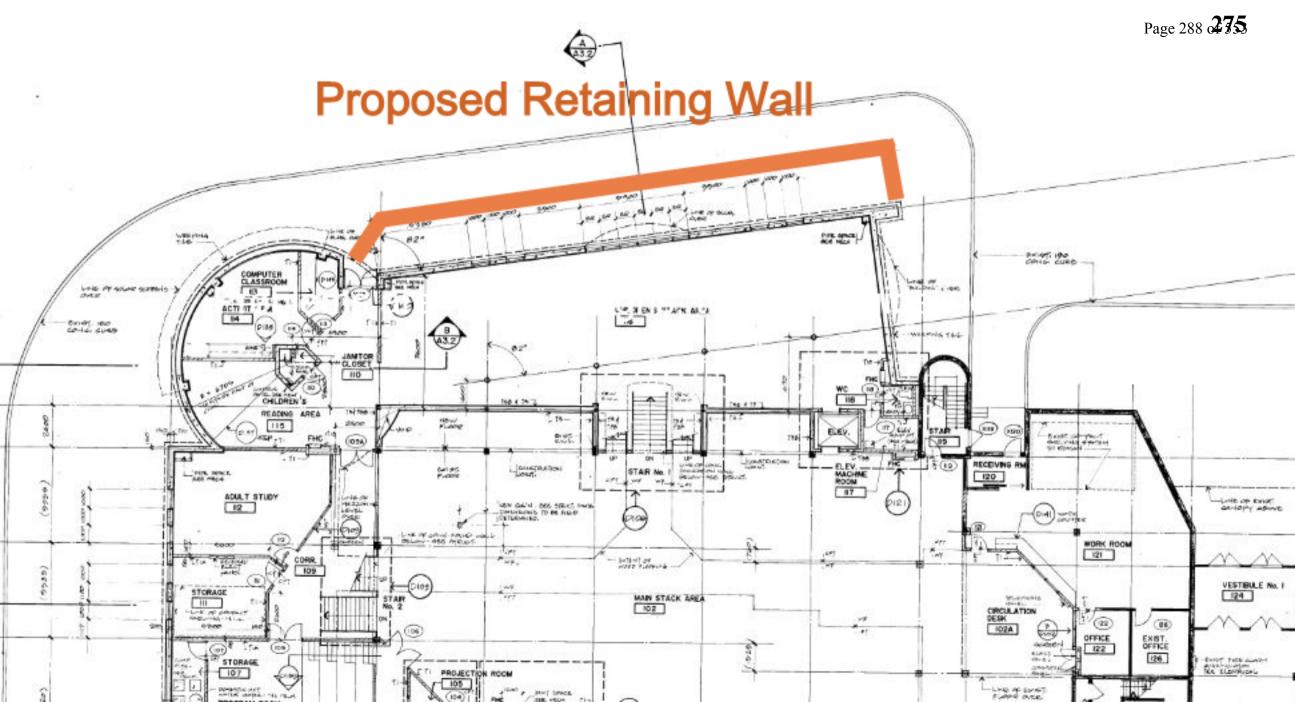
This project is to replace one (1) ice edger, one (1) hose reel, and one (1) ice painting equipment at the Thornhill C.C. The Equipment at						Numb	er: 2	1096
Repair/Replace Repair/Replace Repair/Replace Repair/Replace Repair/Replace Recreation Services Useful Life: Pre Approx Project Mgr: Martin Barrow Requirement Validation: Third party estimate Third party estimate Third party estimate Third party estimate Requirement Validation: Third party estimate Third party	Project Name: Thornhill	C C Ice Fauin	mant Panlacar	nant		Project Cost:	\$6,	300
Department: Recreation Services Project Mgr: Martin Barrow Ward(s): CW 1 2 3 4 5 6 7 8 Requirement Validation: Third party estimate Requirement Validation: Condition assessment DETAILED DESCRIPTION (SCOPE OF PROJECT): This project is to replace one (1) ice edger, one (1) hose reel, and one (1) ice painting equipment at the Thornhill C.C. The equipment used by staff to maintain ice quality and operation. BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community PROJECT COSTS (S) Cost/Quote: 6.200 0 0 Internal Charges: 0 0 0 External Consulting: 0 0 0 HST Impact: 109 0 0 Total Project Cost: 6,300 0 0 Total Project Cost: 6,300 0 0 SOURCE(S) OF FUNDING (S) Components Funding Type Budget lest Edger Hose Red lest Painting Equipment) TOTAL Properting Funded Life Cycle 6,300 4,000 1,400 900 0 6,300 TOTAL FUNDING 6,300 50 \$0 \$0 Operating Funded Life Cycle 6,300 4,000 1,400 900 0 6,300 TOTAL FUNDING 6,300 50 \$0 \$0 DOALLIFE CYCLE DETAILS DCA Name Year Amount Study			пси керіассі			Re	epair/Replac	e
Project Mgr: Martin Barrow Ward(s): CW				-	Ţ	Jseful Life:	Pre Ap	proval:
Ward(s): CW 1 2 3 4 Requirement Validation: Sequirement Validation: Condition assessment	•			=	Category:	Minor		
Requirement Validation: Condition assessment Condition assessment				Co	ost Validation:	Third party estir	mate	
This project is to replace one (1) ice edger, one (1) hose reel, and one (1) ice painting equipment at the Thornhill C.C. The equipment depends one one of the community of the confidence of the community of								
This project is to replace one (1) ice edger, one (1) hose reel, and one (1) ice painting equipment at the Thornhill C.C. The equipment at the Thornhill C.C. The equipment of the Thornhill C.C. The Edger Indeed & Substitutes with the Life Cycle Reserve Study Upon the Thornhill C.C. The Edger Indeed & Substitute Substitutes and the Thornhill C.C. The Edger Indeed & Substitute Su			DO THOM					
PROJECT COSTS (\$) Cost/Quote: 6,200	This project is to replace one	e (1) ice edger, one	(1) hose reel, ar	nd one (1) ice pai	inting equipme	ent at the Thornhil	ll C.C. The e	equipment
Cost/Quote: 6,200 0 0 Internal Charges: 0 0 0 External Consulting: 0 0 Sub Total: 6,200 0 0 HST Impact: 109 0 0 HST Impact: 109 0 0 Total Project Cost: 6,300 0 0 SOURCE(S) OF FUNDING (\$) Funding Type Budget Ree Edger Hose Reed Ice Painting Equip TOTAL Project Cost: 6,300 Exernal Funded Life Cycle 6,300 4,000 1,400 900 0 6,300 TOTAL FUNDING 6,300 Fersonnel Revenues Expenditures/(Revenues) OPERATING BUDGET IMPACT Personnel Non Personnel Revenues Expenditures/(Revenues) SOURCE(S) OF SUDING (\$)	BUILDING MARKHAM'S	S FUTURE TOG	ETHER: Safe		ommunity			
Cost/Quote: 6,200 0 Reel), and 1990 (Ice Painting Equipment). A condition asset of the ice equipment indicates replacement is warranted. The amount is consistent with the Life Cycle Reserve Study Upon Sub Total: 6,200 0 O O O O O O O	PROJECT COSTS (\$)	<u>2021</u>	Future Phase		g items were r	aurchased in 2004	(Ice Edger)	2003 (He
External Consulting: Sub Total: 6,200 0 0 HST Impact: 109 0 Total Project Cost: 6,300 0 SOURCE(S) OF FUNDING (\$) Components Funding Type Budget Ice Edger Hose Reel Ice Painting Equip TOTAL POPERATING BUDGET IMPACT \$0 \$0 \$0 \$0 TOTAL FUNDING 6,300 4,000 1,400 900 0 6,300 TOTAL FUNDING 6,300 \$0 \$0 \$0 DCA/LIFE CYCLE DETAILS DCA Name Year Amount Study	Cost/Quote:	6,200	0	Reel), and	1990 (Ice Pain	ting Equipment).	A condition	assessme
Sub Total: 6,200 0	Internal Charges:	0	0					
HST Impact: 109 0 0	External Consulting:	0	0	amount is c	onsistent with	the Life Cycle Re	eserve study	Opuate.
Total Project Cost: 6,300 0	Sub Total:	6,200	0					
SOURCE(S) OF FUNDING (\$) Components		109	0					
Funding Type Budget Ice Edger Hose Reel Ice Painting Equip TOTAL P	Total Project Cost:	6,300	0					
Funding Type Budget Ice Edger Hose Reel Ice Painting Equip TOTAL Painting Type Personnel Revenues Expenditures/(Revenues)	SOURCE(S) OF FUNDING	<u> </u>		Сот	oonents			Future
TOTAL FUNDING 6,300 OPERATING BUDGET IMPACT \$0 \$0 \$0 \$0 \$0 DCA/LIFE CYCLE DETAILS DCA Name Year Amount in Study	Funding Type	Budget	Ice Edge	r Hose Ree	l Ice Painting Ec	<u>qиір</u>	TOTAL	Phases
OPERATING BUDGET IMPACT Personnel Non Personnel Revenues Expenditures/(Revenues) \$0 \$0 \$0 \$0 DCA/LIFE CYCLE DETAILS DCA Name Year Amount in Life Cycle Year Amount Study	Operating Funded Life Cycle	6,300	4,000	1,400	900	0	6,300	
OPERATING BUDGET IMPACT \$0 \$0 \$0 \$0 DCA/LIFE CYCLE DETAILS DCA Name Year Amount in Life Cycle Year Amount Study	TOTAL FUNDING	6,300				=	6,300	
\$0 \$0 \$0 \$0 DCA/LIFE CYCLE DETAILS DCA Name Substitute	OPERATING BUDGET IN	MPACT Per	rsonnel Non	Personnel 1	Revenues	Expenditures/(Revenues)	
DCA Amount in <u>Life Cycle</u> Name Year Amount Study			\$0	\$0	\$0	\$0		
Name Year Amount Study		<u>110</u>			Amount in	<u>Life Cycl</u>	<u>le</u>	
——————————————————————————————————————	Name		•	Year Amount	Study	Amount in	Study:	351,600
							-	6,300
Year in the study						I mount m		0,500
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:						Year in th		2021



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21097 **Number:**

Duningt Mannay IDI 1 11		33 7 11 T 4 11 4*			Project (Just.	\$330	,700
Project Name: Thornhil		Wali Installation	n			New	Asset/Ex	pansion
Commission: Communit	y & Fire Services			Į	Jseful Life:	15	Pre Ap	proval:
Department: Recreation				Category:			- F	F
Project Mgr: Martin Bar	rrow		Cost	t Validation:		actima	φ.	
Ward(s): $CW \square 1$	2 3 4 4		Requirement					
5 🗆	□ 6□ 7□ 8□		Requirement	vanuation.	Condition a	188088111	JIIL	
ETAILED DESCRIPTION								
his project is to install an itigation strategies to pred 17 floods was \$300K, whoods within the Thornhill om filling the lower emerge UILDING MARKHAM	vent against flooding nich was paid by ins Library. The retaini gency exit area, thus	g that occurred in J urance (\$100K ded ng wall will reside flooding the centre	une & July, 201 luctible was paid along the front	17. The total d by the City of the library	cost for clea). This retain	nup and	d repair af ll will hel	fter the p mitigate
ROJECT COSTS (\$)	2021	E (DI	NOTES					
	<u>2021</u>	Future Phases	Due to heavy					
Cost/Quote:	300,000	0	emergency exbeds, which t					
Internal Charges:	0	0	library. The					
External Consulting:	25,000	0	capacity to si					
Sub Total:	325,000		the building be partially f					
UCT Impact:	5,720	0	be partially i	unaca (1070)				
HST Impact:			Funding, whi		received by	the City	of Markl	ham for
Total Project Cost:	330,700	0	Funding, whi	ich is a grant	received by	the City	of Mark	ham for
Total Project Cost:	330,700			ich is a grant ation.	received by	the City	of Markl	
Total Project Cost:	330,700		flood remedi	ich is a grant ation.	received by		of Mark	ham for Future Phases
Total Project Cost: OURCE(S) OF FUNDIN Inding Type	330,700 G (\$)		flood remedi	ich is a grant ation.				Future Phases
Total Project Cost: DURCE(S) OF FUNDIN Inding Type There External	330,700 G (\$) Budget	0	flood remedi Compo	ich is a grant ation. onents	(1	OTAL	Future Phases
Total Project Cost: DURCE(S) OF FUNDIN Inding Type ner External	330,700 G (\$) Budget 132,280	0	flood remedi Compo	ich is a grant ation. onents	(1	OTAL 0	Future Phases
Total Project Cost: DURCE(S) OF FUNDIN Inding Type her External X FOTAL FUNDING	330,700 G (\$) Budget 132,280 198,420 330,700	0 0	Compo 0 0	ich is a grant ation. onents	(1	0 0 0 0	Future Phases
Total Project Cost: DURCE(S) OF FUNDIN Inding Type There External TOTAL FUNDING	330,700 G (\$) Budget 132,280 198,420 330,700	0 0 0	Compo 0 0	onents 0 0	(1	0 0 0 0	Future Phases
Total Project Cost: DURCE(S) OF FUNDIN Inding Type There External TOTAL FUNDING PERATING BUDGET 1 CA/LIFE CYCLE DETA	330,700 G (\$) Budget 132,280 198,420 330,700 Per	0 0	Compo 0 0 ersonnel Re	onents 0 0	(])) 	0 0 0 0	Future Phases
Total Project Cost: DURCE(S) OF FUNDIN Inding Type Ther External X FOTAL FUNDING PERATING BUDGET I CA/LIFE CYCLE DETA DCA	330,700 G (\$) Budget 132,280 198,420 330,700 Per	0 0 0 80 S	Compo O O ersonnel Re SO	onents 0 0 0 Amount in	Expenditu])) 	0 0 0 0	Future Phases
Total Project Cost: DURCE(S) OF FUNDIN Inding Type The External X FOTAL FUNDING PERATING BUDGET 1	330,700 G (\$) Budget 132,280 198,420 330,700 Per	0 0	Compo O O ersonnel Re SO	onents 0 0 0 evenues	Expenditu	1)) res/(Re	OTAL 0 0 0 venues)	Future Phases
Total Project Cost: DURCE(S) OF FUNDIN Inding Type Ther External X FOTAL FUNDING PERATING BUDGET I CA/LIFE CYCLE DETA DCA	330,700 G (\$) Budget 132,280 198,420 330,700 Per	0 0 0 80 S	Compo O O ersonnel Re SO	onents 0 0 0 Amount in	Expenditu Life Amou	1)) res/(Re \$0	OTAL 0 0 0 venues)	Future Phases
Total Project Cost: DURCE(S) OF FUNDIN Inding Type her External X TOTAL FUNDING PERATING BUDGET I CA/LIFE CYCLE DETA DCA	330,700 G (\$) Budget 132,280 198,420 330,700 Per	0 0 0 80 S	Compo O O ersonnel Re SO	onents 0 0 0 Amount in	Expenditu Life Amou	10) (res/(Re \$0) Cycle unt in St	venues)	<u>Future</u>





Page 290 **275**3

ARKHAM 21098 Number: **Project Cost:** \$158,800 Project Name: Thornhill C.C. Rubber Floor Replacement Repair/Replace Commission: Community & Fire Services Pre Approval: Useful Life: 10 Department: Recreation Services Category: Minor Project Mgr: Martin Barrow Cost Validation: Third party estimate CW □ 1 ✓ 2 □ 3 □ 4 □ Ward(s): Requirement Validation: Condition assessment 5 🗆 6 🗆 7 🗆 8 🗆 **DETAILED DESCRIPTION (SCOPE OF PROJECT):** This project is to replace existing rubber flooring in the West arena and arena dressing rooms at Thornhill C.C. The replacement consists of approximately 8,630 sqft of rubber flooring located at the West arena and dressing rooms. Rubber flooring is specifically used in arena applications, as it is cut resistant able to withstand heavy impact and are durable. Safe & Sustainable Community **BUILDING MARKHAM'S FUTURE TOGETHER: PROJECT COSTS (\$)** 2021 **Future Phases** Existing rubber flooring was installed in 2009 at Thornhill C.C. A Cost/Quote: 156,100 0 condition assessment of the flooring indicates replacement is warranted. The amount requested is consistent with recent award **Internal Charges:** 0 0 plus inflation **External Consulting:** 0 0 *** (Recent Award) Rubber flooring costs approximately \$ 18.40 per sq ft including labour x 8,630 sq ft = \$158,800. Cost per unit is Sub Total: 156,100 0 consistent with recent award plus inflation. 0 **HST Impact:** 2,747 **Total Project Cost:** 158,800 0 SOURCE(S) OF FUNDING (\$) **Components Future Funding Type TOTAL Phases Budget** Operating Funded Life Cycle 158,800 0 0 0 0 0 0 TOTAL FUNDING 158,800 0 0 Personnel Non Personnel Revenues **Expenditures/(Revenues)** OPERATING BUDGET IMPACT \$0 \$0 \$0 \$0 DCA/LIFE CYCLE DETAILS **DCA** Amount in **Life Cycle** Year Name **Amount** Study Amount in Study: 351,600 Amount Incl HST 158,800 Year in the study DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:



Number: 21099

• • • • • • • • • • • • • • • • • • •	~					Project C	ost:	\$2,80	6,300
Project Name: Library	Collections						Repa	ir/Replac	e
Commission: Communit	y & Fire Services				ī	Jseful Life:	7		proval: 🗹
Department: Markham l	=				Category:		,	rie rip	provan.
Project Mgr: <u>Catherine</u>	Biss			C	ost Validation:		.da		
Ward(s): CW ✓ 1	2 🗆 3 🗆 4 🗆								
5 🗆	6 7 8			Requireme	nt Validation:	Condition as	ssessine	:IIL	
DETAILED DESCRIPTION	ON (SCOPE OF P	ROJECT):							
Collections are the Library's acquisition of new materials demand in Markham. In a 2 borrowing materials as the #demand. BUILDING MARKHAM	s, including those in 2020 survey of 2,521 ‡1 Library service.	print and non residents, 94 A constant str	n-print f 4% indi ream of	ormats and cated that it new materi	non-English la was importan	nguage mater that MPL pr to keep up wit	ials, w ovides	hich are in books an	n high d valued
BUILDING MARKHAM	S FUTURE TOGI	einek; -	жеерио	iai beivices	by Exceptional I	Соріс			
PROJECT COSTS (\$)	2021	Future Pha	ises	NOTES					
Cost/Quote:	2,757,738		0		y allocations (i dio-visual \$31				
Internal Charges:	0		0		\$3.5K/ Period				
External Consulting:	0		0		ocessing Suppl				
Sub Total:	2,757,738		0		naterial availab % funding (ex				
HST Impact:	48,536		$\frac{0}{0}$	English ma	terials (Multili	ngual, Frencl	i). Cos	st for repl	acement of
Total Project Cost:	2,806,300		0		Resources (wh 25 (\$537K USI				
SOURCE(S) OF FUNDIN	G (\$)			Com	ponents				
Funding Type	Budget	Collec	tions				<u>T</u>	OTAL	<u>Future</u> <u>Phases</u>
Operating Funded Life Cycle	2,806,300	2,806,300	 0	0	0	0	2,80	06,300	0
TOTAL FUNDING	2,806,300	,,						06,300	0
TOTAL FUNDING	<u> </u>							00,500	
	Per	sonnel N	on Pers	sonnel	Revenues	Expenditur	es/(Re	venues)	
OPERATING BUDGET I	<u>IMPACT</u>	\$0	\$0		\$0	•	\$0	,	
DCA/LIFE CYCLE DETA	AILS				· · · · · · · · · · · · · · · · · · ·		·		
<u>DCA</u>	-				Amount in	<u>Life</u>	<u>Cycle</u>		
Name			Year	Amoun	t Study	_ Amou	nt in St	udy: 2	2,831,400
							nt Incl		2,806,300
							in the s		2021
DCA and/antifa Coole	E1-:: :£41:		1	1 /	_	Tear	in the s	tudy	2021
DCA and/or Life Cycle	e: Explain if there is	a change in t	ne year	and/or cost					

2021 LIBRARY COLLECTIONS BUDGET SUPPORTING INFORMATION

The Library's Business Model for Material Selection:

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

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

Depth and Breadth of Library Materials:

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

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

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

Estimated budget breakdown for 2021:

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

Circulation in 2019 VS 2018:

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

Electronic circulation over the past 5 years:

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

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

CUSTOMER SATISFACTION WITH COLLECTIONS:

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

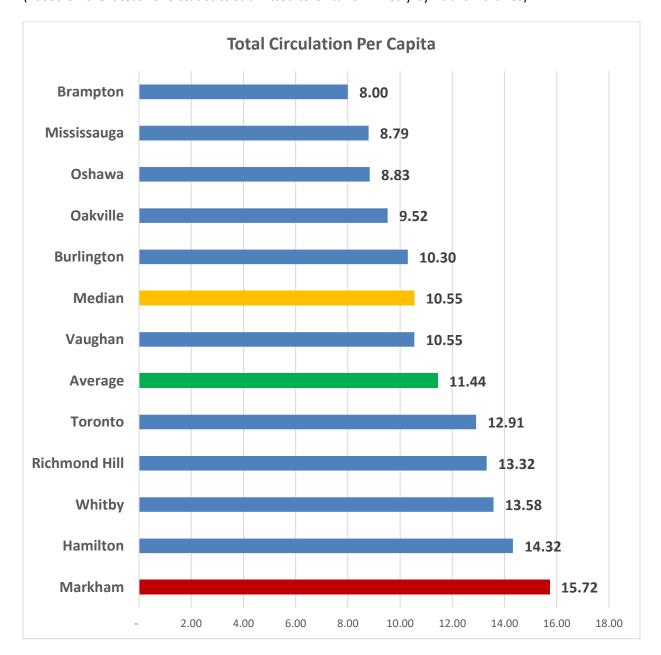
	2019
Importance	9.20/10
Satisfaction	8.03/10
Gap	1.17

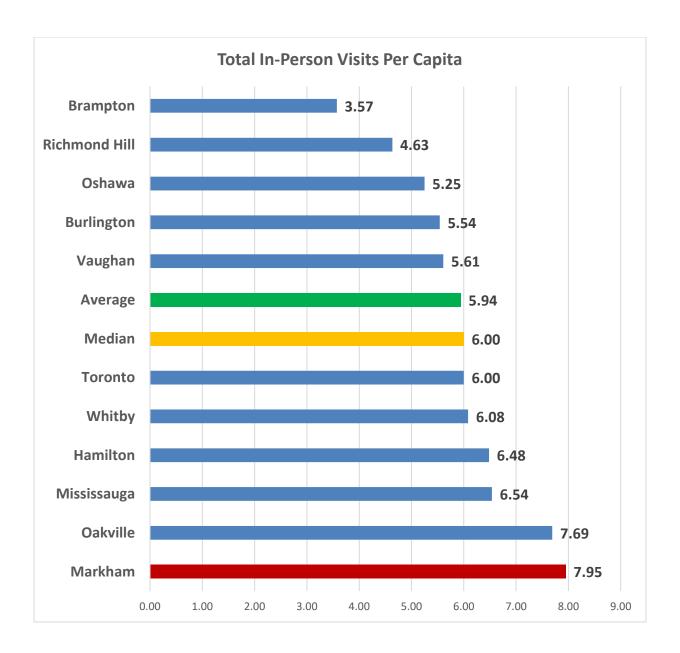
LANGUAGES COLLECTED:

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

KEY PERFORMANCE INDICATORS

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







Page 300 **28**7

21100 Number: **Project Cost:** \$146,700 Project Name: Library Furniture, Equipment & Shelving Replacement Repair/Replace Commission: Community & Fire Services Pre Approval: Useful Life: 10 Department: Markham Public Library Category: Annual Project Mgr: Catherine Biss Cost Validation: Recent awards CW ✓ 1 □ 2 □ 3 □ 4 □ Ward(s): Requirement Validation: Condition assessment 5 🗆 6 🗆 7 🗆 8 🗆 **DETAILED DESCRIPTION (SCOPE OF PROJECT):** To replace furniture/shelving that is broken and/or in poor condition due to heavy usage in MPL branches. Required to maintain library facilities and operations. The public library is a high use municipal service that is valued by the community and helps make Markham a highly attractive place in which to live, work and study. Safe & Sustainable Community **BUILDING MARKHAM'S FUTURE TOGETHER:** NOTES **PROJECT COSTS (\$)** 2021 **Future Phases** This is an annual program and funding will be requested each year. Cost/Ouote: 144,200 0 It will be shared amongst 8 facilities (\$17,500 per facility on average). The 2021 project will be used for replacement of public-**Internal Charges:** 0 0 facing furniture and loose furniture purchases for various locations **External Consulting:** 0 0 (\$56.7K), staff area furniture (\$20K), program room/makerspace (\$30K), mobile shelving (\$40K). The replacement is in high 144,200 Sub Total: 0 priority due to structural damages/safety issue/ public liability 0 **HST Impact:** 2,538 risks. 3 year average spend plus CPI is \$143.8k. This amount is **Total Project Cost:** 146,700 0 consistent with the 2020 Life Cycle Reserve Study update. SOURCE(S) OF FUNDING (\$) **Components Future Funding Type Furniture** Shelving **Phases Budget TOTAL** Operating Funded Life Cycle 146,700 106,700 40,000 0 0 0 146,700 TOTAL FUNDING 146,700 146,700 0 Personnel Non Personnel Revenues Expenditures/(Revenues) OPERATING BUDGET IMPACT \$0 \$0 \$0 \$0 **DCA/LIFE CYCLE DETAILS DCA** Amount in **Life Cycle** Year Name **Amount** Study Amount in Study: 146,700 Amount Incl HST 146,700 Year in the study 2021 DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:



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M Number: 21101

Project Name: Acabalt T) a consulta aim c				Project (Cost:	\$6,815	5,800
Project Name: Asphalt I						Repair	/Replace	;
Commission: Community				Ţ	Jseful Life:	20	Pre Apr	oroval: 🗹
Department: Operations				Category:	Minor		11	
Project Mgr: Zoyeb Vah		 -	Co	st Validation:		rds		
Ward(s): $CW \boxed{\bullet} 1$	2 3 4			nt Validation:			nt	
5 🗆	6 7 8		requireme	ar variation.	- Condition a	5505511101		
DETAILED DESCRIPTION		· · · · · · · · · · · · · · · · · · ·						
sphalt resurfacing of roads								
verall goal is to maintain a esigned to extend pavemen								
esting, route and seal, steel,								
BUILDING MARKHAM	S FUTURE TOG	ETHER: Safe &	Sustainable Co	ommunity				
			NOTES					
PROJECT COSTS (\$)	<u>2021</u>	Future Phases		surfacing of ar	proximately	17.5km	of two la	ne and four
Cost/Quote:	6,610,428	0	lane roads.	6.8km of four	lane roads of	f paveme	nt preser	vation
Internal Charges:	89,002	0		mparable to la this program. l				
External Consulting:	0	0		dicates 2019 p				
Sub Total:	6,699,430	0	72.9% of th	ne road networ	k is deemed	good or l	oetter (ta	rget = 80%).
HST Impact:	116,344	0						
Total Project Cost:	6,815,800	0						
OURCE(S) OF FUNDING	G (\$)		Comp	onents				Entuna
unding Type	<u>Budget</u>					<u>T(</u>	<u>)TAL</u>	<u>Future</u> <u>Phases</u>
as Tax	6,715,800	0	0	0	()	0	0
perating Funded Life Cycle	100,000	0	0	0	(0	0
peraning runded Line Cycle								
TOTAL FUNDING	6.815.800						0	0
	6,815,800						0	0
TOTAL FUNDING	P.	ersonnel Non Po	ersonnel l	Revenues	Expenditu	res/(Rev		0
	P.		ersonnel 1	Revenues \$0	Expenditur	res/(Rev		0
TOTAL FUNDING	MPACT Pe				Expenditu			0
TOTAL FUNDING DPERATING BUDGET I	MPACT Pe	\$0 \$	60	\$0 Amount in				0
TOTAL FUNDING DPERATING BUDGET I	MPACT Pe		60	\$0 Amount in	<u>Life</u>	\$0 Cycle	enues)	
TOTAL FUNDING DPERATING BUDGET I DCA/LIFE CYCLE DETA DCA	MPACT Pe	\$0 \$	60	\$0 Amount in	<u>Life</u> — Amou	\$0 Cycle nt in Stu	enues)	815,800
TOTAL FUNDING DPERATING BUDGET I DCA/LIFE CYCLE DETA DCA	MPACT Pe	\$0 \$	60	\$0 Amount in	Life — Amou Amou	\$0 Cycle nt in Stu nt Incl H	enues) dy: 6,	815,800 815,800
TOTAL FUNDING DPERATING BUDGET I DCA/LIFE CYCLE DETA DCA Name	MPACT PO	\$0 \$	ar Amount	\$0 Amount in Study	Life — Amou Amou	\$0 Cycle nt in Stu	enues) dy: 6,	815,800
TOTAL FUNDING DPERATING BUDGET I DCA/LIFE CYCLE DETA DCA	MPACT PO	\$0 \$	ar Amount	\$0 Amount in Study	Life — Amou Amou	\$0 Cycle nt in Stu nt Incl H	enues) dy: 6,	815,800 815,800
TOTAL FUNDING DPERATING BUDGET I DCA/LIFE CYCLE DETA DCA Name	MPACT PO	\$0 \$	ar Amount	\$0 Amount in Study	Life — Amou Amou	\$0 Cycle nt in Stu nt Incl H	enues) dy: 6,	815,800 815,800
TOTAL FUNDING DPERATING BUDGET I DCA/LIFE CYCLE DETA DCA Name	MPACT PO	\$0 \$	ar Amount	\$0 Amount in Study	Life — Amou Amou	\$0 Cycle nt in Stu nt Incl H	enues) dy: 6,	815,800 815,800
TOTAL FUNDING DPERATING BUDGET I DCA/LIFE CYCLE DETA DCA Name	MPACT PO	\$0 \$	ar Amount	\$0 Amount in Study	Life — Amou Amou	\$0 Cycle nt in Stu nt Incl H	enues) dy: 6,	815,800 815,800
TOTAL FUNDING DPERATING BUDGET I DCA/LIFE CYCLE DETA DCA Name	MPACT PO	\$0 \$	ar Amount	\$0 Amount in Study	Life — Amou Amou	\$0 Cycle nt in Stu nt Incl H	enues) dy: 6,	815,800 815,800

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

Street Name	Road-Segment ID	From	<u>To</u>	Length	Width
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 -				
Simonstone Boulevard East	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
	0.4050 004 + 000	5		1076	
Harvest Moon Drive	04268 - 001 to 009	Entirety		1276	9
	07000 004 / 000	- · · ·		2440	
Riseborough Circuit	07803 - 001 to 022	Entirety		2118	9
Constant Program Duling	00202 004 002 002 004 005 006 007	Entiret		1262	
Senator Reesors Drive	08303 - 001,002,003,004,005,006,007	Entirety		1362	8
Harry Corsen Place John Dexter Place	04421 - 001 04987 - 001	Entirety		500 500	8
		Entirety		75	8.5
Berczy Gate	00825 - 001	Entirety		/5	8.5
Kirkham	12009 - 001	Markham Road	New Delhi Drive	135	16
KIIKIIdIII	12003 - 001	ואומו אוומוזו אטמט	ivew beini brive	135	16

Total 17.84985

km



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2021 PROJECT FUNDING REQUEST FORM 21102 Number: **Project Cost:** \$58,400 Project Name: Boulevard Repairs Repair/Replace Commission: Community & Fire Services Pre Approval: Useful Life: 10 Department: Operations - Roads Category: Annual Project Mgr: Bob O'Hara Cost Validation: Recent awards CW ✓ 1 □ 2 □ 3 □ 4 □ Ward(s): Requirement Validation: Condition assessment 5 🗆 6 🗆 7 🗆 8 🗆 **DETAILED DESCRIPTION (SCOPE OF PROJECT):** The purpose of this project is to maintain boulevard areas in good condition to minimize hazards for pedestrians. Repairs to boulevards throughout the City are for interlock brick payers only (does not include concrete, curb or asphalt). Safe & Sustainable Community **BUILDING MARKHAM'S FUTURE TOGETHER:** NOTES **PROJECT COSTS (\$)** 2021 **Future Phases** Some of the larger repairs include Kenilworth Gate, Carlton & Cost/Quote: 57,400 0 Main Street Unionville, Wooten Way and Sir Tristram and 133 Main Street Unionville, 2783, 2831, 2867 Bur Oak. Installation **Internal Charges:** 0 0 cost is \$33/m2. This is an annual program. There is no substantial **External Consulting:** 0 0 backlog within this program and the boulevards are in a state of good repair. 3 year avg is \$55K. Sub Total: 57,400 0 Unit cost is consistent with recent award plus inflation. 1,010 0 **HST Impact: Total Project Cost:** 58,400 0 SOURCE(S) OF FUNDING (\$) **Components Future Funding Type TOTAL Phases Budget** Gas Tax 58,400 0 0 0 0 0 0 TOTAL FUNDING 58,400 0 0 Personnel Non Personnel Revenues Expenditures/(Revenues) OPERATING BUDGET IMPACT \$0 \$0 \$0 \$0 DCA/LIFE CYCLE DETAILS **DCA** Amount in **Life Cycle** Year Name **Amount** Study Amount in Study: 58,400 Amount Incl HST 58,400 Year in the study 2021 DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:



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(IVIARKHAM	2021 1 ROS	Let I embi	ii (G RL)	QCEST 1 C	Numbe	er: 21	1103
Project Name: Bridge Str	ruoturo Drovont	ativa Maintanan	oo Dood	a	Project Cost:	\$25	,800
		ative Maintenan	ice - Koau	<u> </u>	Re	pair/Replac	e
Commission: Community					Useful Life: 30	Pre Ar	proval:
Department: Operations				Category:	Annual	•	•
Project Mgr: Bob O'Hara				Cost Validation	: Recent awards		
	2 3 4 5		Requirer	nent Validation:	Condition assess:	ment	
	6 7 8	- 0 0m					
Annual preventative mainten as required basis which inclu concrete patches on approach	nance of the 27 City ides fill and grade	y owned bridge/culv					
BUILDING MARKHAM'	S FUTURE TOG	ETHER: Safe &	Sustainable	Community			
PROJECT COSTS (\$)	2021	Future Phases	NOTES				
Cost/Quote:	25,350	0			ed upon condition Bridge structures ar		
Internal Charges:	0	0	repair. O	perations is resp	onsible for preven	tative main	tenance on
External Consulting:	0	0			minor grading, pato ecks, while Enviror		
Sub Total:	25,350	0	responsil	ole for its inspec	tion/rehabilitation	and replace	ement.
HST Impact:	446	0	Amount Study up		sistent with the 202	20 Life Cyc	ele Reserve
Total Project Cost:	25,800	0	Study up	date.			
SOURCE(S) OF FUNDING	<u> </u>		Co	mponents			<u>Future</u>
Funding Type	<u>Budget</u>					TOTAL	<u>Phases</u>
Operating Funded Life Cycle	25,800	0	0	0	0	0	(
TOTAL FUNDING	25,800				=	0	
OPERATING BUDGET I	MPACT Pe	rsonnel Non Pe	ersonnel	Revenues	Expenditures/(I	Revenues)	
		\$0 \$	60	\$0	\$0		
<u>DCA/LIFE CYCLE DETA</u> <u>DCA</u>	<u>JLS</u>						
<u>DCA</u> Name		Ye	ar Amou	Amount in int Study	<u></u>		1
- (41114					— Amount in	-	51,600
					Amount Inc	l HST	25,800
					Year in the	study	2021
DCA and/or Life Cycle	Explain if there is	a change in the year	ar and/or co	ost:			



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2021 I NOJ	LCI I UIV		Lecisiio	N	umber:	2	1104
	4 D.1.1"	1'4 4' /D	\$10	,200			
ed Entrance Fea	ature Kenabi	litation/Rej	placement		Repai	r/Replac	e
& Fire Services		_	Ţ	Useful Life:	20	Pre Ap	proval:
		_	Category:	Annual			1
		_			estimate	e	
		Requi					
		•					
		n essessment					
trance features oa	sea on conditio	n assessment	•				
S FUTURE TOG	ETHER: Sa	fe & Sustainal	ble Community				
<u>2021</u>	Future Phas			ing to the out	mamaa fa	otumo ot 1	6th and
10,000	0						
0	0						
0	0						
10,000	0		11 Q2 2 020 u 110 W	ii provide un	правис	o count	
176	0						
10,200	0	<u> </u>					
G (\$)		(Components				Future
<u>Budget</u>					<u>T</u>	<u>OTAL</u>	<u>Phases</u>
10,200	0		0 0	()	0	
10,200						0	
MPACT Pe	rsonnel No	n Personnel	Revenues	Expenditu	res/(Rev	venues)	
	\$0	\$0	\$0		\$0		
ILS			Amount in	Life	Cycle		
		Year Am			•	ıdı	165 500
						-	465,500
				Amou	int Incl F	1 1	10,200
				37	1		2021
				Year	in the st		2021
Explain if there is	s a change in the	e year and/or	cost:	Year	in the st		2021
Explain if there is	s a change in the	e year and/or	cost:	Year	in the st		2021
Explain if there is	a change in the	e year and/or	cost:	Year	in the st		2021
	### Entrance Features ### Entrance Features ### Entrance features bases ### Entrance features bases	### Entrance Feature Rehabi ### Fire Services Roads	### Requirement	## Category: Category: Cost Validation:	Project of the Entrance Feature Rehabilitation/Replacement & Fire Services Roads Taods Category: Annual Cost Validation: Third party Requirement Validation: Condition as N (SCOPE OF PROJECT): Itrance features based on condition assessment. SFUTURE TOGETHER: Safe & Sustainable Community 2021 Future Phases 10,000 0 0 0 0 0 0 0 0 10,000 0 0 176 0 0 10,200 0 0 176 0 0 10,200 0 0 Components Budget 10,200 0 0 0 0 0 10,200 MPACT Personnel Non Personnel Revenues Expenditure Sudy MPACT So SO SO SO LIS Amount in Life Year Amount Study	Repaired Entrance Feature Rehabilitation/Replacement & Fire Services Repaired Cost: Repaired Cost Repaired Cost Repaired Cost Repaired Cost Repaired Cost Requirement Validation: Condition Research Re	ed Entrance Feature Rehabilitation/Replacement & Fire Services Repair/Replacement Category: Annual Condition assessment Requirement Validation: Third party estimate Condition assessment Requirement Validation: Condition assessment Requirement Validation: Condition assessment Requirement Validation: Condition assessment N(SCOPE OF PROJECT): Itrance features based on condition assessment. SFUTURE TOGETHER: Safe & Sustainable Community NOTES



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TARKILLANA.	2021 PROJ	ECT FUNDI	NG RE	QUEST FO	RM		24	105
V IARKHAM			•	_	N	umber:	21	105
Project Name: City Own	ed Fence Replac	cement Program			Project (Cost:	\$63,	900
						Repair	r/Replace	÷
Commission: Community				Ţ	Jseful Life:	25	Pre App	proval:
Department: Operations				Category:	Minor			
Project Mgr: Bob O'Hara			(Cost Validation:		er review	7	
Ward(s): $CW \boxed{\bullet} 1 \square$	2 3 4			nent Validation:				
5 🗆	6□ 7□ 8□		requiren	icht vandation.	Condition t	issessine		
ETAILED DESCRIPTIO	N (SCOPE OF P	ROJECT):						
JILDING MARKHAM'S ROJECT COSTS (\$)	S FUTURE TOG 2021	ETHER: Safe & Future Phases	Sustainable NOTES	•				
				ations include M				
Cost/Quote:	62,832	0		-Bur Oak- Wilfuth Lane and Sun				
Internal Charges: External Consulting:	0	0	This is ar	annual progran	n. There is no	backlog		
Sub Total:	62,832	0	the fence	s are in a state of	f good repair	•		
HST Impact:	1,106	0						
Total Project Cost:	63,900	0						
=	03,700							
OURCE(S) OF FUNDING	<u> </u>		Cor	mponents				Future
nding Type	Budget					<u>T(</u>	<u>OTAL</u>	Phases
erating Funded Life Cycle	63,900	0	0	0	(0	0	
TOTAL FUNDING	63,900						0	
DED ATING DUDGET W	Pe	rsonnel Non Pe	ersonnel	Revenues	Expenditu	res/(Rev	renues)	
PERATING BUDGET I	<u>VIPACI</u>	\$0 \$	60	\$0		\$0		
CA/LIFE CYCLE DETA	<u>ILS</u>							-
<u>DCA</u>				Amount in	<u>Life</u>	Cycle		
Name		Yes	ar Amou	nt Study				

DOM			Amount in	<u>Liie Cycle</u>	
Name	Year	Amount	Study	Amount in Study:	131,500
				Amount Incl HST	63,900
				Year in the study	202
DCA and/or Life Cycle: Explain if there is a change in	the year a	nd/or cost:			



Page 314 **39**3

A TATALAN						14	umber.		100
D	D					Project	Cost:	\$91,	400
Project Name: Citywide	Ditching Progra	m					Repair/	Replace	 e
Commission: Community	& Fire Services				1	Useful Life:			proval:
Department: Operations					Category:		25	11011p	provar.
Project Mgr: Ron Roffey	_			(Cost Validation:		er review		
	2 🗆 3 🗆 4 🗆				nent Validation:				
	6□ 7□ 8□			rtoquiron	ioni vandation.	Condition			
DETAILED DESCRIPTIO						10.1	. 1.1.1		1
Annual ditch restoration progomponent of the broader storosion of Markham's infrast	orm drainage syster								
BUILDING MARKHAM'S	S FUTURE TOG	ETHER:	Safe & S	ustainable	Community				
PROJECT COSTS (\$)	<u>2021</u>	Future P	<u>'hases</u>	NOTES	the current cos	44:41	4:4-1-:		
Cost/Quote:	89,800		0						
Internal Charges:	0		0	able to maintain up to 4 linear km's per year. This is an annual program which has an average cost of \$88,000 per year. This is the first year of the program. Ditch restoration work will be undertaken as part of the annual capital road improvements program and conducted prior to undertaking road rehabilitation work on roads with rural profiles. Amount requested is consistent with the 2020 Life Cycle Reserve Study update.					
External Consulting:	0		0						
Sub Total:	89,800		0						
HST Impact:	1,580		0						
Total Project Cost:	91,400		0						
OURCE(S) OF FUNDING	<u> </u>			Cor	nponents				
unding Type	<u>Budget</u>						<u>TO</u>	TAL	<u>Future</u> <u>Phases</u>
perating Funded Life Cycle	91,400		0	0	0		0	0	0
TOTAL FUNDING	91,400							0	0
OPERATING BUDGET II	MDACT Per	rsonnel	Non Pers	sonnel	Revenues	Expenditu	res/(Reve	nues)	
DPERATING DUDGET II	WIPACI	\$0	\$0		\$0		\$0		
CA/LIFE CYCLE DETA	ILS								
<u>DCA</u>			X 7	Amount in	<u>Life</u>	Cycle			
Name			Year Amoun		nt Study	— Amo	unt in Stud	ly:	91,400
						Amou	ant Incl HS	ST	91,400
						Year	in the stud	dy	2021
DCA and/or Life Cycle:	Explain if there is	a change i	n the vear	and/or co	st:				
Deri and of Ene Cycle.	Explain if there is	a change i		una, or co					



Page 316 **393**

Project Name: Don Mills St						Number:	2,1	1107
Toject Name. Don Wills St	chammal				Proje	ct Cost:	\$35,	,400
						Repair	:/Replac	e
Commission: Community &				Ţ	Jseful Lif	e: 1	Pre Ap	proval:
Department: Operations - R	oads			Category:			1	1
Project Mgr: Dennis King			C	ost Validation:		wards		
Ward(s): $CW \square 1 \square 2$	□ 3□ 4□			ent Validation:			nt	
5 🗆 6	□ 7□ 8✔		Requireme	ant vandation.	Condition	n assessmen	10	
ETAILED DESCRIPTION	(SCOPE OF P	ROJECT):						
orm channel is located east of annel to ensure proper storm and in the channel. It will also	water conveyan o include channe	ce. Program will el maintenance af	l include period fter large storm	ic clean-up of events, and in	debris, gar	bage and ex		
JILDING MARKHAM'S F	TOTURE TOG	ETHER: Sale	& Sustainable C	ommunity				
ROJECT COSTS (\$)	2021	Future Phases	NOTES					
Cost/Quote:	34,741	0	To support	t ongoing annu annual progran				
_				annuai progran s is responsible				
Internal Charges: External Consulting:	0	0	the Don M	ills storm chan	nel such a	s debris and	l vegetat	tion remov
				ronmental Serv				
Sub Total: HST Impact:	34,741 611	$\frac{0}{0}$	strategies and implementation. Higher funding requested this ye for more frequent work which will improve water flow and volu capacity and minimize flooding and breaching of banks.					
Total Project Cost:								
===	35,400	0						
URCE(S) OF FUNDING (<u>\$)</u>		Com	ponents				T. 4
nding Type	Budget					<u>T(</u>	<u>OTAL</u>	Future Phases
E. 1.11.6 G. 1	35,400	0	0	0		0	0	
erating Funded Life Cycle	35,400						0	
TOTAL FUNDING	Per	rsonnel Non	Personnel	Revenues	Expend	itures/(Rev	enues)	
TOTAL FUNDING	Per			Revenues \$0	Expend	itures/(Rev	enues)	
TOTAL FUNDING PERATING BUDGET IMP	PACT	rsonnel Non \$0	Personnel \$0	Revenues \$0	Expend	itures/(Rev	enues)	
TOTAL FUNDING PERATING BUDGET IMP	PACT			\$0		\$0	enues)	
TOTAL FUNDING PERATING BUDGET IMP	PACT	\$0		\$0 Amount in	<u> </u>	\$0		
TOTAL FUNDING PERATING BUDGET IMP CA/LIFE CYCLE DETAIL DCA	PACT	\$0	\$0	\$0 Amount in		\$0 ife Cycle nount in Stu	dy:	
	PACT	\$0	\$0	\$0 Amount in	L — Ar	\$0	dy:	



Page 318 **395**

21108 Number: **Project Cost:** \$143,300 Project Name: Emergency Repairs Repair/Replace Commission: Community & Fire Services Pre Approval: Useful Life: 20 Department: Operations - Roads Category: Annual Project Mgr: Dennis King/Ron Roffey Cost Validation: Recent awards CW ✓ 1 □ 2 □ 3 □ 4 □ Ward(s): Requirement Validation: Visual inspection 5 🗆 6 🗆 7 🗆 8 🗆 **DETAILED DESCRIPTION (SCOPE OF PROJECT):** Emergency repairs to guiderails, guide cable, storm sewers, entrance features, outfalls, inlets, and cross connections as required. These repairs could be necessary due to motor vehicle accidents, winter maintenance, and damage from storm water or pipe/road failures. Safe & Sustainable Community **BUILDING MARKHAM'S FUTURE TOGETHER:** NOTES **PROJECT COSTS (\$)** 2021 **Future Phases** Examples of work done in previous years; Storm Sewer Repairs -Cost/Quote: 140,800 0 20 Heritage, 12 Vanwood, Silver Aspen, Main Street Markham, and Main Street Unionville- 3yr avg \$143K. This is an annual **Internal Charges:** 0 0 program. **External Consulting:** 0 0 Sub Total: 140,800 0 0 **HST Impact:** 2,478 **Total Project Cost:** 143,300 0 SOURCE(S) OF FUNDING (\$) **Components Future Funding Type TOTAL Phases Budget** Operating Funded Life Cycle 143,300 0 0 0 0 0 0 TOTAL FUNDING 143,300 0 0 Personnel Non Personnel Revenues Expenditures/(Revenues) OPERATING BUDGET IMPACT \$0 \$0 \$0 \$0 DCA/LIFE CYCLE DETAILS **DCA** Amount in **Life Cycle** Year Name **Amount** Study Amount in Study: 143,300 Amount Incl HST 143,300 Year in the study 2021 DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:



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21109 **Number: Project Cost:** \$90,900

Project Name: Guiderai	l- Install/Repair/	Upgrade						
Commission: Communit	y & Fire Services				Repair/Replac	e		
Commission: Community & Fire Services Department: Operations - Roads				Useful Life:	15 Pre Ap	proval: \square		
Project Mgr: Bob O'Hara			Category	Minor				
<i>y</i> 5	2 3 4 4		Cost Validation	: Recent awards				
	□ 2 □ 3 □ 4 □ □ 6 □ 7 □ 8 □		Requirement Validation	Condition a	ssessment			
DETAILED DESCRIPTION		ROIECT).						
Install new or repair/upgrad	le existing guiderail		cial Standards and minimi	ze maintenanc	e. Program ensu	ires that the		
City maintains safe roadway	ys for users.							
BUILDING MARKHAM	'S FUTURE TOGI	ETHER: Safe &	Sustainable Community					
PROJECT COSTS (\$)	<u>2021</u>	Future Phases	NOTES		2 : 1 - 1	1.1.		
Cost/Quote:			153 locations identified meet standards only whe					
Internal Charges:	0	0	require emergency repairs. 2 locations to be completed this year					
External Consulting:	0	0	Brimley Road, east side between Worthing Ave and Wilclay Ave and Brimley Rd west side between Cardiff Rd and Winston Rd. To					
Sub Total:	89,300	0	date, 58 locations have been upgraded to the Provincial Standard.					
HST Impact:	1,572	0	 year program during which time the remaining locations will be 					
Total Project Cost:	90,900	0						
SOURCE(S) OF FUNDIN	G (\$)		Components			-		
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0								
Funding Type	Budget	Brimley Rd East Side Bri	mley Rd West Side		TOTAL	<u>Future</u> <u>Phases</u>		
		Brimley Rd East Side Bride 49,135	mley Rd West Side 41,765 0	(· · · · · · · · · · · · · · · · · · ·		
Funding Type	Budget			(<u>Phases</u>		
Funding Type Gas Tax	90,900	49,135	41,765 0		90,900	Phases 0		
Funding Type Gas Tax	90,900 90,900	49,135	41,765 0 rsonnel Revenues		90,900 90,900 res/(Revenues)	Phases 0		
Funding Type Gas Tax TOTAL FUNDING OPERATING BUDGET	90,900 90,900 Per	49,135	41,765 0 rsonnel Revenues		90,900	Phases 0		
Funding Type Gas Tax TOTAL FUNDING OPERATING BUDGET 1 DCA/LIFE CYCLE DETA	90,900 90,900 Per	49,135	41,765 0 rsonnel Revenues 0 \$0	Expenditu	90,900 90,900 res/(Revenues) \$0	Phases 0		
Funding Type Gas Tax TOTAL FUNDING OPERATING BUDGET DETAILED OF THE PROPERTY OF THE PROPERT	90,900 90,900 Per	49,135 rsonnel Non Pe	41,765 0 rsonnel Revenues 0 \$0 Amount in	Expenditu	90,900 90,900 res/(Revenues)	0 0		
Funding Type Gas Tax TOTAL FUNDING OPERATING BUDGET 1 DCA/LIFE CYCLE DETA	90,900 90,900 Per	49,135	41,765 0 rsonnel Revenues 0 \$0 Amount in	Expenditure Life	90,900 90,900 res/(Revenues) \$0	Phases 0		
Funding Type Gas Tax TOTAL FUNDING OPERATING BUDGET DETAILED OF THE PROPERTY OF THE PROPERT	90,900 90,900 Per	49,135 rsonnel Non Pe	41,765 0 rsonnel Revenues 0 \$0 Amount in	Expenditure Life Amou	90,900 90,900 res/(Revenues) \$0	0 0		
Funding Type Gas Tax TOTAL FUNDING OPERATING BUDGET DETAILED OF THE PROPERTY OF THE PROPERT	90,900 90,900 Per	49,135 rsonnel Non Pe	41,765 0 rsonnel Revenues 0 \$0 Amount in	Expenditure Life Amou	90,900 90,900 res/(Revenues) \$0 Cycle ant in Study:	Phases 0 0 90,900		
Funding Type Gas Tax TOTAL FUNDING OPERATING BUDGET DETAILED OF THE PROPERTY OF THE PROPERT	90,900 90,900 Per AILS	49,135 rsonnel Non Per \$0 \$	41,765 0 rsonnel Revenues 0 \$0 Amount in Study	Expenditure Life Amou	90,900 90,900 res/(Revenues) \$0 Cycle ant in Study: Incl HST	90,900 90,900		
Funding Type Gas Tax TOTAL FUNDING OPERATING BUDGET 1 DCA/LIFE CYCLE DETA DCA Name	90,900 90,900 Per AILS	49,135 rsonnel Non Per \$0 \$	41,765 0 rsonnel Revenues 0 \$0 Amount in Study	Expenditure Life Amou	90,900 90,900 res/(Revenues) \$0 Cycle ant in Study: Incl HST	90,900 90,900		
Funding Type Gas Tax TOTAL FUNDING OPERATING BUDGET 1 DCA/LIFE CYCLE DETA DCA Name	90,900 90,900 Per AILS	49,135 rsonnel Non Per \$0 \$	41,765 0 rsonnel Revenues 0 \$0 Amount in Study	Expenditure Life Amou	90,900 90,900 res/(Revenues) \$0 Cycle ant in Study: Incl HST	90,900 90,900		
Funding Type Gas Tax TOTAL FUNDING OPERATING BUDGET 1 DCA/LIFE CYCLE DETA DCA Name	90,900 90,900 Per AILS	49,135 rsonnel Non Per \$0 \$	41,765 0 rsonnel Revenues 0 \$0 Amount in Study	Expenditure Life Amou	90,900 90,900 res/(Revenues) \$0 Cycle ant in Study: Incl HST	90,900 90,900		
Funding Type Gas Tax TOTAL FUNDING OPERATING BUDGET 1 DCA/LIFE CYCLE DETA DCA Name	90,900 90,900 Per AILS	49,135 rsonnel Non Per \$0 \$	41,765 0 rsonnel Revenues 0 \$0 Amount in Study	Expenditure Life Amou	90,900 90,900 res/(Revenues) \$0 Cycle ant in Study: Incl HST	90,900 90,900		
Funding Type Gas Tax TOTAL FUNDING OPERATING BUDGET 1 DCA/LIFE CYCLE DETA DCA Name	90,900 90,900 Per AILS	49,135 rsonnel Non Per \$0 \$	41,765 0 rsonnel Revenues 0 \$0 Amount in Study	Expenditure Life Amou	90,900 90,900 res/(Revenues) \$0 Cycle ant in Study: Incl HST	90,900 90,900		



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2021 PROJECT FUNDING REQUEST FORM 21110 Number: **Project Cost:** \$459,000 Project Name: Incremental Growth Related Winter Maintenance Vehicles New Asset/Expansion Commission: Community & Fire Services Pre Approval: Useful Life: Department: Operations - Roads Category: Annual Project Mgr: Raymond Law Cost Validation: Recent awards CW ✓ 1 □ 2 □ 3 □ 4 □ Ward(s): Requirement Validation: Condition assessment 5 🗆 6 🗆 7 🗆 8 🗆 **DETAILED DESCRIPTION (SCOPE OF PROJECT):** Development Charge (DC) funding for additional growth-related winter maintenance vehicles purchased by contractors. If winter maintenance was done in-house, these vehicles would need to be purchased by the City, so this request is to obtain DC funding to offset a portion of the capital cost included in the winter maintenance paid through Operating accounts. Safe & Sustainable Community **BUILDING MARKHAM'S FUTURE TOGETHER: PROJECT COSTS (\$)** 2021 **Future Phases** Amount requested is as per the 2017 DC Study plus 2% Cost/Quote: 459,000 0 inflationary increase. **Internal Charges:** 0 0 **External Consulting:** 0 0 Sub Total: 459,000 0 0 **HST Impact:** 0 **Total Project Cost:** 459,000 0 SOURCE(S) OF FUNDING (\$) **Components Future Funding Type TOTAL Phases Budget** DCA 459,000 0 0 0 0 0 0 TOTAL FUNDING 459,000 0 0 Personnel Non Personnel Revenues **Expenditures/(Revenues)** OPERATING BUDGET IMPACT \$0 \$0 \$0 \$0 DCA/LIFE CYCLE DETAILS **DCA** Amount in **Life Cycle** Year Name **Amount** Study 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:



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21111 Number: **Project Cost:** \$876,400 Project Name: Localized Repairs - Curb & Sidewalk Repair/Replace Commission: Community & Fire Services Pre Approval: Useful Life: 20 Department: Operations - Roads Category: Minor Project Mgr: Bob O'Hara Cost Validation: Recent awards CW ✓ 1 □ 2 □ 3 □ 4 □ Ward(s): Requirement Validation: Condition assessment **DETAILED DESCRIPTION (SCOPE OF PROJECT):** Maintenance repairs to sidewalks, curbs, and catch basins throughout the City as identified by staff. Ensure that deficient sections are repaired to minimize trip and fall incidents and reduce associated liability to the City. The purpose of concrete curb is to channel storm water into the storm sewer system. Safe & Sustainable Community **BUILDING MARKHAM'S FUTURE TOGETHER:** NOTES **PROJECT COSTS (\$)** 2021 **Future Phases** Specific locations to be determined upon completion of condition Cost/Quote: 861,200 0 audit in 2020. 3 year avg is \$760K. Ask is higher due to growth and more deficiencies identified. **Internal Charges:** 0 0 Amount requested is consistent with the 2020 Life Cycle Reserve **External Consulting:** 0 0 Study update. Sub Total: 861,200 0 0 **HST Impact:** 15,157 **Total Project Cost:** 876,400 0 SOURCE(S) OF FUNDING (\$) **Components Future Funding Type TOTAL Phases Budget** Gas Tax 876,400 0 0 0 0 0 0 TOTAL FUNDING 876,400 0 0 Personnel Non Personnel Revenues Expenditures/(Revenues) OPERATING BUDGET IMPACT \$0 \$0 \$0 \$0 DCA/LIFE CYCLE DETAILS **DCA** Amount in **Life Cycle** Year Name **Amount** Study Amount in Study: 876,400 Amount Incl HST 876,400 Year in the study 2021 DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:

Project	Localized Repairs – Curb and Sidewalk
2021 Capital Request	\$876,400
Funding Source	Life Cycle Reserve
Description of Program	Maintenance repairs to sidewalks, curbs, multi-use paths (MUP) and catch basins throughout the
	City as identified by staff through road patrol. Ensure that deficient sections are repaired to
	minimize trip and fall incidents and reduce associated liability to the City. The purpose of concrete
	curb is to channel storm water into the storm sewer system.
Project Rationale	Addresses minor repair locations of curb, sidewalk, MUP failures in order to extend the Life Cycle.
	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	Localized Repairs Concrete/Asphalt, Asphalt Resurfacing
Related Maps	n/a
Alignment to the Strategic Plan	Program ensures roads and boulevards are made safe for all cyclists, pedestrians and vehicular
	traffic. Program removes hazards, deficiencies, and reduces risk to the City by replacing with new
	concrete. This program promotes safety, reduces liability and encourages walkability within the
	community.



Number:	21112
---------	-------

\$119,200

Project Cost:

Localized	Repairs - Parki	ng Lots					Repair	/Replace	e.
Commission: Community	& Fire Services				1	Useful Life:	8		proval:
Department: Operations	- Roads						o	тте др	provar. —
Project Mgr: Bob O'hara					Category:				
Ward(s): CW ✓ 1	2□ 3□ 4□				Cost Validation:				
5 🗆	6 7 8			Requiren	nent Validation:	Condition a	ssessmer	nt	
DETAILED DESCRIPTION	ON (SCOPE OF P	ROJECT)	:						
Ongoing maintenance and re naintenance holes and catch angus Glen South lot, Cente	basin adjustments								
BUILDING MARKHAM'	S FUTURE TOG	ETHER:	Safe &	Sustainable	Community				
PROJECT COSTS (\$)	<u>2021</u>	Future I	<u>Phases</u>	NOTES	.4: 4 4-1	- CC Amana	Class Nas	41. 1 1	A
Cost/Quote:	117,100		0		ntions: Armadal th lot. This is ar				
Internal Charges:	0		0	backlog i	n this program.	3 year avg is	\$122K.		
External Consulting:	0		0		equested is con	sistent with th	ne 2020 I	Life Cyc	le Reserve
Sub Total:	117,100		0	Study up	iale.				
HST Impact:	2,061		0						
Total Project Cost:	119,200	-	0						
=									
OURCE(S) OF FUNDING	G (\$)			Cor	nponents				<u>Future</u>
unding Type	<u>Budget</u>						<u>T(</u>	<u>)TAL</u>	Phases Phases
perating Funded Life Cycle	119,200		0	0	0	()	0	0
TOTAL FUNDING	119,200							0	0
OPERATING BUDGET I	MPACT Pe	rsonnel	Non Per	rsonnel	Revenues	Expenditu	res/(Rev	enues)	
DE EKATING BUDGET I	WIFACI	\$0	\$0	O	\$0		\$0		
CA/LIFE CYCLE DETA	ILS								
<u>DCA</u>					Amount in	<u>Life</u>	Cycle		
Name			Yea	r Amou	nt Study	— Amou	nt in Stu	dv:	119,200
							nt Incl H		119,200
						rear	in the stu	ıay	2021
DCA and/or Life Cycle	Explain if there is	a change i	n the yea	r and/or co	st:				



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2021 PROJECT FUNDING REQUEST FORM 21114 Number: **Project Cost:** \$80,200 Project Name: Retaining Wall Repair Program Repair/Replace Commission: Community & Fire Services Pre Approval: Useful Life: 20 Department: Operations - Roads Category: Annual Project Mgr: Bob O'Hara Cost Validation: Recent awards Ward(s): CW ✓ 1 □ 2 □ 3 □ 4 □ Requirement Validation: Condition assessment 5 🗆 6 🗆 7 🗆 8 🗆 **DETAILED DESCRIPTION (SCOPE OF PROJECT):** Repairs to failing retaining walls and other right of way structural assets on city owned property. Safe & Sustainable Community **BUILDING MARKHAM'S FUTURE TOGETHER: NOTES PROJECT COSTS (\$)** 2021 **Future Phases** 4 locations to be done 40 Braeside, 192 Bullock, Stirling & Digby, Cost/Quote: 78,800 0 and Forbes Cres and Denison. This is an annual program. There is no backlog in this program. The retaining walls are in a state of **Internal Charges:** 0 0 good repair. **External Consulting:** 0 0 Amount requested is consistent with the 2020 Life Cycle Reserve Study update. 0 Sub Total: 78,800 1,387 0 **HST Impact: Total Project Cost:** 80,200 0 SOURCE(S) OF FUNDING (\$) **Components Future Funding Type TOTAL Phases Budget** Operating Funded Life Cycle 80,200 0 0 0 0 0 0 TOTAL FUNDING 80,200 0 0 Personnel Non Personnel Revenues Expenditures/(Revenues) OPERATING BUDGET IMPACT \$0 \$0 \$0 \$0 DCA/LIFE CYCLE DETAILS **DCA** Amount in **Life Cycle** Year Name **Amount** Study Amount in Study: 80,200 Amount Incl HST 80,200 Year in the study 2021 DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:



Page 332 **319**

21115 Number: **Project Cost:** \$51,900 Project Name: Storm Water Retention Pond Maintenance Program Repair/Replace Commission: Community & Fire Services Pre Approval: Useful Life: 15 Department: Operations - Roads Category: Minor Project Mgr: Bob O'Hara Cost Validation: Internal peer review CW ✓ 1 □ 2 □ 3 □ 4 □ Ward(s): Requirement Validation: Visual inspection 5 🗆 6 🗆 7 🗆 8 🗆 **DETAILED DESCRIPTION (SCOPE OF PROJECT):** Ongoing minor maintenance activities to all storm water management ponds throughout the City. The work includes repairing/replacing grates, headwalls and fences. This maintenance program will include localized repairs of identified deficiencies as reported by 2018 site inspection. Repair defective items identified from the 115 storm water management (SWM) ponds inspected in the fall of 2019. Safe & Sustainable Community **BUILDING MARKHAM'S FUTURE TOGETHER: PROJECT COSTS (\$)** 2021 **Future Phases** Items include repairs to baffle blocks, inlets, backflow preventer, Cost/Ouote: 51,000 0 outlets, pipes and retaining walls. This is an annual program. There is no backlog in this program. Roads provide maintenance above **Internal Charges:** 0 0 the water line while Environmental Services provide rehabilitation **External Consulting:** 0 0 below the water line. Amount requested is consistent with the 2020 Life Cycle Reserve Study update. Sub Total: 51,000 0 0 **HST Impact:** 898 **Total Project Cost:** 51,900 0 SOURCE(S) OF FUNDING (\$) **Components Future Funding Type TOTAL Phases Budget** Operating Funded Life Cycle 51,900 0 0 0 0 0 0 TOTAL FUNDING 51,900 0 0 Personnel Non Personnel Revenues Expenditures/(Revenues) OPERATING BUDGET IMPACT \$0 \$0 \$0 \$0 **DCA/LIFE CYCLE DETAILS DCA** Amount in **Life Cycle** Year Name **Amount** Study Amount in Study: 51,900 Amount Incl HST 51,900 Year in the study 2021 DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:



Page 334 **324**

2021 PROJECT FUNDING REQUEST FORM 21116 **Number: Project Cost:** \$144,000

riojectivanie. Backstop	and Outfield Fe	nce Replacemen	t			
Commission: Community	& Fire Services		_		Repair/Replace	
Department: Operations			1	Useful Life:	35 Pre Ap	proval: \square
Project Mgr: James Bing			Category:	Minor		
<i>s</i> 6 <u> </u>	2 □ 3 🗸 4 □		Cost Validation:	Internal pee	er review	
	6		Requirement Validation:	Condition a	ssessment	
DETAILED DESCRIPTION		DOIECT).				
Backstop fence and outfield	,	•	Major #1 and Randal Park M	Maior #1		
Backstop rence and outrien	rence replacement	for James Edward	rajor "1" and Randar I ark I	viajoi #1.		
BUILDING MARKHAM'	S FUTURE TOG	ETHER: Safe &	Sustainable Community			
PROJECT COSTS (\$)	2021	Future Phases	NOTES			
Cost/Quote:	141,524	0	Unit cost is based on original This is an annual program			
Internal Charges:	0	0	for baseball and softball	field's city wi	de. Project costs	vary
External Consulting:	0	0	depending on the number backlog and assets are in			stantial
Sub Total:	141,524	0	Replacement of netting a			osts and
HST Impact:	2,491	0	structure to 2040 based o			1007
Total Project Cost:	144,000	0	backstop/outfield fence b	oth locations	was installed in	1986.
=						
SOURCE(S) OF FUNDING	<u>G (\$)</u>		Components			<u>Future</u>
Funding Type	Budget				TOTAL	Phases
Gas Tax	144,000	0	0 0	(0	0
					0	0
TOTAL FUNDING	144,000					=======================================
TOTAL FUNDING	144,000					
	Per	rsonnel Non Pe	rsonnel Revenues	Expenditu	res/(Revenues)	
TOTAL FUNDING OPERATING BUDGET I	Per	rsonnel Non Pe		Expenditu	res/(Revenues)	
OPERATING BUDGET I	MPACT Per			Expenditu		
OPERATING BUDGET I DCA/LIFE CYCLE DETA DCA	MPACT Per	\$0 \$	Amount in			
OPERATING BUDGET I	MPACT Per		Amount in	<u>Life</u>	\$0	151,200
OPERATING BUDGET I DCA/LIFE CYCLE DETA DCA	MPACT Per	\$0 \$	Amount in	Life — Amou	\$0 Cycle	151,200 144,000
OPERATING BUDGET I DCA/LIFE CYCLE DETA DCA	MPACT Per	\$0 \$	Amount in	Life — Amou	\$0 Cycle Int in Study:	
OPERATING BUDGET I DCA/LIFE CYCLE DETA DCA Name	MPACT Per	\$0 \$ Yes	Amount in Study	Life — Amou	\$0 Cycle Int in Study: Int Incl HST	144,000
OPERATING BUDGET I DCA/LIFE CYCLE DETA DCA	MPACT Per	\$0 \$ Yes	Amount in Study	Life — Amou	\$0 Cycle Int in Study: Int Incl HST	144,000
OPERATING BUDGET I DCA/LIFE CYCLE DETA DCA Name	MPACT Per	\$0 \$ Yes	Amount in Study	Life — Amou	\$0 Cycle Int in Study: Int Incl HST	144,000
OPERATING BUDGET I DCA/LIFE CYCLE DETA DCA Name	MPACT Per	\$0 \$ Yes	Amount in Study	Life — Amou	\$0 Cycle Int in Study: Int Incl HST	144,000
OPERATING BUDGET I DCA/LIFE CYCLE DETA DCA Name	MPACT Per	\$0 \$ Yes	Amount in Study	Life — Amou	\$0 Cycle Int in Study: Int Incl HST	144,000
OPERATING BUDGET I DCA/LIFE CYCLE DETA DCA Name	MPACT Per	\$0 \$ Yes	Amount in Study	Life — Amou	\$0 Cycle Int in Study: Int Incl HST	144,000



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2021 PROJECT FUNDING REQUEST FORM 21117 **Number: Project Cost:** \$190,700 Project Name: Beaupre Park Waterplay Replacement Repair/Replace Commission: Community & Fire Services Pre Approval: Useful Life: 20 Department: Operations - Parks Category: Minor Project Mgr: Scott Grieves Cost Validation: Internal peer review Ward(s): Requirement Validation: Condition assessment 5 □ 6 □ 7 🗸 8 □ **DETAILED DESCRIPTION (SCOPE OF PROJECT):** The Splash Pad at Beaupre Park requires replacement based on condition assessment and life expectancy. Safe & Sustainable Community **BUILDING MARKHAM'S FUTURE TOGETHER: NOTES** This is asset based program and funding will be requested as

PROJECT COSTS (\$)	<u>2021</u>	Future Phases
Cost/Quote:	177,400	0
Internal Charges:	0	0
External Consulting:	10,000	0
Sub Total:	187,400	0
HST Impact:	3,298	0
Total Project Cost:	190,700	0

required for different locations with funding specific to the size and type of Splash Pad. This Splash Pad was first installed in 2001 and this is the first time it will be replaced.

Year in the study

2021

SOURCE(S) OF FUNDING	3 (\$)		Compon	ents			E4
Funding Type	<u>Budget</u>					TOTAL	<u>Future</u> <u>Phases</u>
Gas Tax	190,700	0	0	0	0	0	0
TOTAL FUNDING	190,700				=	0	0

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

DCA/LIFE CYCLE DETAILS **DCA Amount in** Life Cycle Year Name **Amount** Study Amount in Study: 180,500 Amount Incl HST 180,500

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



Total Project Cost:

22,900

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2021 PROJECT FUNDING REQUEST FORM 21118 **Number: Project Cost:** \$22,900 Project Name: Bleachers (Metal) Replacements Repair/Replace Commission: Community & Fire Services Pre Approval: Useful Life: 30 Department: Operations - Parks Category: Annual Project Mgr: James Bingham Cost Validation: Recent awards CW □ 1 ✓ 2 ✓ 3 □ 4 □ Ward(s): Requirement Validation: Condition assessment 5 🗆 6 🗆 7 🗆 8 🗆 **DETAILED DESCRIPTION (SCOPE OF PROJECT):** Large metal bleachers at Ashton Meadows and Bayview Glen Park require replacement based on condition assessment. These bleachers are safety standard certified. Safe & Sustainable Community **BUILDING MARKHAM'S FUTURE TOGETHER: NOTES PROJECT COSTS (\$)** 2021 **Future Phases** Funding amount changes every year based on Life Cycle and actual Cost/Quote: 22,500 0 condition assessment performed to support recommendations. There is no substantial backlog and assets are in a state of good **Internal Charges:** 0 0 repair. **External Consulting:** 0 0 Unit cost is consistent with recent award plus inflation. Bleachers last replaced in 1991. Sub Total: 22,500 0 0 **HST Impact:** 396

SOURCE(S) OF FUNDING (\$)			Compone	nts			Endano
Funding Type	Budget	Ashton Meadows	Bayview Glen			TOTAL	<u>Future</u> <u>Phases</u>
Operating Funded Life Cycle	22,900	11,450	11,450	0	0	22,900	0
TOTAL FUNDING	22,900				=	22,900	0

0

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

DCA/LIFE CYCLE DETAILS **DCA** Amount in Life Cycle Year Name **Amount** Study Amount in Study: 22,900 Amount Incl HST 22,900 Year in the study 2021 DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:



Page 340 3253

21120 Number: **Project Cost:** \$359,400 Project Name: Boulevard/Park Trees Replacement Repair/Replace Commission: Community & Fire Services Pre Approval: Useful Life: 50 Department: Operations - Parks Category: Annual Project Mgr: David Plant Cost Validation: Recent awards CW ✓ 1 □ 2 □ 3 □ 4 □ Ward(s): Requirement Validation: Condition assessment 5 🗆 6 🗆 7 🗆 8 🗆 **DETAILED DESCRIPTION (SCOPE OF PROJECT):** Boulevard/Park replacement tree planting is an annual program which enables the City to replace approximately 700 dead, diseased or damaged trees. Cost per tree is approximately \$400 to plant with 2 year warranty and \$100 to grind the stump in preparation for planting. This funding will be requested each year to address tree loss through damage, accidents and normal mortality. Safe & Sustainable Community **BUILDING MARKHAM'S FUTURE TOGETHER:** NOTES **PROJECT COSTS (\$)** 2021 **Future Phases** The current backlog of vacant tree sites is 1824 and expected to be Cost/Ouote: 353,200 0 at 2300 by the end of 2020. This contract will address 705 trees and reduce the backlog to 1595 trees. The cost to address the remaining **Internal Charges:** 0 0 backlog is \$797,500.00. Amount requested is consistent with the **External Consulting:** 0 0 2020 Life Cycle Reserve Study update. 3 year avg is \$254K. The backlog is subject to the condition of the trees in any given year. 353,200 Sub Total: 0 The three year averaging for mortality has been consistent year 0 **HST Impact:** 6,216 over year. This represents an increased mortality of 0.2% on an **Total Project Cost:** 359,400 0 inventory of 100,000 street trees. SOURCE(S) OF FUNDING (\$) **Components Future Funding Type** New Plantings Back Log **Budget TOTAL Phases** Operating Funded Life Cycle 359,400 179,700 179,700 0 0 359,400 0 TOTAL FUNDING 359,400 359,400 0 Personnel Non Personnel Revenues Expenditures/(Revenues) OPERATING BUDGET IMPACT \$0 \$0 \$0 \$0 **DCA/LIFE CYCLE DETAILS DCA** Amount in **Life Cycle** Year Name **Amount** Study Amount in Study: 359,400 Amount Incl HST 359,400 Year in the study 2021 DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:



Page 342 **339**

W IARKHAM					1	lumber:	21	
Project Name: Bridge Str	ructure Prevent	ative Maintena	nce in Parl	rs	Project	Cost:	\$25,	800
			nee m r arr			Repai	r/Replace	2
Commission: Community				Ţ	Useful Life:	30	Pre App	proval:
Department: <u>Operations</u> Project Mgr: Scott Griev				Category:	Annual			
	2 3 4			Cost Validation:	Recent awa	ards		
.,	6 7 8		Requirer	nent Validation:	Condition	assessme	nt	
DETAILED DESCRIPTION		ROIECT).						
Annual preventative mainten assessment. Work includes to curbs. BUILDING MARKHAM'	nance of parks and fill and grade bridg	open space bridge ge approaches, rem		ace wooden dec				
BUILDING MARKHANI	S FUTURE TOG	ETHER: Saic C		•				
PROJECT COSTS (\$)	<u>2021</u>	Future Phases	NOTES This is a	n annual progran	n and funds	will be re	auested e	each vear.
Cost/Quote:	25.250	0						
Cost/Quote.	25,350	0		no backlog and b				
Internal Charges:	25,350	0	repair. O	perations is resp	onsible for p	preventive	e minor n	naintenanc
_			repair. O on bridge bridge ap	perations is respes/culverts such approaches and br	onsible for pas minor gra	oreventive ding, pate and siltat	e minor n ching, sea ion remo	naintenanc aling of val from
Internal Charges: External Consulting: Sub Total:	0 0 25,350	0 0	repair. O on bridge bridge ap culverts,	perations is respes/culverts such a pproaches and br while Environm	onsible for pas minor graidge decks, ental Service	oreventive ding, pate and siltat es is resp	e minor n ching, sea ion remo onsible fo	naintenanc aling of val from or its
Internal Charges: External Consulting: Sub Total: HST Impact:	0 0 25,350 446	0	repair. O on bridge bridge ap culverts, inspectio	perations is respes/culverts such approaches and br	onsible for pas minor gradge decks, ental Service and replacen	preventive ding, pate and siltat es is resp nent. Am	e minor n ching, sea ion remo onsible fo ount requ	naintenance aling of val from or its dested is
Internal Charges: External Consulting: Sub Total:	0 0 25,350	0 0	repair. O on bridge bridge ap culverts, inspectio	perations is resp es/culverts such a proaches and br while Environm n/rehabilitation a	onsible for pas minor gradge decks, ental Service and replacen	preventive ding, pate and siltat es is resp nent. Am	e minor n ching, sea ion remo onsible fo ount requ	naintenance aling of val from or its dested is
Internal Charges: External Consulting: Sub Total: HST Impact: Total Project Cost:	25,350 446 25,800	0 0 0 0	repair. O on bridge bridge ap culverts, inspection consister	perations is resp es/culverts such a proaches and br while Environm n/rehabilitation a	onsible for pas minor gradge decks, ental Service and replacen	preventive ding, pate and siltat es is resp nent. Am	e minor n ching, sea ion remo onsible fo ount requ	naintenance aling of val from or its sested is ate.
Internal Charges: External Consulting: Sub Total: HST Impact: Total Project Cost: SOURCE(S) OF FUNDING	25,350 446 25,800	0 0 0 0	repair. O on bridge bridge ap culverts, inspection consister	perations is respes/culverts such a proaches and br while Environm n/rehabilitation at with the 2020	onsible for pas minor gradge decks, ental Service and replacen	preventive ding, pate and siltat es is resp ment. Am Reserve S	e minor n ching, sea ion remo onsible fo ount requ	naintenance aling of val from or its dested is
Internal Charges: External Consulting: Sub Total: HST Impact: Total Project Cost: SOURCE(S) OF FUNDING	0 0 25,350 446 25,800 G (\$)	0 0 0 0	repair. O on bridge bridge ap culverts, inspection consister	perations is respes/culverts such a proaches and br while Environm n/rehabilitation at with the 2020	onsible for pas minor gra idge decks, ental Service and replacen Life Cycle R	preventive ding, pate and siltat es is resp ment. Am Reserve S	e minor n ching, sea ion remo onsible fo ount requ tudy upda	naintenance aling of val from or its uested is ate. Future
Internal Charges: External Consulting: Sub Total: HST Impact: Total Project Cost: SOURCE(S) OF FUNDING	0 0 25,350 446 25,800 G (\$)	0 0 0 0 0	repair. O on bridge bridge ap culverts, inspectio consister	perations is respes/culverts such approaches and browhile Environm n/rehabilitation at with the 2020 mponents	onsible for pas minor gra idge decks, ental Service and replacen Life Cycle R	oreventive ding, pate and siltates is responent. Am Reserve S	e minor n ching, sea ion remo onsible fo ount requ tudy upda	naintenance alling of val from or its tested is ate. Future Phases
Internal Charges: External Consulting: Sub Total: HST Impact: Total Project Cost: SOURCE(S) OF FUNDING Funding Type Operating Funded Life Cycle TOTAL FUNDING	0 0 25,350 446 25,800 G (\$) Budget 25,800 25,800	0 0 0 0 0	repair. O on bridge bridge ap culverts, inspectio consister	perations is respes/culverts such approaches and browhile Environm n/rehabilitation at with the 2020 mponents	onsible for pas minor gra idge decks, ental Service and replacen Life Cycle R	oreventive ding, pate and siltates is responent. Am Reserve S	e minor n ching, sea ion remo onsible fo ount requ tudy upda OTAL 0 0	naintenance alling of val from or its tested is ate. Future Phases
Internal Charges: External Consulting: Sub Total: HST Impact: Total Project Cost: SOURCE(S) OF FUNDING Funding Type Operating Funded Life Cycle TOTAL FUNDING	0 0 25,350 446 25,800 G (\$) Budget 25,800 25,800	0 0 0 0 0 0	repair. O on bridge bridge ap culverts, inspection consister	perations is respes/culverts such a proaches and brownile Environm n/rehabilitation at with the 2020 maponents	onsible for pas minor graidge decks, ental Service and replacen Life Cycle R	oreventive ding, pate and siltates is responent. Am Reserve S	e minor n ching, sea ion remo onsible fo ount requ tudy upda OTAL 0 0	naintenance alling of val from or its tested is ate. Future Phases
Internal Charges: External Consulting: Sub Total: HST Impact: Total Project Cost: SOURCE(S) OF FUNDING Funding Type Deparating Funded Life Cycle TOTAL FUNDING OPERATING BUDGET INDICA/LIFE CYCLE DETA	0 0 25,350 446 25,800 G (\$) Budget 25,800 25,800 Pe	0 0 0 0 0	repair. O on bridge bridge ap culverts, inspection consister Con O Personnel	perations is respes/culverts such a proaches and browhile Environm n/rehabilitation at with the 2020 mponents Revenues	onsible for pas minor graidge decks, ental Service and replacen Life Cycle R	reventive ding, pate and siltates is responent. Am Reserve S	e minor n ching, sea ion remo onsible fo ount requ tudy upda OTAL 0 0	naintenance alling of val from or its tested is ate. Future Phases
Internal Charges: External Consulting: Sub Total: HST Impact: Total Project Cost: SOURCE(S) OF FUNDING Funding Type Operating Funded Life Cycle TOTAL FUNDING OPERATING BUDGET II DCA/LIFE CYCLE DETA DCA	0 0 25,350 446 25,800 G (\$) Budget 25,800 25,800 Pe	0 0 0 0 0 0	repair. O on bridge bridge ap culverts, inspection consister Con Personnel \$0	perations is respected value of the second o	onsible for pas minor grainge decks, ental Service and replacen Life Cycle R	reventive ding, pate and siltates is responent. Am Reserve S	e minor n ching, sea ion remo onsible fo ount requ tudy upda OTAL 0 0	naintenance alling of val from or its tested is ate. Future Phases
Internal Charges: External Consulting: Sub Total: HST Impact: Total Project Cost: SOURCE(S) OF FUNDING Funding Type Operating Funded Life Cycle TOTAL FUNDING OPERATING BUDGET INDICA/LIFE CYCLE DETA	0 0 25,350 446 25,800 G (\$) Budget 25,800 25,800 Pe	0 0 0 0 0 0	repair. O on bridge bridge ap culverts, inspection consister Con O Personnel	perations is respected vertex such a proaches and browning Environm n/rehabilitation at with the 2020 maponents Revenues \$0 Amount in	onsible for pas minor graidge decks, ental Service and replacen Life Cycle R	reventive ding, pate and siltates is responent. Am Reserve S	e minor n ching, sea ion remove consible for count require tudy upda OTAL 0 0 venues)	naintenance alling of val from or its tested is ate. Future Phases
Internal Charges: External Consulting: Sub Total: HST Impact: Total Project Cost: SOURCE(S) OF FUNDING Funding Type Operating Funded Life Cycle TOTAL FUNDING OPERATING BUDGET II DCA/LIFE CYCLE DETA DCA	0 0 25,350 446 25,800 G (\$) Budget 25,800 25,800 Pe	0 0 0 0 0 0	repair. O on bridge bridge ap culverts, inspection consister Con Personnel \$0	perations is respected value of the second o	onsible for pas minor gra idge decks, a ental Service and replacen Life Cycle R Expenditu Life Amo	To and siltates is responent. Am Reserve S	e minor n ching, sea ion remove onsible for ount requestudy updated to the country of the countr	naintenance alling of val from or its tested is ate. Future Phases
Internal Charges: External Consulting: Sub Total: HST Impact: Total Project Cost: SOURCE(S) OF FUNDING Funding Type Operating Funded Life Cycle TOTAL FUNDING OPERATING BUDGET II DCA/LIFE CYCLE DETA DCA	0 0 25,350 446 25,800 G (\$) Budget 25,800 25,800 Pe	0 0 0 0 0 0	repair. O on bridge bridge ap culverts, inspection consister Consister Consister Consister Consister Consister Amount Consister Consister Consister Consister Consister Consister Consister Consister Consister	perations is respected vertex such a proaches and browning Environm n/rehabilitation at with the 2020 in the second vertex with the 2020 in the second vertex and the second vertex vertex and the second vertex ver	onsible for pas minor gra idge decks, a ental Service and replacen Life Cycle R Expenditu Life Amo Amo	reventive ding, pate and siltates is responent. Am Reserve S Teleon description of the siltate	e minor n ching, sea ion remove onsible for ount required to the country updated to the country of the country	naintenance alling of val from or its tested is ate. Future Phases



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Number: 21122

Project Name: Compt.	Fonce Danair./D	onlogom s-4			Project Cos	st: \$40	,700
Project Name: Cemetery		epiacement]	Repair/Replac	e
Commission: Community				Ţ	Jseful Life: 2	5 Pre Ap	proval:
Department: Operations				Category:	Annual		•
Project Mgr: Dean McDe			Cost '		Recent awards	<u> </u>	
	2 3 4				Condition asse		
5 🗆	6□ 7□ 8✔		requirement	undunom			
DETAILED DESCRIPTIO	•						
Fence repairs at Thornhill an border between private adjac with the 4th side being auther Heritage review and approvakeeping with the black wrough	ent lands and buriantic wrought iron for the galvanized of the galvanized of the tron entrance.	Il grounds. Thornhi ence and masonry hain link fence wil	Il Cemetery is su gate posts. Fence I be replaced wit	rrounded o replacement h a black vi	n 3 sides with g nt at Thornhill (alvanized cha Cemetery is su	in link fenc bject to
BUILDING MARKHAM'S	S FUTURE TOGI	ETHER: Safe &	Sustainable Comn	nunity			
PROJECT COSTS (\$)	2021	Future Phases	NOTES			C (0.4.41	0 1.1
Cost/Quote:	40,000	0			with a budget of the		
Internal Charges:	0	0	contractor dete	ermined ref	urbishment wou	ıld not meet sa	afety
External Consulting:	0	0			vrought iron fen		
Sub Total:	40,000	0			aining funds of a replace the ren		
HST Impact:	704	0	fence with blace	ck vinyl cha	ain link fence, f	or a total cost	of \$59,700
Total Project Cost:	40,700	0	Future updates of this replaces		e Cycle Reserve	Study will re	flect the co
=		<u>_</u>	or this replaces	ment.			
SOURCE(S) OF FUNDING	(\$)		Compon	ents			<u>Future</u>
Funding Type	Budget	<u>Thornhill</u>	St John			TOTAL	<u>Phases</u>
Operating Funded Life Cycle	40,700	27,500	13,200	0	0	40,700	(
TOTAL FUNDING	40,700					40,700	
_	Dox	rsonnel Non Pe	rsonnel Rev	enues	Expenditures	/(Povonuos)	
OPERATING BUDGET IN	<u>MPACT</u>			\$0	\$(· · · · · ·	
DCA/LIFE CYCLE DETA	ILS	φυ φ	O .	φU	φι)	
<u>DCA</u>				mount in	Life Cy	<u>/cle</u>	
Name		Ye	ar Amount	Study	— Amount	in Study:	21,600
						Incl HST	40,700
						the study	2021
DCA and/andifo Code	E1-116-4h1-	and an and the discount	1/		1 cai iii	the study	2021
DCA and/or Life Cycle:	-						
Thornhill Cemetery fence	e being replaced w	ith black vinyl cha	in link fence inste	ead of repai	red.		



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\$175,000

21123 **Number:**

Project Cost:

Category: Cost Validation: Requirement Validation: ent or replacement of City eptacles, bike racks, bann	Annual Internal peer review	Approval:
Category: Cost Validation: Requirement Validation: ent or replacement of City eptacles, bike racks, band and installation of Molok	Annual Internal peer review Condition assessment furniture in parks and Civiner arms, self-watering plant	c property
Cost Validation: Requirement Validation: ent or replacement of City reptacles, bike racks, band and installation of Molok	Internal peer review Condition assessment furniture in parks and Civiner arms, self-watering plant	ters and
Cost Validation: Requirement Validation: ent or replacement of City reptacles, bike racks, band and installation of Molok	Internal peer review Condition assessment furniture in parks and Civiner arms, self-watering plant	ters and
Requirement Validation: ent or replacement of City eptacles, bike racks, bann and installation of Molok	Condition assessment furniture in parks and Civiner arms, self-watering plant	ters and
ent or replacement of City eptacles, bike racks, bann and installation of Molok	y furniture in parks and Civiner arms, self-watering plant	ters and
eptacles, bike racks, banr and installation of Molok	ner arms, self-watering plant	ters and
eptacles, bike racks, banr and installation of Molok	ner arms, self-watering plant	ters and
•		
NOTES		
on annual condition asses	sments at all City parks, tra	ils, greenspac
information signs and pla		
Muskoka chairs.		
Components		Future
	TOTAL	
0 0	0 0	(
	0	
onnel Revenues	Expenditures/(Revenues)
\$0	\$0	,
	T.0 G 1	
Amount in	<u>Life Cycle</u>	
Amount in Study		175,000
	— Amount in Study: [175,000
		175,000 175,000 2021
	This is an annual program assets are in a state of god with the 2020 Life Cycle on annual condition assess and facilities. Includes be concrete pads for both, bit Gates, picnic table frames information signs and pla Muskoka chairs. Components 0 0	This is an annual program. There is no substantial ba assets are in a state of good repair. Amount requested with the 2020 Life Cycle Reserve Study. Replacement on annual condition assessments at all City parks, trained facilities. Includes benches, waste receptacles/reconcrete pads for both, bike racks, planters and hanging Gates, picnic table frames and wood/hardware, banner information signs and plaques, seasonal decoration (IMuskoka chairs. Components TOTAL O O O O O O O O O O O O O O



Page 348 **335**

Number: 21124

Project Name: Count Dog	uurfaaina/Daaan	atmustism/Maint	tonono.		Project C	ost: \$170	6,900
Project Name: Court Res		struction/Maint	епапсе			Repair/Replac	ce
Commission: Community				Use	ful Life:	7 Pre Ap	pproval:
Department: Operations				Category: M	Iinor	•	
Project Mgr: Dean McDe			C	ost Validation: I	nternal peer	review	
	2 3 4 5			ent Validation: C			
	6□ 7□ 8□						
DETAILED DESCRIPTIO Repair and resurfacing of bas Resurface -Centennial Baske	sketball, public and tball 1, Maintenand	l club tennis courts ce - Carlton Park 5	5-7.		. Reconstr	uction- Armada	ale 1-4
BUILDING MARKHAM'S	S FUTURE TOGI	ETHER: Safe &	z Sustainable C	ommunity			
PROJECT COSTS (\$)	2021	Future Phases	NOTES		0		
Cost/Quote:	173,840	0		been deferments of sclubs but it is no			
Internal Charges:	0	0	The City is	s responsible for t	he annual	naintenance of	the clay
External Consulting:	0	0		maximum of \$3k s). The total cost of			
Sub Total:	173,840	0		ared 50:50 between			
HST Impact:	3,060	0		replacement/reha		ill proceed sub	ject to
Total Project Cost:	176,900	0	satisfactor	y club finance rev	iew.		
OURCE(S) OF FUNDING	Z (\$)		Com	ponents			
Funding Type	Budget	Clay Court	Public Cour			TOTAL	<u>Future</u> <u>Phases</u>
Operating Funded Life Cycle	94,600	9,000	3,300	82,300	0	94,600	0
Other External	82,300	9,000	0	82,300	0	82,300	0
TOTAL FUNDING		O	O	02,500	O	176,900	0
TOTAL FUNDING	<u> </u>					170,900	
OPERATING BUDGET I	MPACT Per	sonnel Non P	ersonnel	Revenues E	xpenditur	es/(Revenues)	
		\$0	\$0	\$0		\$0	
OCA/LIFE CYCLE DETA DCA	<u>ILS</u>			Amount in	<u>Life (</u>	Twolo	
Name		Ye	ear Amoun				
						it in Study:	285,700
						t Incl HST	143,200
					Year i	n the study	2021
DCA and/or Life Cycle:	Explain if there is	a change in the ye	ear and/or cost	:			

2021 Court Resurfacing/Reconstruction

17-Sep-2020

Resurface, Reconstruction or Maintenance	Component	Lifecycle Cost Inc. HST Impact City Share	Tennis Club Share Inc. HST Impact	Total Project Cost Inc. HST impact	Notes
Rebuild	Armadale - #1 to #4	82,310	82,310	164,619	Tennis Club (Armadale)
Resurface	Centennial Park - Basketball #1 (half)	3,321		3,321	
Clay Court Maintenance	Carlton Park - Tennis #5, #6 & #7 (Clay)	9,000		9,000	Reimbursement to Unionville Tennis Club
	Total	94.631	82.310	176.941	

Rounded Off 94,600 82,300 176,900

Funding Sources should be:	Budget	Clay Court	Public Courts	Tennis Club
Operating Funded Lifecycle	94,600	9,000	3,300	82,300
External Funding - Armadale	82,300			82,300
Total	176,900	9,000	3,300	164,600

Notes: Locations in Lifecycle but will be deferred to 2023

Robinson - Tennis #1 & #2	
Frisby - Tennis #1 & #2	
Ada Mckenzie - Tennis #1 & #2	
Pomona Valley - Tennis #1 to #6	



Page 352 339

21125 Number: **Project Cost:** \$135,800 Project Name: Fence (Tennis Courts) Repair/Replace Commission: Community & Fire Services Pre Approval: Useful Life: 35 Department: Operations - Parks Category: Minor Project Mgr: Dean McDermid Cost Validation: Internal peer review CW □ 1 ✓ 2 □ 3 □ 4 □ Ward(s): Requirement Validation: Condition assessment 5 🗆 6 🗆 7 🗆 8 🗆 **DETAILED DESCRIPTION (SCOPE OF PROJECT):** Replacement of perimeter fencing of tennis courts helps to protect the playing surfaces from non-court uses while maintaining the limits of play and allowing securement of the courts when not available for users. Safe & Sustainable Community **BUILDING MARKHAM'S FUTURE TOGETHER: NOTES PROJECT COSTS (\$)** 2021 **Future Phases** This is an annual program and funding will be requested each year. Cost/Quote: 133,450 0 2021 locations include Highgate, courts 1-3, Pomona Valley, courts 1-6 and Bayview Glen courts 1-2. Unit cost is based on original **Internal Charges:** 0 0 cost of construction plus inflation. There is no substantial backlog **External Consulting:** 0 0 and the fences are in a state of good repair. 133,450 Sub Total: 0 2,349 0 **HST Impact: Total Project Cost:** 135,800 0 SOURCE(S) OF FUNDING (\$) **Components Future Funding Type** Highgate Pomona Valley Bayview Glen **TOTAL Phases Budget** Gas Tax 135,800 37,900 68,300 29,600 0 0 135,800 TOTAL FUNDING 135,800 135,800 0 Personnel Non Personnel Revenues Expenditures/(Revenues) OPERATING BUDGET IMPACT \$0 \$0 \$0 \$0 DCA/LIFE CYCLE DETAILS **DCA** Amount in **Life Cycle** Year Name **Amount** Study Amount in Study: 106,200 Amount Incl HST 135,800 Year in the study 2021 DCA and/or Life Cycle: Explain if there is a change in the year and/or cost: Highgate is accelerated from 2031



Page 354 **345**Number: 21126

Project Name: F	Toodlights, Poles & Cross Arms Replace	ement	Project C	Cost:	\$820,700
_		<u> </u>		Repai	ir/Replace
	Community & Fire Services	J	Jseful Life:	30	Pre Approval:
Project Mgr: Ja	Operations - Parks ames Bingham	Category:	Minor		
Ward(s): CV	V ☑ 1 □ 2 □ 3 □ 4 □	Cost Validation:			
	5 6 7 8	Requirement Validation:	Condition as	ssessme	ent

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Floodlights, poles and cross arms at parks due for replacement based on condition assessment and to avoid untimely outages. This project includes the repair, removal and disposal of existing poles and floodlights, and supply and installation of new poles, cross arms and floodlights. Locations for 2021 are Carlton Park Tennis, Milliken Mills #5 Softball, Morgan Park Tennis, and Pomona Valley Tennis.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

PROJECT COSTS (\$)	<u>2021</u>	Future Phases
Cost/Quote:	760,824	0
Internal Charges:	0	0
External Consulting:	45,650	0
Sub Total:	806,474	0
HST Impact:	14,194	0
Total Project Cost:	820,700	0

NOTES

This is an asset based lifecycle program and funding will be requested each year. All of the Markham sports fields constructed or retrofitted since 1982 have been equipped with controlled-optic sports floodlights that are designed to control the direct illumination and to reduce the dark sky illumination. Project will be completed during 2020/2021 winter season. This project will be upgraded to LED lights generating annual savings of \$3K. There is no substantial backlog and assets are in a state of good repair.

SOURCE(S) OF FUNDING	(\$)		Compon	ents			Entres
Funding Type	<u>Budget</u>					TOTAL	<u>Future</u> <u>Phases</u>
Gas Tax	820,700	0	0	0	0	0	0
TOTAL FUNDING	820,700				=	0	0

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
OLDMIN O BODGET IMI NOT	\$0	-\$3,241	\$0	-\$3,241

DCA/LIFE CYCLE DETAILS

<u>DCA</u>			Amount in	Life Cycle	
Name	Year	Amount	Study	- Amount in Study:	973,700
				Amount Incl HST	820,700
				Year in the study	2021

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

The lights at the 3 tennis courts at Markham Tennis Club are being completed as part of the Tennis Bubble project managed by Asset Management.

2021 Floodlights, Poles & Cross Arms

17-Jul-2020

			Breakdown of Proj	ect Cost (Pre-Tax)
Facility	Lifecycle Cost Pre-Tax	Cost Inc. Contingency	Consultant	Total
Carlton Park - Tennis (North)	150,425	141,911	8,515	150,425
Carlton Park - Tennis (South)	150,425	141,911	8,515	150,425
Milliken Mills Park #5 - Softball	204,772	193,181	11,591	204,772
Morgan - Tennis	150,425	141,911	8,515	150,425
Pomona Valley - Tennis	150,425	141,911	8,515	150,425
	806,473	760,824	45,650	806,473
			Total Cost pre-tax	\$ 806,473
			HST Impact	\$ 14,194
			Total Project Cost	\$ 820,667
			Rounded Off	
			Project Cost	820,700

Note: Reesor - Tennis (North) - \$150k pre-tax included in lifecycle but has been removed; To be done by Sustainability and Asset Management



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ARKHAM 21127 **Number: Project Cost:** \$20,700 Project Name: Goal Posts Replacement- Ashton Meadows Park Repair/Replace Commission: Community & Fire Services Pre Approval: Useful Life: 30 Department: Operations - Parks Category: Minor Project Mgr: James Bingham Cost Validation: Recent awards Ward(s): CW □ 1 □ 2 ✓ 3 □ 4 □ Requirement Validation: Condition assessment 5 🗆 6 🗆 7 🗆 8 🗆 **DETAILED DESCRIPTION (SCOPE OF PROJECT):** Goal Posts (3 sets) at Ashton Meadows Park due for replacement based on life expectancy and condition assessment. Safe & Sustainable Community **BUILDING MARKHAM'S FUTURE TOGETHER: PROJECT COSTS (\$)** 2021 **Future Phases** Life cycle Program. \$6.7K per pair per location. This is an annual Cost/Quote: 20,300 0 program and funding will be requested each year. The replacements are safety compliant. **Internal Charges:** 0 0 Unit prices consistent with recent award plus inflation. The goal **External Consulting:** 0 0 posts at Ashton Meadows were last replaced in 1991. Sub Total: 20,300 0 0 **HST Impact:** 357 **Total Project Cost:** 20,700 0 SOURCE(S) OF FUNDING (\$) **Components Future Funding Type TOTAL Phases Budget** Gas Tax 20,700 0 0 0 0 0 0 TOTAL FUNDING 20,700 0 0 Personnel Non Personnel Revenues Expenditures/(Revenues) OPERATING BUDGET IMPACT \$0 \$0 \$0 \$0 **DCA/LIFE CYCLE DETAILS DCA** Amount in **Life Cycle** Year Name **Amount** Study Amount in Study: 20,700 Amount Incl HST 20,700 Year in the study 2021 DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:



Page 360 **345**8

21128 **Number:**

Project Cost:

Project Name: N. 11	. Т С			Project (Cost:	\$121	,500
Project Name: Markham		UFFOW			New A	sset/Ex	pansion
Commission: Community				Useful Life:	50	Pre Ap	proval: \Box
Department: Operations			Category	: Annual			
Project Mgr: Nory Takat			Cost Validation	n: Internal pe	er review		
	2 3 4 5		Requirement Validation			t	
	6 7 8		•				
ETAILED DESCRIPTIO	*	·			•.		
lunteers and Non-Government	ment Organizations aintain the health a	s. The program scop	nitiatives through the engage is developed annually baurban forest. To date, over	ased on chang	ing priorit	ies that	focus on
UILDING MARKHAM'	S FUTURE TOG	ETHER: Except	ional Services by Exceptional	l People			
ROJECT COSTS (\$)	<u>2021</u>	Future Phases	NOTES	4			
Cost/Quote:	83,250	0	This program facilitates community engagement				rporate
Internal Charges:	36,750	0	2019-2022 Goals	-			
External Consulting:	0	0	1. Increase tree canopy l 3. Outreach, Education,		tnerships		
Sub Total:	120,000	0	Focal point of 2021 is re		ntings, 10,	000 tree	es, Tree
HST Impact:	1,465	0	Canada, refreshed brand	ling, social me	edia campa	aign and	d tree
Total Project Cost:	121,500	0	education programs. Internal chargeback for	1-150 day stat	ff		
=				1 150 day 5ta			
OURCE(S) OF FUNDING	<u>G (\$)</u>		Components				Future
nding Type	Budget				<u>TO</u>	TAL	Phases
	121,500	0	0 0	(0	0	
ner Internal	,				-		
	121,500					0	
FOTAL FUNDING	121,500	rsonnel Non Pe	ersonnel Revenues	Expenditu	res/(Reve		
TOTAL FUNDING	121,500		ersonnel Revenues 0 \$0	Expenditu	ares/(Reve		
FOTAL FUNDING PERATING BUDGET I	121,500 Pe			Expenditu			
TOTAL FUNDING PERATING BUDGET I CA/LIFE CYCLE DETA DCA	121,500 Pe	\$0 \$	0 \$0 Amount in				
IOTAL FUNDING PERATING BUDGET I	121,500 Pe		0 \$0 Amount in	ı <u>Life</u>	\$0 Cycle	enues)	
PERATING BUDGET I CA/LIFE CYCLE DETA DCA	121,500 Pe	\$0 \$	0 \$0 Amount in	n <u>Life</u> — Amou	\$0 Cycle unt in Stud	enues)	
PERATING BUDGET I CA/LIFE CYCLE DETA DCA	121,500 Pe	\$0 \$	0 \$0 Amount in	n <u>Life</u> — Amou Amou	\$0 Cycle	enues)	



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2021 PROJECT FUNDING REQUEST FORM 21129 Number: **Project Cost:** \$142,700 Project Name: Pathways Resurfacing Repair/Replace Commission: Community & Fire Services Pre Approval: Useful Life: 15 Department: Operations - Parks Category: Minor Project Mgr: Scott Grieve Cost Validation: Recent awards CW ✓ 1 □ 2 □ 3 □ 4 □ Ward(s): 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. Paying 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. Safe & Sustainable Community **BUILDING MARKHAM'S FUTURE TOGETHER: NOTES PROJECT COSTS (\$)** 2021 **Future Phases** Locations subject to condition assessment to be done spring 2021. Cost/Quote: 140,200 0 There is no substantial backlog and the pathways are in a state of good repair. 3 year avg is \$126K. 0 **Internal Charges:** 0 **External Consulting:** 0 0 Sub Total: 140,200 0 **HST Impact:** 0 2,468 **Total Project Cost:** 142,700 0 SOURCE(S) OF FUNDING (\$) **Components Future Funding Type TOTAL Phases Budget** Gas Tax 142,700 0 0 0 0 0 0 TOTAL FUNDING 142,700 0 0 Personnel Non Personnel Revenues Expenditures/(Revenues) OPERATING BUDGET IMPACT \$0 \$0 \$0 \$0 DCA/LIFE CVCLE DETAILS

<u>DCA</u>		Amount in	<u>Life Cycle</u>	
Name	Year Amou	ınt Study	Amount in Study:	142,700
			Amount Incl HST	142,700
			Year in the study	202



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21130 Number: **Project Cost:** \$366,800 Project Name: Playstructure Replacement Repair/Replace Commission: Community & Fire Services Pre Approval: Useful Life: 17 Department: Operations - Parks Category: Minor Project Mgr: Scott Grieve Cost Validation: Recent awards CW ✓ 1 □ 2 □ 3 □ 4 □ Ward(s): Requirement Validation: Condition assessment 5 6 7 8 **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 4 locations to be replaced in 2021, Milliken Mills Park. Milliken Mills Park rubberized surface, Benjamin Marr South, Bruce Boyd. Safe & Sustainable Community **BUILDING MARKHAM'S FUTURE TOGETHER:** NOTES **PROJECT COSTS (\$)** 2021 **Future Phases** Locations are subject to change based on condition assessment. Cost/Ouote: 354.850 0 Funding amount changes every year based on life cycle replacement of specific playstructures. There is no substantial 0 **Internal Charges:** 0 backlog upon completion of the 2021 project. Assets are in a state **External Consulting:** 5,592 0 of good repair. Milliken Mills playground structure will be accelerated to 2021 to coincide with the Milliken Mills rubberized Sub Total: 360,442 0 surface which has been deferred to 2021 from 2020. 6,344 0 **HST Impact: Total Project Cost:** 366,800 0 SOURCE(S) OF FUNDING (\$) **Components Future Funding Type TOTAL Phases Budget** Gas Tax 366,800 0 0 0 0 0 0 TOTAL FUNDING 366,800 0 0 Personnel Non Personnel Revenues Expenditures/(Revenues) OPERATING BUDGET IMPACT \$0 \$0 \$0 \$0 DCA/LIFE CYCLE DETAILS **DCA** Amount in **Life Cycle** Year Name **Amount** Study Amount in Study: 526,500 Amount Incl HST 361,100 Year in the study 2021 DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:

2021 PLAYGROUND

Inventory Description	Facility	Funding	Cost Pre HST
Playground - Rubberized Surface	Milliken Mills	Lifecycle	130,042
Playground Structure	Benjamin Marr South (1-Junior, 1-Senior)	Lifecycle	55,300
Playground Structure	Bruce Boyd (1-Junior)	Lifecycle	47,900
Playground Structure	Milliken Mills Park (2-Senior, 1-Junior)	Lifecycle	127,200
		Total	360,442
		HST Impact	6,344
		Total Project Cost	366,786
		Rounded Off	366,800

Playground Component

Playground Cost	354,850
Consultant - 1.5%	5,592
Total	360,442
HST Impact	6,344
Total Project Cost	366,786
Rounded Off	366,800

Included in lifecycle in 2021 but has been deferred :

Playground - Rubberized Surface	Swan Lake
Playground Structure	Clarence Chant (1-Senior)
Playground Structure	Forest Manor Parkette (1-Junior)
Playground Structure	Huntington Park (2-Senior)
Playground Structure	James Thomas Park Everett (1-Senior)
Playground Structure	Roy Walker Parkette (1-Senior)
Playground Structure	Simonston Park (1-Junior, 1-Senior)
Playground Structure	Victoria Square North (1-Senior)



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21131 **Number: Project Cost:** \$16,900 Project Name: Recycling Containers Replacement (Yr 4 of 10) Repair/Replace Commission: Community & Fire Services Pre Approval: Useful Life: 10 Department: Operations - Parks Category: Minor Project Mgr: Matt Busato Cost Validation: Internal peer review CW ✓ 1 □ 2 □ 3 □ 4 □ Ward(s): Requirement Validation: Condition assessment 5 🗆 6 🗆 7 🗆 8 🗆 **DETAILED DESCRIPTION (SCOPE OF PROJECT):** Replacement of recycling containers based on condition assessment. Safe & Sustainable Community **BUILDING MARKHAM'S FUTURE TOGETHER: PROJECT COSTS (\$)** 2021 **Future Phases** There are approximately 500 seasonal recycling bins in parks. Cost/Quote: 16,600 106,797 Project will replace these bins (purchased in 2008) with some permanent bins in high use locations and some seasonal bins. Based **Internal Charges:** 0 0 on 2020 costs - Steel painted drums (30) - \$26 ea = \$780, flair top **External Consulting:** 0 0 ribbon containers (18) - \$800 ea = \$14,400 and lids (30)- \$40 ea = \$1200. Costs to be confirmed in spring of 2021 due to fluctuation Sub Total: 16,600 106,797 of prices on steel costs. This is the 4th of a 10 year replacement **HST Impact:** 292 1,880 program for recycling containers in parks. Amount requested is **Total Project Cost:** 16,900 108,700 consistent with the 2020 Life Cycle Reserve Study update. SOURCE(S) OF FUNDING (\$) **Components Future Funding Type Phases Budget TOTAL** Operating Funded Life Cycle 16,900 0 0 0 0 0 108,700 TOTAL FUNDING 16,900 0 108,700 Personnel Non Personnel Revenues Expenditures/(Revenues) OPERATING BUDGET IMPACT \$0 \$0 \$0 \$0 DCA/LIFE CYCLE DETAILS **DCA** Amount in **Life Cycle** Year Name **Amount** Study Amount in Study: 16,900 Amount Incl HST 16,900 Year in the study 2021 DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:



Page 370 **355**8 2021 PROJECT FUNDING REQUEST FORM 21132 **Number: Project Cost:** \$40,100 Project Name: Relamping & Fixtures Refurbishment Repair/Replace Commission: Community & Fire Services Pre Approval: Useful Life: 10 Department: Operations - Parks Category: Annual Project Mgr: James Bingham Cost Validation: Internal peer review CW ✓ 1 □ 2 □ 3 □ 4 □ Ward(s): Requirement Validation: Visual inspection **DETAILED DESCRIPTION (SCOPE OF PROJECT):** An independent audit of electrical services in municipal parks and sportsfields identifies locations for repair/maintenance of electrical components based on condition assessment. Untimely outages may pose potential hazards. Safe & Sustainable Community **BUILDING MARKHAM'S FUTURE TOGETHER:** NOTES **PROJECT COSTS (\$)** 2021 **Future Phases** Locations to be determined. Project scope includes bulb, defective Cost/Quote: 33,400 0 ballast, cables, broken lens replacements. Work to completed is based on condition assessment by the lighting consultant and is **Internal Charges:** 0 0 location specific. This is an annual program and funding will be **External Consulting:** 0 6,000 requested each year; 3 year average-\$35K. The assets are in a state of good repair. Sub Total: 39,400 0 Amount requested is consistent with the 2020 Life Cycle Reserve 0 **HST Impact:** 693 Study update. **Total Project Cost:** 40,100 0

SOURCE(S) OF FUNDING	<u>(\$)</u>		TD 4				
Funding Type	<u>Budget</u>					TOTAL	<u>Future</u> <u>Phases</u>
Operating Funded Life Cycle	40,100	0	0	0	0	0	0
TOTAL FUNDING	40,100				_	0	

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

DCA/LIFE CYCLE DETAILS DCA Amount in Life Cycle Year Name **Amount** Study Amount in Study: 40,100 Amount Incl HST 40,100 Year in the study 2021 DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:



Project Name: Shade Structure Rehabilitation and/or Replacement

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\$111,700

21133 **Number:**

Project Cost:

							Repair/	Replac	e
Commission: Communit					Ţ	Jseful Life:	35	Pre Ap	proval:
Department: Operations					Category:	Minor		1	•
Project Mgr: Scott Griev					Cost Validation:		er review		
	2 3 4				nent Validation:				
5 🗹	6 □ 7 ✓ 8 □								
ETAILED DESCRIPTION									
ehabilitation and/or replace ocations in 2021.	ement of shade stru	ıctures (gaz	ebo minor	, major ar	nd trellis) based	on condition	assessmen	it. Ther	re are 6
BUILDING MARKHAM	'S FUTURE TOG	ETHER:	Safe & S	ustainable	Community				
PROJECT COSTS (\$)	2021	Future F	hases	NOTES					
Cost/Quote:	109,814		0		ations are: Bercz jor Rehab),Beau				
Internal Charges:	0		0	Park(Mir	nor),Benjamin M	Iarr Park No	rth (Minor	Rehab),Joseph
External Consulting:	0		0		Minor Rehab). T				
Sub Total:	109,814		0		r form and will p d to 20 years. The				
HST Impact:	1,933		0	in 2017.	There is currentl	y no backlog	g and the a	ssets ar	e in a stat
Total Project Cost:	111,700	-	0		epair. Amount r serve Study upd		onsistent v	vith the	2020 Lif
=	<u>, </u>			Cycle Re	serve study upu	ute.			
OURCE(S) OF FUNDING	<u>G (\$)</u>			Cor	nponents				Future
unding Type	<u>Budget</u>						<u>TO</u>	TAL	Phases
perating Funded Life Cycle	111,700		0	0	0	(0	0	
TOTAL FUNDING	111,700							0	
OPERATING BUDGET I	тмраст Ре	rsonnel	Non Pers	sonnel	Revenues	Expenditu	res/(Reve	nues)	
TERATING BUDGET	WIACI	\$0	\$0		\$0		\$0		
CA/LIFE CYCLE DETA	AILS	-							
<u>DCA</u>			***		Amount in	<u>Life</u>	Cycle		
Name			Year	Amou	nt Study	— Amoi	unt in Stud	y:	210,700
						Amou	ınt Incl HS	Т	111,700
						Year	in the stud	ly	2021
DCA and/or Life Cycle	e: Explain if there is	s a change i	n the vear	and/or co	st:				
	<u></u>								



Ward(s):

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2021 PROJECT FUNDING REQUEST FORM 21134 **Number: Project Cost:** \$140,300 Project Name: Sportsfield Maintenance & Reconstruction Repair/Replace Commission: Community & Fire Services Pre Approval: Useful Life: Department: Operations - Parks Category: Annual Project Mgr: James Bingham

DETAILED DESCRIPTION (SCOPE OF PROJECT):

CW ✓ 1 □ 2 □ 3 □ 4 □

Life cycle program includes top dressing, grass seed, sod, fertilizer, and irrigation upgrades as per contracts. Funds within this project may be reallocated to sportsfield maintenance materials and services that require immediate attention unforeseen at time of submission such as sodding of damaged fields. Locations to be determined each spring and again at the end of playing season based on inspection.

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

PROJECT COSTS (\$)	<u>2021</u>	Future Phases
Cost/Quote:	137,900	0
Internal Charges:	0	0
External Consulting:	0	0
Sub Total:	137,900	0
HST Impact:	2,427	0
Total Project Cost:	140,300	0

NOTES

There are 212 sportsfields existing in various parks and schools which consist of baseball diamonds, rugby, soccer, cricket and football fields. Fields are scheduled for renovation every year by various degrees depending on condition. Average expenditures per sportsfield vary depending on use, wear and tear and weather conditions. This is an annual program and funding will be requested each year. There is no substantial backlog within this program and assets are in a state of good repair. Project cost is based on existing contracts (expire 2021). 3 year avg is \$132K.

Cost Validation: Internal peer review

Requirement Validation: Condition assessment

SOURCE(S) OF FUNDING (<u>(\$)</u>		Compone	ents			Entura
Funding Type	<u>Budget</u>					TOTAL	<u>Future</u> <u>Phases</u>
Operating Funded Life Cycle	140,300	0	0	0	0	0	0
TOTAL FUNDING	140,300					0	0

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

DCA/LIFE CYCLE DETAILS DCA Amount in Year Name **Amount** Study

Life Cycle

Amount in Study:

140,300 140,300

Amount Incl HST Year in the study

2021

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



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21135 Number: **Project Cost:** \$229,200 Project Name: Stairway Repairs Repair/Replace Commission: Community & Fire Services Pre Approval: Useful Life: 20 Department: Operations - Parks Category: Minor Project Mgr: Scott Grieve Cost Validation: Internal peer review CW □ 1 ✓ 2 □ 3 ✓ 4 ✓ Ward(s): Requirement Validation: Condition assessment 5 🗆 6 🗆 7 🗆 8 🗆 **DETAILED DESCRIPTION (SCOPE OF PROJECT):** This project replaces stairways citywide, based on condition assessment. Stairways offer important access points to valley land, park, parking lots and facilities. Safe & Sustainable Community **BUILDING MARKHAM'S FUTURE TOGETHER: PROJECT COSTS (\$)** 2021 **Future Phases** 2021 project will include: Sixpenny (\$77K), Christman(\$59K), Cost/Quote: 225,272 0 Dollar Hamlet (\$33K), Toogood Pond(\$45K) and Huntington Park(\$15K). This inventory is currently being captured and will be **Internal Charges:** 0 0 completed by the end of 2020 and will include location specific **External Consulting:** 0 0 amounts converting this to an asset based project. The assets are in a state of good repair. Unit prices consistent with Sub Total: 225,272 0 recent award plus inflation. 0 **HST Impact:** 3,965 Amount requested is consistent with the 2020 Life Cycle Reserve **Total Project Cost:** 229,200 0 Study update. SOURCE(S) OF FUNDING (\$) **Components Future Funding Type TOTAL Phases Budget** Operating Funded Life Cycle 229,200 0 0 0 0 0 0 TOTAL FUNDING 229,200 0 0 Personnel Non Personnel Revenues Expenditures/(Revenues) **OPERATING BUDGET IMPACT** \$0 \$0 \$0 \$0 DCA/LIFE CYCLE DETAILS **DCA** Amount in **Life Cycle** Year Name **Amount** Study Amount in Study: 252,200 Amount Incl HST 229,200 Year in the study 2021 DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:



Page 378 **365**

21136 Number: **Project Cost:** \$10,200

Troject Name. Corporate	e Fleet Growth -	Non-Fiee	τ				New As	sset/Exr	ansion
Commission: Community	& Fire Services				ī	Jseful Life:	-		oroval:
Department: Operations	- Fleet				Category:		,	- 10 11pf	
Project Mgr: Raymond L	aw/Peter Englezak	os					•		
Ward(s): $CW \boxed{\bullet} 1 \square$	2□ 3□ 4□					Internal ped		`	
5 🗆	6□ 7□ 8□			Requirement V	'alidation:	Other(speci	ify in Note	s)	
DETAILED DESCRIPTIO	N (SCOPE OF P	ROJECT):							
To purchase growth related N small tools.	Non- Fleet equipme	ent such as p	oush mow	ers, portable ge	nerators, c	ord trimmers	s, leaf blov	vers and	lother
BUILDING MARKHAM'S	S FUTURE TOG	ETHER:	Safe & Si	ustainable Comm	unity				
PROJECT COSTS (\$)	<u>2021</u>	Future Pl	<u>hases</u>	NOTES Additional equi	immont for	additional a	accomal sta	eff bosses	l on amovetl
Cost/Quote:	10,000		0	The 2 year aver			easonai sta	iii basec	ı on grown
Internal Charges:	0		0	-	-				
External Consulting:	0		0						
Sub Total:	10,000		0						
HST Impact:	176		0						
Total Project Cost:	10,200		0						
SOURCE(S) OF FUNDING	S (\$)			Compone	ents				
Funding Type	<u>Budget</u>						<u>TO</u>	TAL	Future Phases
DCA	10,200		0	0	0	(0	0	C
TOTAL FUNDING	10,200							0	
OPERATING BUDGET IN	MPACT Per		Non Pers		enues	Expenditu		nues)	
	~	\$0	\$0	\$	80		\$0		
DCA/LIFE CYCLE DETA DCA	<u>ILS</u>					T . 0	G 1		
Name			Year		mount in Study		<u>Cycle</u>		
Public Works - Fleet			202		105,3	$\overline{00}$ Amou	ınt in Stud	y:	
TOTAL FUNDING				10,200	105,3	00 Amou	int Incl HS	T	
						— Year	in the stud	dy	
DCA and/or Life Cycle:	Explain if there is	a change in	the year	and/or cost:					



Page 380 **36%**

TOTAL Properating Funded Life Cycle 37,000 0 0 0 0 0 0 0 0 0	(M ARKHAM				<u>E</u>	UEST FO	N	umber:	21	137
Department: Operations - Fleet	Project Name: Compared	Elect Defende	L:				Project (Cost:	\$37,	000
Department: Operations - Fleet Project Mgr: Raymond Law/Peter Englezakos Ward(s): CW V 1 2 3 4 Ward(s): Cost Validation: Cost Validation: Multiple(specify) DETAILED DESCRIPTION (SCOPE OF PROJECT): Equipment and vehicles require periodic refurbishing, rust proofing and corrosion protection to meet the Ministry of Transportation assets of good repair. BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community PROJECT COSTS (s) 2021 Future Phases Cost/Quote: 36,400 0 Internal Charges: 0 0 Sub Total: 36,400 0 External Consulting: 0 0 Sub Total: 36,400 0 HST Impact: 641 0 Total Project Cost: 37,000 0 0 SOURCE(s) OF FUNDING (s) Components Funding Type Budget TOTAL Plans Personnel Funding Funded Life Cycle 37,000 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Corporate	e Fleet Returbis	ning					Repair/	Replace	2
Department: Operations - Fleet Project Mgr: Raymond Law/Peter Englezakos Ward(s): CW 2 1 2 3 4 4 5 5 6 6 7 8 8	Commission: Community	& Fire Services				I	Iseful Life:	3	Pre Ani	proval.
Ward(s): CW									P J	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Requirement Validation: Multiple(specify)	Project Mgr: Raymond L	aw/Peter Englezak	COS		C			or roviou		
DETAILED DESCRIPTION (SCOPE OF PROJECT): Equipment and vehicles require periodic refurbishing, rust proofing and corrosion protection to meet the Ministry of Transportation (Scope of Project requirements are met. Program helps to mitigate maintenance costs and keeps the equipment in a state of good repair. BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community PROJECT COSTS (\$) 2021 Future Phases Cost/Quote: 36,400 0 0 Internal Charges: 0 0 0 External Consulting: 0 0 0 Sub Total: 36,400 0 0 HST Impact: 641 0 0 Total Project Cost: 37,000 0 0 SOURCE(S) OF FUNDING (\$) Components Funding Type Budget TOTAL Properating Funded Life Cycle 37,000 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Ward(s): $CW \checkmark 1$	2 3 4 4		1						
Equipment and vehicles require periodic refurbishing, rust proofing and corrosion protection to meet the Ministry of Transportation safety requirements and to ensure life cycle requirements are met. Program helps to mitigate maintenance costs and keeps the equipment in a state of good repair. PROJECT COSTS (\$)	5 🗆	6 7 8			xequireme	iit vandation.	- With the Cop	ecity)		
BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community PROJECT COSTS (\$) Cost/Quote: 36,400 0 0		· · · · · · · · · · · · · · · · · · ·								
Cost/Quote: 36,400 0 1 Internal Charges: 0 0 0 1 External Consulting: 0 0 0 1 Sub Total: 36,400 0 0 HST Impact: 641 0 0 1 Total Project Cost: 37,000 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	safety requirements and to en equipment in a state of good	nsure life cycle req repair.	uirements ar	e met. Pro	gram help	s to mitigate m				
Cost/Quote: 36,400 0 Project includes rust protection, body work and painting. Internal Charges: 0 0 0 External Consulting: 0 0 0 Undate. Sub Total: 36,400 0 0 Undate. Sub Total Project Cost: 37,000 0 0 Undate. SOURCE(S) OF FUNDING (\$) Funding Type Budget TOTAL FUNDING 37,000 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	PROJECT COSTS (\$)	2021	Future Pl	12266						
Internal Charges: 0 0 0 0 Compliance. This is an annual program. 3 year average is \$3 Amount requested is consistent with Life Cycle Reserve Stu update. Sub Total: 36,400 0 0 HST Impact: 641 0 0 Total Project Cost: 37,000 0 0 Components Funding Type Budget TOTAL Properting Funded Life Cycle 37,000 0 0 0 0 0 0 0 0 0 0 0 TOTAL FUNDING 37,000 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Cost/Ouote:	· 								
External Consulting: 0 0 Update. Sub Total: 36,400 0 Update. SOURCE(S) OF FUNDING (\$) Components Funding Type Budget TOTAL Properting Funded Life Cycle 37,000 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	_	0		0	compliance	e. This is an an	nual progran	n. 3 year a	verage	is \$36K.
Sub Total	ŭ	0		()		quested is cons	sistent with L	Life Cycle	Reserve	e Study
HST Impact:	Sub Total:	36.400			ipuaic.					
Components Funding Type Budget TOTAL Properating Funded Life Cycle 37,000 0 0 0 0 0 0	—									
Funding Type Budget TOTAL Properating Funded Life Cycle 37,000 0 0 0 0 0 0 0 0 0	Total Project Cost:	37,000		0						
Funding Type Budget TOTAL Properating Funded Life Cycle 37,000 0 0 0 0 0 0 0 0 0	SOURCE(S) OF FUNDING	G (\$)			Com	ponents				Future
TOTAL FUNDING 37,000 OPERATING BUDGET IMPACT \$0 \$0 \$0 \$0 \$0 DCA/LIFE CYCLE DETAILS DCA Name Year Amount in Study Amount in Study: 37	Funding Type	Budget						<u>TO</u>	TAL	Phases
OPERATING BUDGET IMPACT \$0 \$0 \$0 \$0 \$0 DCA/LIFE CYCLE DETAILS DCA Name Year Amount in Study Study Amount in Study: 37	Operating Funded Life Cycle	37,000		0	0	0	(0	0	(
SO SO SO SO SO SO SO DCA/LIFE CYCLE DETAILS DCA Name Year Amount in Study Amount in Study Amount in Study 37.	TOTAL FUNDING	37,000							0	
DCA/LIFE CYCLE DETAILS DCA Name Year Amount in Study Amount in Study Amount in Study: 37.	OPERATING BUDGET I	MPACT Pe	rsonnel	Non Perso	onnel	Revenues	Expenditu	res/(Reve	nues)	
DCA NameYear Amount StudyAmount in StudyLife Cycle Amount in Study:			\$0	\$0		\$0		\$0		
Name Year Amount Study Amount in Study: 37.		<u>ILS</u>								
Amount in Study: 37.				Vear	Amoun		<u>Life</u>	<u>Cycle</u>		
A	Name			Tear	7 XIIIOUII	Study	— Amou	ant in Stud	ly:	37,000
Amount Incl HST 37							Amou	int Incl HS	ST	37,000
Year in the study							Year	in the stud	dy	2021
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:										



Department: Operations - Fleet

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V IARKH	AM 2021 PROJECT FUNDING REQUES	T FORM Numl	ber: 21138
Project Name:	Corporate Fleet Replacement - Fire	Project Cost	t: \$2,723,900
-		<u>R</u>	Repair/Replace
Commission: 0	Community & Fire Services	Useful Life: 5	Pre Approval:

Project Mgr: Chris Nearing/Raymond Law Cost Validation: Recent awards CW ✓ 1 □ 2 □ 3 □ 4 □ Ward(s):

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 for replacement - 5 units (2 Vehicles, 3 Apparatus).

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

PROJECT COSTS (\$)	<u>2021</u>	Future Phases
Cost/Quote:	2,676,757	0
Internal Charges:	0	0
External Consulting:	0	0
Sub Total:	2,676,757	0
HST Impact:	47,111	0
Total Project Cost:	2,723,900	0

NOTES

Useful life varies from 5 to 10 years based on units types. Requirement validation - Condition assessment, vehicle reliability & down time, & operating costs. Units specified in this replacement program will be purchased with the most recent technology available at time of purchase providing maximized fuel economy with minimal emissions. Project completion estimated at Q2/Q3 2022 for apparatus units due to time required to build the vehicles (built in USA). USD foreign exchange used was \$1.325 USD to CDN - USD \$654,617.

Category: Major

SOURCE(S) OF FUNDING	(\$)	Components						
Funding Type	<u>Budget</u>	<u>Fire</u>	Fire Apparatus			TOTAL	<u>Future</u> <u>Phases</u>	
Operating Funded Life Cycle	2,723,900	75,972	2,647,928	0	0	2,723,900	0	
TOTAL FUNDING	2,723,900					2,723,900	0	

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)	
OI EXCITING BODGET TIME ICE	\$0	\$0	\$0	\$0	

DCA/LIFE CYCLE DETAILS

<u>DCA</u>		Amount in	<u>Life Cycle</u>
Name	Year Amount	Study	Amount in Study: 2,937,800
			Amount Incl HST 2,723,900
			Year in the study 2021
DCA and/or Life Cycle: Explain if th	ere is a change in the year and/or cost		
DCA and/or Life Cycle. Explain it in	ere is a change in the year and/or cost	•	

2021 Corporate Fleet Replacement - Fire

						2021	2021	
Asset ID	Inventory Description	Model Year	Mileage (km)	Usage (hours)	Facility	Inflated Cost	Updated Cost	Project Notes
9405	COMPACT SUV FWD HYBRID-ESCAPE	2009	69,619		FIRE-1- Fire	43,030	43,030	Deferred from 2018 to 2021
9413	FULL SIZE REGULAR CAB PICKUP WITH CAP-GMC SIERRA 1500	2008	52,459		FIRE-1- Fire	31,625	31,625	Deferred from 2019 to 2021
9911	SMEAL PUMPER RESCUE SPARTON METROSTAR-	2013	120,339	5,960	FIRE-1- Fire Apparatus	867,368	867,368	US\$654,617 @\$1.325 exchange rate
9961	SMEAL PUMPER RESCUE SPARTON METROSTAR-	2013	87,907	4,207	FIRE-1- Fire Apparatus	867,368	867,368	US\$654,617 @\$1.325 exchange rate
9971	SMEAL PUMPER RESCUE SPARTON METROSTAR-	2013	78,899	3,849	FIRE-1- Fire Apparatus	867,368	867,368	US\$654,617 @\$1.325 exchange rate
						2,676,757	2,676,757	
					HST Impact	47,111	47,111	
					Total - Project Cost	2,723,868	2,723,868	
					Rounded Off - Project			
					Cost	2,723,900	2,723,900	



Page 386 **373**

21139 Number: **Project Cost:** \$102,100 Project Name: Corporate Fleet Replacement - Ice Resurfacing Machine Repair/Replace Commission: Community & Fire Services Pre Approval: Useful Life: 10 Department: Operations - Fleet Category: Major Project Mgr: Raymond Law/Peter Englezakos Cost Validation: Other(specify in Notes) CW □ 1 ✓ 2 □ 3 □ 4 □ Ward(s): Requirement Validation: Multiple(specify) 5 🗆 6 🗆 7 🗆 8 🗆 **DETAILED DESCRIPTION (SCOPE OF PROJECT):** Part of the 2021 Annual Fleet Replacement Program based on the Council adopted Corporate Fleet Policy Guidelines and condition assessment. Life cycle costing targets Optimal Replacement Intervals (ORI) which identifies the most cost effective time period for replacement. All equipment contained in this program have reached or surpassed the ORI. User Departments were consulted with respect to the units in this program. Unit for replacement - 1 ice resurfacing machine at Centennial Arena Safe & Sustainable Community **BUILDING MARKHAM'S FUTURE TOGETHER: NOTES PROJECT COSTS (\$)** 2021 **Future Phases** Cost Validation- most recent purchase of similar unit Cost/Ouote: 100,300 0 type.Requirement validation - vehicle reliability and down time, and operating costs. Pending condition assessment. Replacement **Internal Charges:** 0 0 model and make may change depending on availability. This **External Consulting:** 0 0 program and funding will be requested each year. Unit specified in this replacement program will be purchased with the most recent Sub Total: 100,300 0 technology available at time of purchase providing maximized fuel 0 **HST Impact:** 1,765 economy with minimal emissions. Amount requested is consistent **Total Project Cost:** 0 102,100 with Life Cycle Reserve Study update. SOURCE(S) OF FUNDING (\$) **Components Future Funding Type TOTAL Phases Budget** 0 0 0 0 Operating Funded Life Cycle 0 0 102,100 **TOTAL FUNDING** 102,100 0 0 Expenditures/(Revenues) Personnel Non Personnel Revenues OPERATING BUDGET IMPACT \$0 \$0 \$0 \$0 DCA/LIFE CYCLE DETAILS **DCA** Amount in Life Cycle Year **Amount** Study Name Amount in Study: 102,100 Amount Incl HST 102,100 2021 Year in the study DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:



Department: Operations - Fleet

2021 PROJECT FUNDING REQUEST FORM

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21140 Number: **Project Cost:** \$1,620,700 Project Name: Corporate Fleet Replacement - Non-Fire Repair/Replace Commission: Community & Fire Services Pre Approval: Useful Life:

Category: Major Project Mgr: Raymond Law/Peter Englezakos Cost Validation: Other(specify in Notes)

CW ✓ 1 □ 2 □ 3 □ 4 □ Ward(s): Requirement Validation: Multiple(specify)

DETAILED DESCRIPTION (SCOPE OF PROJECT):

5 6 7 8

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

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

PROJECT COSTS (\$)	<u>2021</u>	Future Phases
Cost/Quote:	1,592,680	0
Internal Charges:	0	0
External Consulting:	0	0
Sub Total:	1,592,680	0
HST Impact:	28,031	0
Total Project Cost:	1,620,700	0

NOTES

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.

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

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)	
OI EXAMINO BODGET IVII NO	\$0	\$0	\$0	\$0	

<u>OCA</u>		Amount in	Life Cycle	
lame	Year Amou	unt Study	Amount in Study: Amount Incl HST	2,440,500
			Year in the study	202
OCA and/or Life Cycle: Explain if there is a cha	inge in the year and/or co	ost:		

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	
								Project 18247 - life extended, deferred to
1426	TRACTOR 4 WD WITH CAB-6320	2003		7,011	OPERATIONS-Non Licensed	Non Licensed	160,092	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	
								Previously approved in 2019 (Project 19207) -
3321	3/4 TON 4X4 PICK UP C/W 8` SNOW PLOW	2011	121,960					to be resubmitted in 2021 due to budget
3321	3/4 TON 4X4 PICK OP C/W 8 SNOW PLOW	2011	121,960					shortfall; Updated price based on 090-T-20 -
					OPERATIONS-Licensed	Licensed	51,378	\$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	
								Previously approved in 2019 (Project 19207) -
		2242						to be resubmitted in 2021 due to budget
3344	CREW CAB DIESEL 9` DUMP	2010	68,384					shortfall; Updated price based on 090-T-20 -
					OPERATIONS-Licensed	Licensed	41,377	\$40,566, plus 2% inflation
								Previously approved in 2019 (Project 19207) -
	45 \ 0.105 \ 1.11							to be resubmitted in 2021 due to budget
3376	16 `CUBE VAN	2008	93,309					shortfall; Updated price based on 090-T-20 -
					OPERATIONS-Licensed	Licensed	51,328	\$50,322 plus 2% inflation
3443	56 HP 2 WHEEL DRIVE TRACTOR C/W CAB-5225	2007		3,622	OPERATIONS-Non Licensed	Non Licensed		Deferred from 2019 to 2021
	·						, in the second second	Previously approved in 2019 (Project 19207 -
								\$85,200) - to be resubmitted in 2021 due to
3458	4 X 4 TRACTOR LOADER	2007			OPERATIONS-Non Licensed	Non Licensed		budget shortfall; Updated price based on 108-
							127.500	Q-20 - \$125k, plus 2% inflation
3471	ZERO TURN 60" DIESEL POWERED-ZD21F ZERO TURN	2012		1.532	OPERATIONS-Non Licensed	Non Licensed		Deferred from 2020 to 2021
3472	ZERO TURN 60" DIESEL POWERED-ZD21F ZERO TURN	2012		1,306	OPERATIONS-Non Licensed	Non Licensed	,	Deferred from 2020 to 2021
3493	ZERO TURN MOWER 60" DIESEL POWERED-ZD21F ZERO TURN	2012		1,676	OPERATIONS-Non Licensed	Non Licensed	-,-	Deferred from 2020 to 2021
3494	ZERO TURN MOWER 60" DIESEL POWERED-ZD21F ZERO TURN	2012		1,460	OPERATIONS-Non Licensed	Non Licensed	-,-	Deferred from 2020 to 2021
4036	ZERO TURN 60" REAR DISCHARGE DIESEL -TURN	2011		1,642	OPERATIONS-Non Licensed	Non Licensed		Deferred from 2019 to 2021
4141	ZERO TURN 60" DIESEL POWERED-ZD21F ZERO TURN	2012		1.682	OPERATIONS-Non Licensed	Non Licensed		Deferred from 2020 to 2021
4902	ELECTRIC POWERED UTILITY VEHICLE-CARRYALL 1	2011		,	OPERATIONS-Non Licensed	Non Licensed	15,347	
5350	FULL SIZE PICK UP-GMC SIERRA 1500	2008	15,451	344	MUSEM-1-Licensed	Licensed		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	2013	131.089		ENFOR LIC-Licensed	Licensed		Deferred from 2019 to 2021
6095	COMPACT VAN FWD-GRAND CARAVAN	2012	76,312		CLERK-1-Licensed	Licensed	-,	Deferred from 2019 to 2021
6136	COMPACT CARGO VAN-GRAND CARAVAN	2012	193,246		ENFOR LIC-Licensed	Licensed	25,284	
6139	COMPACT CARGO VAN-GRAND CARAVAN COMPACT SUV FWD -ESCAPE	2013	99,072		ENFOR LIC-Licensed	Licensed	28,854	
0133	COMINGI JOV I WD -LJCAI L	2013	33,072		OPERATIONS- Operation Non Fleet <	Operation Non Fleet < \$5,000	20,034	
All	Operation Non Fleet < \$5,000 or Misc	2020			\$5,000 or Misc	or Misc	52.020	
All	Operation Non Fieet < \$5,000 or Misc	2020			73,000 or iviist	OI IVII3C	52,020	
						Total Pre-Tax	1,592,680	
					L		28,031	
						HST impact	28,031	1

HST impact 28,031
Total Project Cost 1,620,712
Rounded Off - Project Cost 1,620,700



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ARKHAM 21141 Number: **Project Cost:** \$216,200 Project Name: Corporate Fleet Replacement - Waterworks Repair/Replace Commission: Community & Fire Services Pre Approval: Useful Life: Department: Operations - Fleet Category: Major Project Mgr: Raymond Law/Pete Englezakos/Eddy Wu Cost Validation: Recent awards CW ✓ 1 □ 2 □ 3 □ 4 □ Ward(s): Requirement Validation: Other(specify in Notes) 5 6 7 8 **DETAILED DESCRIPTION (SCOPE OF PROJECT):** Part of the 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 (5 units) contained in this program have reached or surpassed the ORI. This is funded by Waterworks reserve. Safe & Sustainable Community **BUILDING MARKHAM'S FUTURE TOGETHER:** NOTES **PROJECT COSTS (\$)** 2021 **Future Phases** 5 units - Requirement Validation - meeting the approved Cost/Quote: 212,482 0 replacement criteria, pending condition assessment. A total of 10 units were due to be replaced of which 5 were deferred based on Internal Charges: 0 0 condition assessment. **External Consulting:** 0 0 All units in this request will be purchased with the most recent technology available at time of purchase providing maximum fuel Sub Total: 212,482 0 economy with minimal emissions. 0 **HST Impact:** 3,740 **Total Project Cost:** 216,200 0 SOURCE(S) OF FUNDING (\$) **Components Future Funding Type** Licensed (4) Non Licensed (1) **TOTAL Phases Budget** Waterworks 216,200 201,555 14,645 0 0 216,200 0 TOTAL FUNDING 216,200 216,200 0 Expenditures/(Revenues) **Personnel** Non Personnel Revenues **OPERATING BUDGET IMPACT** \$0 \$0 \$0 \$0 **DCA/LIFE CYCLE DETAILS DCA Amount in** Life Cycle Year **Amount** Name Study Amount in Study: 335,400 Amount Incl HST 216,200 2021 Year in the study DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:

2021 Waterworks Fleet Replacement Program

Asset ID	Inventory Description	Mileage (Km)	Usage (Hours)	Category	Model Year	2021 Updated Cost	Project Notes
2164	FULL SIZE PICK UP 4X2-F 150	83,869		WATER- Licensed	2013	28,485	
2169	ONE TON FLATBED DIESEL DUMP-RAM 3500	66,852		WATER- Licensed	2008	68,453	Deferred from 2020 to 2021
2173	COMPACT CARGO VAN FWD-TRANSIT	79,073		WATER- Licensed	2012	33.757	Deferred from 2020 to 2021; Cost increased by \$472 - return to full sized cargo van
2178	CREW CAB AND CHASSIS C/W UNICEL 12` BODY- F450	86,305		WATER- Licensed	2010	67,379	Deferred from 2020 to 2021. engine rebuild in 2018
2204	STEAMER-STEAM			WATER- Non Licensed (Tools & Equip)	2011	14,413	Accelerate from 2022 to 2021

Total Pre-Tax 212,481
HST impact 3,740
Total Project Cost 216,221
Rounded Off Project
Cost 216,200



Page 396 **383**

2021 PROJECT FUNDING REQUEST FORM 21142 Number: **Project Cost:** \$45,800 Project Name: New Fleet - Parks New Asset/Expansion Commission: Community & Fire Services Pre Approval: Useful Life: Department: Operations - Fleet Category: Minor Project Mgr: Raymond Law/Peter Englezakos Cost Validation: Other(specify in Notes) CW ✓ 1 □ 2 □ 3 □ 4 □ Ward(s): Requirement Validation: Other(specify in Notes) 5 6 7 8 **DETAILED DESCRIPTION (SCOPE OF PROJECT):** Purchase and acquisition of one (1) boom mount flail mower for use on compact tractor, and two (2) electric hydraulic tandem axle dump trailers. The City currently has one (1) boom mount flail mower. The expansion of the MUP network is the primary driver of this requirement. A second unit will also allow for some fall-back redundancy for when a unit is in need of repair. The City currently does not have any dump trailers. Tasks are being performed using 1-ton dump body trucks. The addition of dump trailers would allow for the crews mulching trees to work independently of the dump truck operator. **BUILDING MARKHAM'S FUTURE TOGETHER:** Safe & Sustainable Community NOTES **PROJECT COSTS (\$)** 2021 **Future Phases** Boom mount flail mower - \$25,000 (Useful life - 8 yrs) 45,000 Cost/Ouote: 0 Trailers 10,000 ea. X 2 = 20,000 (Usefil life - 10 yrs) Internal Charges: 0 0 External Consulting: 0 0 Sub Total: 45,000 0 0 **HST Impact:** 792 **Total Project Cost:** 45.800 0 SOURCE(S) OF FUNDING (\$) **Components Future Funding Type** Flail Mower **Trailers** TOTAL **Phases Budget** DCA 0 45,800 25,400 20,400 0 45,800 0 TOTAL FUNDING 45,800 45,800 0 Personnel Non Personnel Revenues **Expenditures/(Revenues) OPERATING BUDGET IMPACT** \$0 \$1,800 \$0 \$1.800

Year

Amount

Amount in

Study

Life Cycle

DCA/LIFE CYCLE DETAILS

DCA

Name



Page 398 **385**

21143 Number: **Project Cost:** \$28,200 Project Name: Survey Monument Replacement Repair/Replace Commission: Community & Fire Services Pre Approval: Useful Life: 60 Department: Operations - Utility Inspection & Survey Category: Annual Project Mgr: Negar Mahmoudi Cost Validation: Recent awards CW ✓ 1 □ 2 □ 3 □ 4 □ Ward(s): Requirement Validation: Condition assessment 5 🗆 6 🗆 7 🗆 8 🗆 **DETAILED DESCRIPTION (SCOPE OF PROJECT):** Program to replace damaged survey monuments to maintain integrity of City's survey control network. A well developed survey control network will help to achieve an efficient engineering design and construction program and also reduce layout time. Safe & Sustainable Community **BUILDING MARKHAM'S FUTURE TOGETHER: NOTES PROJECT COSTS (\$)** 2021 **Future Phases** Total approximate survey monuments in City is 2,645. Addition Cost/Quote: 27,700 0 through sudivision assumption process approximately 35/year. **Internal Charges:** 0 0 The survey monument maintenance is an annual program hence **External Consulting:** 0 0 there is no backlog and the assets are in a state of good repair. Replacement - estimated quantity is 28 horizont at an average of Sub Total: 27,700 0 \$1,000/unit. 3 year average spend is \$27k. Unit cost is consistent 0 **HST Impact:** 488 with recent award plus inflation. Amount requested is consistent **Total Project Cost:** 28,200 0 with Life Cycle Reserve Study update. SOURCE(S) OF FUNDING (\$) **Components Future Funding Type TOTAL Phases Budget** Operating Funded Life Cycle 28,200 0 0 0 0 0 0 TOTAL FUNDING 28,200 0 0 Personnel Non Personnel Revenues Expenditures/(Revenues) OPERATING BUDGET IMPACT \$0 \$0 \$0 \$0 **DCA/LIFE CYCLE DETAILS DCA** Amount in **Life Cycle** Year Name **Amount** Study Amount in Study: 28,200 Amount Incl HST 28,200 Year in the study 2021 DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:



Page 400 **38**5

21144 Number:

	\$478,300
	sset/Expansion
Commission: Community & Fire Services Useful Life: 0	Pre Approval:
Department: Operations - Business & Technical Services Category: Minor	11
Project Mgr: 1anya Lewinberg Cost Validation: Recent awards	
Ward(s): CW ✓ 1 □ 2 □ 3 □ 4 □ Requirement Validation: Visual inspection	
5 G G 7 8 8 Requirement variation.	
DETAILED DESCRIPTION (SCOPE OF PROJECT):	
xpressing Markham's commitment to ongoing development and enhancement of existing parks and open spaces, the rogram develops projects to create improvements to our existing inventory, that is ten years or older. The program's naintain the high standards of quality reflected in Markham's newer parks with a high level of design and visual appellarkham's older parks. BUILDING MARKHAM'S FUTURE TOGETHER: Exceptional Services by Exceptional People	s projects strive to
PROJECT COSTS (\$) 2021 Feature Phases NOTES	
Shade Structure Windy Hill Park - \$150K.	
Cost/Quote: 470,000 0 Basketball Hoops in Ashton Meadows Park - \$2	20K. Lighting of the
Internal Charges: 0 Fairtree Cricket Grounds \$300k. A 175% increase in permitting periods (7 additional periods)	onal slots vs.
external Consulting: 0 current 4) at this site. The increases would addre	ess a significant
Sub Total: 470,000 portion of required capacity identified in the ILM	
McCowan reservoir will be out of service in 202	
Total Project Cost: 478,300 0 infrastructure work that is being undertaken by the	the Region.
OURCE(S) OF FUNDING (\$) Components	
	Future
unding Type Budget TO	Future Phases
CA 430,470 0 0 0 0	TAL Phases
CA 430,470 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 Phases 0
CA 430,470 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	OTAL Phases 0 0 0 0 0 0
CA 430,470 0 0 0 0 0 on-DC Growth 47,830 0 0 0 0 TOTAL FUNDING 478,300 Personnel Non Personnel Revenues Expenditures/(Revenues)	OTAL Phases 0 0 0 0 0 0
CA 430,470 0 0 0 0 on-DC Growth 47,830 0 0 0 0 TOTAL FUNDING 478,300 Personnel Non Personnel Revenues Expenditures/(Revenues) \$ 80 \$ 90 \$ 90 \$ 90 \$ 90 \$ 90 \$ 90 \$ 90	OTAL Phases 0 0 0 0 0 0
CA 430,470 0 0 0 0 on-DC Growth 47,830 0 0 0 0 TOTAL FUNDING 478,300 Personnel Non Personnel Revenues Expenditures/(Revenues \$\) \[\begin{array}{cccccccccccccccccccccccccccccccccccc	OTAL Phases 0 0 0 0 0 0
CA 430,470 0 0 0 0 0 on-DC Growth 47,830 0 0 0 0 0 TOTAL FUNDING 478,300 Personnel Non Personnel Revenues Expenditures/(Revenues Solution of Soluti	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
CA	OTAL Phases 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
CCA	OTAL Phases O
CA	OTAL Phases O
CCA	OTAL Phases O
CA	OTAL Phases O



Page 402 **389**

V ARKHAM							Number	r: 2	1145
Project Name: Bridges a	and Culverts - Co	ndition I	nsnectio	n		Projec	ct Cost:	\$81	,000
			поресто				Stuc	dies/Pilot	Programs
Commission: Community					1	Useful Life	e: 0	Pre Ap	proval:
Department: <u>ES - Infras</u> Project Mgr: Shipra Sin					Category:	Minor			
, <u> </u>] 2			Co	st Validation:	Recent a	wards		
ward(s).				Requiremen	t Validation:	Multiple	(specify)		
ETAILED DESCRIPTION		DATECT)							
ire a consultant to inspect ublic Transportation and Fo. This program ensures in inspection frequency. UILDING MARKHAM	vehicular bridges (1 lighway Act - Regu nspections take place	14), pedest lation 104/ ce within th	rian bridge 97 to ensu he regulate	re public saf	ety. A total of Refer to atta	f 130 struc	ctures will	l be inspec	eted out of
ROJECT COSTS (\$)	<u>2021</u>	<u>Future I</u>	<u>Phases</u>	NOTES This is an ar	nnual progran	n There is	no backl	og and str	uctures are
Cost/Quote:	0		0	a state of go		ii. There is	no backi	og and su	uctures are
Internal Charges:	0		0		is responsible				
External Consulting:	79,600		0		verts such as r and decks, an				
•									tation and
Sub Total:	79,600		0			oic for its	mspection	ii, rendem	
Sub Total: HST Impact:	79,600 1,401		0	replacement	i.		-		
=				replacement Unit cost is		th recent a	ward plus	s inflation	. Amount
HST Impact: Total Project Cost:	1,401 81,000		0	replacement Unit cost is requested is	t. consistent wi	th recent a	ward plus	s inflation	. Amount Study Updat
HST Impact: Total Project Cost: DURCE(S) OF FUNDING	1,401 81,000		0	replacement Unit cost is requested is	consistent wi	th recent a	ward plus	s inflation	. Amount
HST Impact: Total Project Cost: DURCE(S) OF FUNDING	1,401 81,000 G (\$)		0	replacement Unit cost is requested is	consistent wi	th recent a	ward plus	s inflation Reserve S	. Amount Study Updat <u>Future</u>
HST Impact: Total Project Cost: DURCE(S) OF FUNDING Inding Type Derating Funded Life Cycle	1,401 81,000 G (\$) Budget		0 0	replacement Unit cost is requested is	consistent wi consistent wi consistent wi	th recent a	ward plusife Cycle	s inflation Reserve S	. Amount Study Updat <u>Future</u> <u>Phases</u>
HST Impact: Total Project Cost: DURCE(S) OF FUNDING Inding Type Derating Funded Life Cycle TOTAL FUNDING	1,401 81,000 G (\$) Budget 81,000 81,000	rsonnel	0 0	replacement Unit cost is requested is Comp	consistent wi consistent wi consistent wi	th recent a	ward plusife Cycle	TOTAL 0 0	Etudy Updat Future Phases
HST Impact: Total Project Cost: DURCE(S) OF FUNDING Inding Type Derating Funded Life Cycle TOTAL FUNDING PERATING BUDGET 1	1,401 81,000 G (\$) Budget 81,000 81,000 Per	rsonnel \$0	0 0	replacement Unit cost is requested is Comp	consistent wi consistent w onents	th recent a	award plusifie Cycle 0	TOTAL 0 0	Etudy Updat Future Phases
HST Impact: Total Project Cost: DURCE(S) OF FUNDING Inding Type Derating Funded Life Cycle TOTAL FUNDING PERATING BUDGET I	1,401 81,000 G (\$) Budget 81,000 81,000 Per		0 0 0 Non Per	replacement Unit cost is requested is Comp	consistent wi consistent wi onents 0 Revenues \$0	th recent a ith 2020 L	o ward plus ife Cycle 0 itures/(R \$0	TOTAL 0 evenues)	Etudy Updat Future Phases
HST Impact: Total Project Cost: DURCE(S) OF FUNDING mding Type Derating Funded Life Cycle TOTAL FUNDING PERATING BUDGET I CA/LIFE CYCLE DETA DCA	1,401 81,000 G (\$) Budget 81,000 81,000 Per		0 0 Non Per	replacement Unit cost is requested is Comp	consistent wi consistent w consistent w onents 0 evenues \$0 Amount in	th recent a ith 2020 L	itures/(Ro	TOTAL 0 evenues)	Etudy Updat Future Phases
HST Impact: Total Project Cost: DURCE(S) OF FUNDING Inding Type Derating Funded Life Cycle TOTAL FUNDING PERATING BUDGET I	1,401 81,000 G (\$) Budget 81,000 81,000 Per		0 0 0 Non Per	replacement Unit cost is requested is Comp	consistent wi consistent wi onents 0 Revenues \$0	th recent a ith 2020 L	o ward plus ife Cycle 0 itures/(R \$0	TOTAL 0 evenues)	Etudy Updat Future Phases
HST Impact: Total Project Cost: DURCE(S) OF FUNDING Inding Type Derating Funded Life Cycle TOTAL FUNDING PERATING BUDGET I CA/LIFE CYCLE DETA DCA	1,401 81,000 G (\$) Budget 81,000 81,000 Per		0 0 Non Per	replacement Unit cost is requested is Comp	consistent wi consistent w consistent w onents 0 evenues \$0 Amount in	Expend	o itures/(Rose)	TOTAL 0 0 evenues)	Future Phases
HST Impact: Total Project Cost: DURCE(S) OF FUNDING mding Type Derating Funded Life Cycle TOTAL FUNDING DPERATING BUDGET I CA/LIFE CYCLE DETA DCA	1,401 81,000 G (\$) Budget 81,000 81,000 Per		0 0 Non Per	replacement Unit cost is requested is Comp	consistent wi consistent w consistent w onents 0 evenues \$0 Amount in	Expend L Ar	itures/(R \$0	TOTAL 0 0 evenues)	Future Phases

Project 21145 - Bridges and Culve	rts - Condi	tion Ins	pection				
.,							
As of July 2020							
	Inspection Frequency	Inventory (2020)	2020	2021	2022	2023	2024
Vehicular Bridges	2 years	25	9	14	10	13	10
Pedestrian bridges	2 years	78	37	44	36	41	39
Boardwalks	2 years	10	10	0	10	0	10
Sub Total - Bridges		113	56	58	56	54	59
Large Culverts (over 900mm diameter)	2 to 4 years*	106	37	37	50	41	43
Small Culverts (upto 900mm diameter)	4 years*	131	26	35	16	37	36
Sub Total - Culverts		237	63	72	66	78	79
Total		350	119	130	122	132	138
Project Number			#20233	#21145			
Budget Amount			\$68,800	\$81,000			
Average Unit Rate**			\$ 578.15	\$ 623.08			
Note:							
1. If the structure is under rehabilitation/replacement p	rogram, inspecti	on is deferre	ed until after w	arranty			
2. * Some culverts are inspected every 2 years depending	g on their condit	ion					
** Unit rate varies due to size of the structure							



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21146

Number:

Department: ES - Infrastructure Project Mgr: Hossein Sharif Ward(s): CW 1 2 3 4 5 6 7 8 Cost Validation: Requirement Validation: Requirement Validation: Requirement Validation: Requirement Validation: Total Project Cost: 27,600 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	rds compliance complia	oproval: Olfo as plans are it the ecompletion ermined by each year. Amount
Department: ES - Infrastructure Project Mgr: Hossein Sharif Ward(s): CW 1 2 3 4 Requirement Validation: Recent awards S 6 7 8 Requirement Validation: Recent awards Requirement Validation: Legislative compared to the Ministry of Natural Resources and Forestry (MNRF). Program common required under the Section 17, item 5e of the Endangered Species Act, 2007. Total of 17 site reports including 7 required for 2021. BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community ROJECT COSTS (\$) 2021 Future Phases Cost/Quote: 0 0 0 Internal Charges: 0 Internal C	rds compliance complia	olf as plans are it the e completion ermined by each year.
Project Mgr: Hossein Sharif Ward(s): CW	rds compliance complia	olf as plans are it the e completion ermined by each year.
Ward(s): CW 2 1 2 3 4 Cost Validation: Recent awards Socient Scale Scal	ommenced in 20 ing 7 mitigation rement to submit 5 years after the distructures as determined in the structures as determined in the structure in the stru	it the e completion ermined by each year.
Requirement Validation: Legislative components ETAILED DESCRIPTION (SCOPE OF PROJECT): The a Consultant to prepare reports to the Ministry of Natural Resources and Forestry (MNRF). Program components and the section 17, item 5e of the Endangered Species Act, 2007. Total of 17 site reports including 7 required for 2021. EUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community ROJECT COSTS (\$) Cost/Quote: O Internal Charges: O External Consulting: 27,100 Sub Total: 27,100 HST Impact: 477 Total Project Cost: 27,600 O Components Components Components Components Components Components	ommenced in 20 ing 7 mitigation rement to submit 5 years after the distructures as determined in the structures as determined in the structure in the stru	it the e completion ermined by each year.
ETAILED DESCRIPTION (SCOPE OF PROJECT): ire a Consultant to prepare reports to the Ministry of Natural Resources and Forestry (MNRF). Program comm quired under the Section 17, item 5e of the Endangered Species Act, 2007. Total of 17 site reports including 7 quired for 2021. EUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community ROJECT COSTS (\$) 2021 Future Phases Cost/Quote: 0 0 0 Internal Charges: 0 0 0 External Consulting: 27,100 0 0 Sub Total: 27,100 0 0 HST Impact: 477 0 0 Total Project Cost: 27,600 0 0 Components DURCE(S) OF FUNDING (\$) Components Inding Type Budget	rement to submit 5 years after the destructures as detected airement varies of rd plus inflation. Cycle Reserve S	it the e completion ermined by each year.
re a Consultant to prepare reports to the Ministry of Natural Resources and Forestry (MNRF). Program commodured under the Section 17, item 5e of the Endangered Species Act, 2007. Total of 17 site reports including 7 equired for 2021. **CUILDING MARKHAM'S FUTURE TOGETHER:** **COSTOSTS (\$)** **COST	rement to submit 5 years after the destructures as determined by the structures are determined by the structures of the structures are determined by the structures of the structures are determined by the structures of the structure of the structures of the structure of the	it the e completion ermined by each year.
Acquired under the Section 17, item 5e of the Endangered Species Act, 2007. Total of 17 site reports including 7 equired for 2021. Components C	rement to submit 5 years after the destructures as determined by the structures are determined by the structures of the structures are determined by the structures of the structures are determined by the structures of the structure of the structures of the structure of the	it the e completion ermined by each year.
Cost/Quote: 0 0 0 following to MNRF: Internal Charges: 0 0 0 for apital works at water crossings; and (b) Mitigation Plan Reports for some struct MNRF. Sub Total: 27,100 0 MNRF. HST Impact: 477 0 MNRF. Total Project Cost: 27,600 0 Components DURCE(S) OF FUNDING (\$) Departing Funded Life Cycle 27,600 0 0 0 0 0 0	5 years after the d structures as dete uirement varies of rd plus inflation. Cycle Reserve S	e completion ermined by each year. . Amount
Cost/Quote: 0 0 0 following to MNRF: Internal Charges: 0 0 0 for capital works at water crossings; and (b) Mitigation Plan Reports for some struction MNRF. Sub Total: 27,100 0 MNRF. Sub Total: 27,100 0 MNRF. HST Impact: 477 0 MNRF. Total Project Cost: 27,600 0 modern method with a substantial program. It is a requirement following to MNRF: (a) Monitoring Reports every year for 5 year of capital works at water crossings; and (b) Mitigation Plan Reports for some struction MNRF. 3 year average is not applicable as requirement following to MNRF. Total Project Cost: 27,600 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	5 years after the d structures as dete uirement varies of rd plus inflation. Cycle Reserve S	e completion ermined by each year. . Amount
Internal Charges: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1 1 1 1 1	d structures as determined the structures as determined the structures as determined to the structure of the	ermined by each year Amount
External Consulting: 27,100 0 of capital works at water crossings; and (b) Mitigation Plan Reports for some struct MNRF. HST Impact: 477 0 Unit cost is consistent with recent award plant requested is consistent with 2020 Life Cycle Country Budget DURCE(S) OF FUNDING (\$) Components Budget Perating Funded Life Cycle 27,600 0 0 0 0 0	d structures as determined the structures as determined the structures as determined to the structure of the	ermined by each year Amount
Sub Total: 27,100 HST Impact: 477 Total Project Cost: 27,600 DURCE(S) OF FUNDING (\$) Budget Departing Funded Life Cycle 27,600 Components (b) Mitigation Plan Reports for some struct MNRF. 3 year average is not applicable as requirent Unit cost is consistent with recent award plan requested is consistent with 2020 Life Cycle Components Components Durce (B) Mitigation Plan Reports for some struct MNRF. 3 year average is not applicable as requirent Unit cost is consistent with 2020 Life Cycle Cycle Cycle Components Components	uirement varies ord plus inflation. Cycle Reserve S	each year Amount
HST Impact: 477 0 Unit cost is consistent with recent award pl requested is consistent with 2020 Life Cycl COURCE(S) OF FUNDING (\$) Components Budget Derating Funded Life Cycle 27,600 0 0 0 0 0	rd plus inflation. Cycle Reserve S	. Amount
Total Project Cost: 27,600 Unit cost is consistent with recent award pl requested is consistent with 2020 Life Cycl Components Budget Derating Funded Life Cycle 27,600 0 0 0 0 0	rd plus inflation. Cycle Reserve S	. Amount
Total Project Cost: 27,600 0 requested is consistent with 2020 Life Cycle Components Budget Derating Funded Life Cycle 27,600 0 0 0 0 0	Cycle Reserve S	
Derating Funded Life Cycle 27,600 0 0 0 0	TOTAL	tudy Updat
perating Funded Life Cycle 27,600 0 0 0	TO TAKE	
	<u>TOTAL</u>	Future Phases
TOTAL FUNDING 27.600	0	(
	0	
Personnel Non Personnel Revenues Expenditures/(es/(Revenues)	
PERATING BUDGET IMPACT \$0 \$0 \$0 \$0 \$0	, , , ,	
CA/LIFE CYCLE DETAILS	<u>. ·</u>	
DCA Amount in Life Cycl	<u>Cvcle</u>	
Name Year Amount Study	nt in Study:	27.600
	in in Study.	/ / DUIL
	at Incl UCT	27,600
Year in th	nt Incl HST	27,600
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:	in the study	

21146 - MNRF Monitoring fo										
		Monitoring Reports								
Year	Project Completed that requires reporting	2016	2017	2018	2019	2020	2021	2022 (Est.)	2023 (Est.)	2024 (Est.)
2015 Construction	8	8	8	8	8	8				
2016 Construction	1		1	1	1	1	1			
2017 Construction	3			3	3	3	3	3		
2018 Construction	1				1	1	1	1	1	
2019 Construction	3					3	3	3	3	3
2020 Construction	2						2	2	2	2
2021 Construction (Estimated)	2							2	2	2
Sub Total (Monitoring Reports)		8	9	12	13	16	10	11	8	7
Sub Total (Mitigation Plan, where required)						4	7	5	5	5
Total		8	9	12	13	20	17	16	13	12
Budget Amount		\$15,500	\$15,900	\$15,900	\$16,200	\$27,000	\$27,600			
Project Number		#16217	#17205	#18268	#19224	#20235	#21146			
Average Unit Rate (1)		\$ 1,938	\$ 1,767	\$ 1,325	\$ 1,246	\$ 1,350	\$ 1,624			



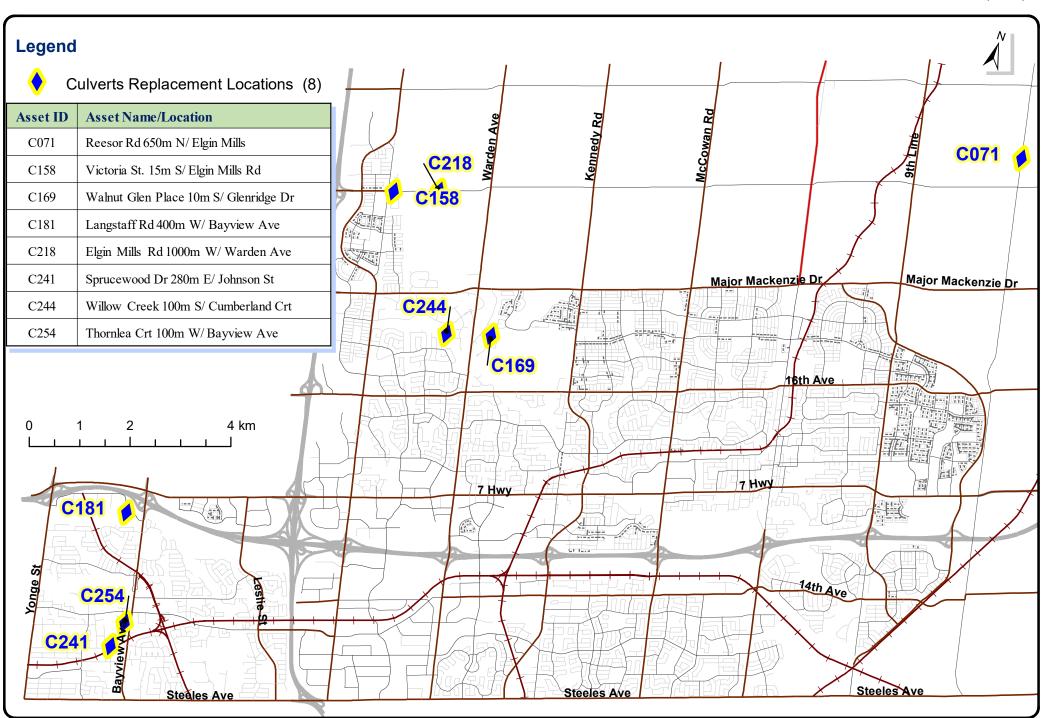
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21147

Number:

Project Cost: \$215,700 Project Name: Small Culverts Replacement (8 Structures) - Construction Repair/Replace Commission: Community & Fire Services Pre Approval: Useful Life: 50 Department: ES - Infrastructure Category: Minor Project Mgr: Shipra Singh Cost Validation: Recent awards CW □ 1 ✓ 2 ✓ 3 □ 4 □ Ward(s): Requirement Validation: Multiple(specify) 5 ✓ 6 ✓ 7 □ 8 □ **DETAILED DESCRIPTION (SCOPE OF PROJECT):** Replacement of 8 small corrugated steel pipe (CSP) culverts (smaller than 900 mm diameter) out of a total inventory of 237 culverts. The 8 culverts for replacement are C071, C158, C169, C181, C218, C241, C244 and C254 (Refer to attached map). Safe & Sustainable Community **BUILDING MARKHAM'S FUTURE TOGETHER:** NOTES **PROJECT COSTS (\$)** 2021 **Future Phases** This project includes replacement of 8 small Corrugated Steel Cost/Ouote: 197,000 0 Pipes (CSP) with High Density Polyethelene (HDPE) pipes, which has a service life of 50 years compared to 30 years for CSP pipes. **Internal Charges:** 0 0 There is no backlog. Culverts are in a state of good repair. **External Consulting:** 15,000 0 Operations is responsible for preventative maintenance on bridges/culverts such as minor grading, patching, sealing of bridge Sub Total: 212,000 0 approaches and decks, and siltation removal from culverts, while 0 **HST Impact:** 3,731 Env. Services is responsible for its inspection/rehabilitation and **Total Project Cost:** 215,700 0 replacement. Unit cost is consistent with recent award plus inflation. SOURCE(S) OF FUNDING (\$) **Components Future Funding Type** Construction Geotechnical **Phases Budget TOTAL** Operating Funded Life Cycle 215,700 200,400 15,300 0 0 0 215,700 TOTAL FUNDING 215,700 215,700 0 Personnel Non Personnel Revenues Expenditures/(Revenues) OPERATING BUDGET IMPACT \$0 \$0 \$0 \$0 DCA/LIFE CYCLE DETAILS **DCA** Amount in **Life Cycle** Year Name **Amount** Study Amount in Study: 215,700 Amount Incl HST 215,700 Year in the study 2021 DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:

ES - Infrastructure (2021)



21148



2021 PROJECT FUNDING REQUEST FORM

Number: Project Cost: \$116,000 Project Name: Storm & Sanitary Pumping Stations - Equipment Inspection Repair/Replace Commission: Community & Fire Services Pre Approval: Useful Life: Department: ES - Infrastructure Category: Minor Project Mgr: Eddy Wu Cost Validation: Third party estimate CW □ 1 □ 2 ✓ 3 ✓ 4 □ Ward(s): Requirement Validation: Other(specify in Notes) 5 □ 6 □ 7 □ 8 ✔ **DETAILED DESCRIPTION (SCOPE OF PROJECT):** Inspection of the pumps and associated equipments at two stormwater pumping stations (Enterprise Drive and 14th Ave. - Hagerman Diamond) and four sanitary pumping stations (Carlton Road, Calvert Road, Milliken Park and Kennedy Road).

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

PROJECT COSTS (\$)	<u>2021</u>	Future Phases
Cost/Quote:	114,000	0
Internal Charges:	0	0
External Consulting:	0	0
Sub Total:	114,000	0
HST Impact:	2,006	0
Total Project Cost:	116,000	0

NOTES

This is an annual program.

Consultant provided an inspection schedule and associated costs for various pumps and equipments in City's pumping stations. Amount requested is consistent with 2020 Life Cycle Reserve Study Update.

SOURCE(S) OF FUNDING (\$)		Components						
Funding Type	Budget	Storm P.S	Sanitary P.S			TOTAL	<u>Future</u> <u>Phases</u>	
Operating Funded Life Cycle	40,700	40,700	0	0	0	40,700	0	
Waterworks	75,300	0	75,300	0	0	75,300	0	
TOTAL FUNDING	116,000				=	116,000	0	

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)	
OT DAMAGE TO BE OF THE STATE OF	\$0	\$0	\$0	\$0	

DCA/LIFE CYCLE DETAILS DCA Life Cycle **Amount in** Year **Amount** Study Name Amount in Study: 40,700 40,700 Amount Incl HST 2021 Year in the study DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:



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21149 **Number: Project Cost:** \$652,800

Project Name:	Storm and Sanitary Sewer CCTV Inspection	on			
	· · · · · · · · · · · · · · · · · · ·			Studi	es/Pilot Programs
Commission:	Community & Fire Services	Ţ	Jseful Life:	0	Pre Approval:
-	ES - Infrastructure Shipra Singh	Category:		Ŭ	
	CW □ 1□ 2□ 3 ♥ 4 ♥	Cost Validation:			
	5 □ 6 □ 7 🗸 8 🗸	Requirement Validation:	Condition as	ssessme	ent

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Program to determine the condition of the storm and sanitary sewers using closed circuit television (CCTV) inspection. Pipe rehabilitation/ replacement programs will be developed based on the condition inspection results. 2021 Program includes: a) 80 km storm sewers out of total 923 km (Life Cycle funded); b) 94 km sanitary sewers out of total 918 km (Waterworks funded)

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

PROJECT COSTS (\$)	<u>2021</u>	Future Phases
Cost/Quote:	580,000	4,596,900
Internal Charges:	0	0
External Consulting:	61,500	0
Sub Total:	641,500	4,596,900
HST Impact:	11,290	80,905
Total Project Cost:	652,800	4,677,800

NOTES

This is an annual program (10 year cycle) - Phase 3 of 10. Program will be re-evaluated at the end of the 10 year cycle. External consultant is retained to identify deficiencies on CCTV inspection. Unit cost is consistent with recent award.

SOURCE(S) OF FUNDING (\$)		Components						
Funding Type	<u>Budget</u>	Contractor	Consultant			TOTAL	<u>Future</u> <u>Phases</u>	
Operating Funded Life Cycle	215,100	186,400	28,700	0	0	215,100	1,733,700	
Waterworks	437,700	403,800	33,900	0	0	437,700	2,944,100	
TOTAL FUNDING	652,800				=	652,800	4,677,800	

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)	
OI BINITING DODGET IVITATE	\$0	\$0	\$0	\$0	

DCA/LIFE CYCLE DETAILS DCA Life Cycle **Amount in** Year **Amount** Study Name Amount in Study: 215,100 215,100 Amount Incl HST 2021 Year in the study DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:

Program Name: CCTV Inspection Program

Department: Environmental Services

Phase #	Inspection	Project #	Past	2021	Future	Total	Comments
	year						
Phase 1	2019	#19225 /	\$524,003			\$524,003	52 km storm; 52 km sanitary;
		#19248/					1,400 laterals
		760-510-5300					
Phase 2	2020	#20237	\$1,585,200			\$1,585,200	90 km storm; 91 km sanitary;
							6,946 laterals
Phase 3	2021	#21149		\$652,800		\$652,800	80 km storm; 94 km sanitary
		(This request)					
Phase 4 to Phase 10	2022 - 2028				\$4,677,800	\$4,677,800	
Total			\$2,109,203	\$652,800	\$4,677,800	\$7,439,803	

Description of Program

Program to determine the condition of the storm and sanitary sewers using closed circuit television (CCTV) inspection

What was completed in the past

2 phases have been completed or in progress (out of 10 phases): \$2.11M

Current ask

CCTV inspection of 80 km storm sewers (out of 923 km) and 94 km sanitary sewers (out of 918 km) - \$652,800

Future Phases

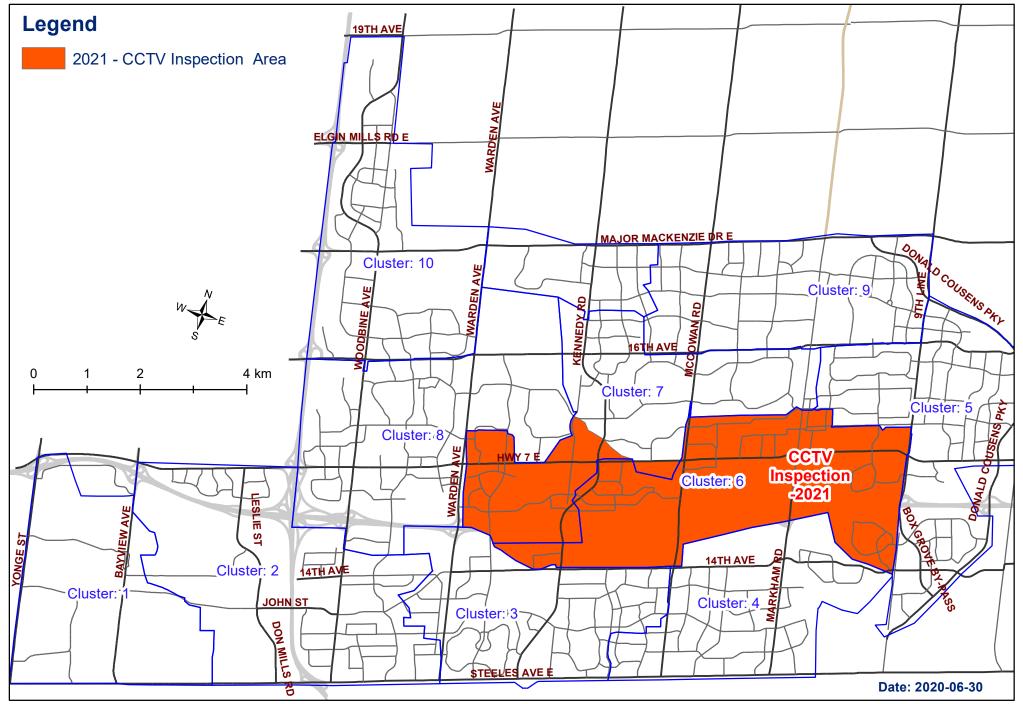
Phases 4 to 10 between 2022 - 2028: \$4.67M

Related 2021 Project(s)

Sanitary Sewer Rehabilitation (#21173): \$1,405,000

Map Attached

ES - Infrastructure (2021)





Page 420 **49**%

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community PROJECT COSTS (\$) 2021 Future Phases Cost/Quote: 55,100 0 0 Internal Charges: 0 0 0 External Consulting: 0 0 0 HST Impact: 970 0 0 HST Impact: 970 0 0 Total Project Cost: 56,100 0 0 SOURCE(S) OF FUNDING (\$) Components Funding Type Budget Total Funded Life Cycle 56,100 0 0 0 0 0 0 0 0 0 TOTAL FUNDING 56,100 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	MARKHAM	2021 PROJ	ECT FUNDI	'NG REQ	UEST FO	<i>RM</i> Numbe	er: 21	150
Commission: Community & Fire Services Department: ES - Infrastructure Project Mgr: Eddy Wu Category: Annual Cost Validation: Recent awards Requirement Validation: Other(specify in Notes) DETAILED DESCRIPTION (SCOPE OF PROJECT): This project is to carry out repairs of storms sewer pipes as required. BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community Solvent Services Solve						Project Cost:	\$56 ,	100
Department: ES-Infrastructure ES-Infrast	Project Name: Stormwate	er Sewer Pipes	Emergency Repa	airs		Rer	nair/Renlac	e
Department: ES - Infrastructure Project Mgr: Eddy Wu	Commission: Community	& Fire Services			Ţ		-	
Ward(s): CW	Department: ES - Infrastr	ructure					Pre Ap	provai: —
Requirement Validation: Other(specify in Notes) DETAILED DESCRIPTION (SCOPE OF PROJECT): This project is to carry out repairs of storm sewer pipes as required. BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community PROJECT COSTS (\$) 2021 Future Phases Cost/Quote: 55,100 0 0 Internal Charges: 0 0 0 Sub Total: 55,100 0 0 HST Impact: 970 0 0 Total Project Cost: 56,100 0 0 COURCE(S) OF FUNDING (\$) Components Previously this component was included as Emergency Repain of the component of the componen	Project Mgr: Eddy Wu			a	• •			
DETAILED DESCRIPTION (SCOPE OF PROJECT): This project is to carry out repairs of storm sewer pipes as required. BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community PROJECT COSTS (\$) 2021 Future Phases Cost/Quote: 55,100 0 0 Internal Charges: 0 0 0 External Consulting: 0 0 0 Sub Total: 55,100 0 0 HST Impact: 970 0 0 Total Project Cost: 56,100 0 0 COURCE(S) OF FUNDING (\$) Components Funding Type Budget TOTAL Personnel Non Personnel Revenues Expenditures/(Revenues) OPERATING BUDGET IMPACT Personnel Non Personnel Revenues Expenditures/(Revenues) DOZALIFE CYCLE DETAILS DCA Name Year Amount Study Amount in Study: 56, Amount In Study:	Ward(s): $CW \boxed{\bullet} 1 \square$	2□ 3□ 4□					Jotos)	
BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community PROJECT COSTS.(\$) Cost/Quote: 55,100	5 🗆	6□ 7□ 8□		Requiremen	nt vandation:	Other(specify in I	votes)	
BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community PROJECT COSTS (\$) 2021 Future Phases Cost/Quote: 55,100 0 0 Internal Charges: 0 0 0 External Consulting: 0 0 0 Sub Total: 55,100 0 0 HST Impact: 970 0 0 Total Project Cost: 56,100 0 0 SOURCE(S) OF FUNDING (\$) Components Funding Type Budget TOTAL Ph Operating Funded Life Cycle 56,100 0 0 0 0 0 0 0 0 TOTAL FUNDING 56,100 0 0 0 0 0 0 0 0 0 OPERATING BUDGET IMPACT Personnel Non Personnel Revenues Expenditures/(Revenues) DCA/LIFE CYCLE DETAILS DCA Name Year Amount Study: 56, Amount in Study: 56, Amount	DETAILED DESCRIPTIO	N (SCOPE OF P	ROJECT):					
This is an annual program to conduct emergency repair of sto sewer pipes as required. Internal Charges: 0 0 0 External Consulting: 0 0 0 HST Impact: 970 0 0 Total Project Cost: 56,100 0 0 Sub Total: 55,100 0 0 HST Impact: 970 0 0 Total Project Cost: 56,100 0 0 Funding Type Budget	BUILDING MARKHAM'S	S FUTURE TOG	ETHER: Safe &	Sustainable Co	ommunity			
Source 55,100 0	PROJECT COSTS (\$)	<u>2021</u>	Future Phases					- £ - t
Internal Charges: 0 0 0 External Consulting: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Cost/Quote:	55,100	0	sewer pipes	as required.	_		
Sub Total:	Internal Charges:	0	0					
Sub Total:	External Consulting:	0	0			it was included as i	Emergency	Repairs
Total Project Cost: 56,100 0	Sub Total:	55,100	0		1			
Components Funding Type Budget TOTAL Ph.		970	0					
Funding Type Budget TOTAL Phase Personnel Revenues Expenditures/(Revenues)	Total Project Cost:	56,100	0					
Funding Type Budget TOTAL Phase	OURCE(S) OF FUNDING	(\$)		Com	onents			T 4
TOTAL FUNDING 56,100 Personnel Non Personnel Revenues Sport Sport Sport Study DCA/LIFE CYCLE DETAILS DCA Name Year Amount in Study: 56, Amount Incl HST 56,	Funding Type	<u>Budget</u>					TOTAL	Future Phases
OPERATING BUDGET IMPACT \$0 \$0 \$0 \$0 \$0 CCA/LIFE CYCLE DETAILS DCA Name Personnel Non Personnel Revenues Expenditures/(Revenues) \$0 \$0 \$0 Life Cycle Amount in Study: 56, Amount Incl HST 56,	Operating Funded Life Cycle	56,100	0	0	0	0	0	
SO \$0 \$0 \$0 DCA/LIFE CYCLE DETAILS DCA Name Year Amount in Study: 56, Amount Incl HST 56,	TOTAL FUNDING	56,100					0	
SO \$0 \$0 \$0 DCA/LIFE CYCLE DETAILS DCA Name Year Amount in Study: 56, Amount Incl HST 56,								
\$0 \$0 \$0 \$0 CCA/LIFE CYCLE DETAILS DCA Name Year Amount in Study Amount in Study: 56, Amount Incl HST 56,	OPERATING BUDGET IN	ПРАСТ Рег	rsonnel Non Pe	ersonnel I	Revenues	Expenditures/(R	evenues)	
DCA NameYearAmount in StudyLife Cycle Amount in Study:56, Amount Incl HST			\$0	50	\$0	\$0		
Name Year Amount Study Amount in Study: 56, Amount Incl HST 56,		ILS						
Amount in Study: 56, Amount Incl HST 56,			Ve	ar Amount		<u>Life Cycle</u>		
	Name				Study	— Amount in S	Study:	56,100
Veer in the study						Amount Inc	l HST	56,100
rear in the study 2						Year in the	study	2021
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:	DCA and/or Life Cycle:	Explain if there is	a change in the ye	ar and/or cost:				



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2021 PROJECT FUNDING REQUEST FORM 21151 Number: **Project Cost:** \$101,800 Project Name: Streetlights - Miscellaneous Requests New Asset/Expansion Commission: Community & Fire Services Pre Approval: Useful Life: 60 Department: ES - Infrastructure Category: Minor Project Mgr: Prathapan Kumar Cost Validation: Internal peer review CW ✓ 1 □ 2 □ 3 □ 4 □ Ward(s): Requirement Validation: Other(specify in Notes) 5 🗆 6 🗆 7 🗆 8 🗆 **DETAILED DESCRIPTION (SCOPE OF PROJECT):** Based on photometric analysis and evaluation against lighting level standards IES -RP8-14 (Illuminating Engineering Society) by Staff, the City will install new streetlights. Note that the lighting levels requirement varies depending on road type and pedestrian activity. Safe & Sustainable Community **BUILDING MARKHAM'S FUTURE TOGETHER:** NOTES **PROJECT COSTS (\$)** 2021 **Future Phases** This is an annual program. Streetlights requests from the residents Cost/Quote: 100,000 0 are reviewed for justification and are implemented to improve lighting levels in older areas. 3 year average: \$131K **Internal Charges:** 0 0 Locations will be prioritized based on photometric analysis and this **External Consulting:** 0 0 budget request is to install approx. 15-18 new poles with LED fixtures. 100,000 Sub Total: 0 Unit cost is consistent with recent award plus inflation. 0 **HST Impact:** 1,760 **Total Project Cost:** 101,800 0 SOURCE(S) OF FUNDING (\$) **Components Future Funding Type TOTAL Phases Budget** Tax 101,800 0 0 0 0 0 0 TOTAL FUNDING 101,800 0 0 Personnel Non Personnel Revenues Expenditures/(Revenues) OPERATING BUDGET IMPACT \$0 \$3,040 \$0 \$3,040 DCA/LIFE CYCLE DETAILS **DCA** Amount in **Life Cycle** Year Name **Amount** Study 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:



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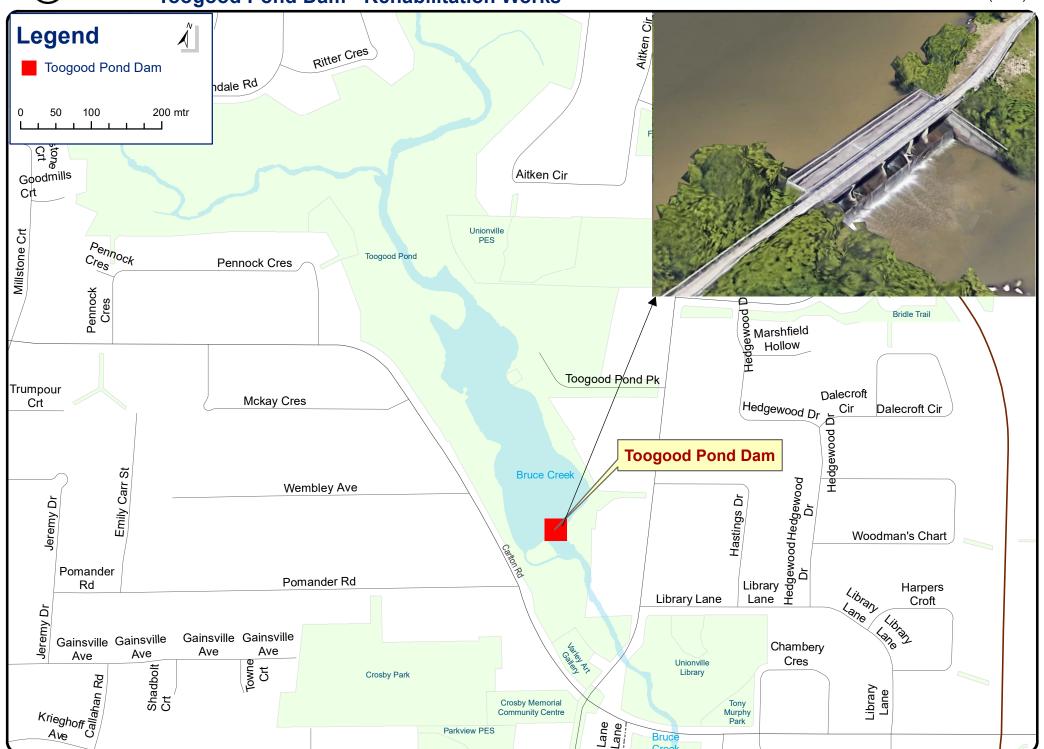
21152 Number: **Project Cost:** \$148,100 Project Name: Structures Program-Full-time Staff Studies/Pilot Programs Commission: Community & Fire Services Pre Approval: Useful Life: Department: ES - Infrastructure Category: Annual Project Mgr: Prathapan Kumar Cost Validation: Other(specify in Notes) CW ✓ 1 □ 2 □ 3 □ 4 □ Ward(s): Requirement Validation: Other(specify in Notes) 5 🗆 6 🗆 7 🗆 8 🗆 **DETAILED DESCRIPTION (SCOPE OF PROJECT):** This funds one Senior Project Engineer (existing Permanent Full-Time staff) position. Safe & Sustainable Community **BUILDING MARKHAM'S FUTURE TOGETHER: PROJECT COSTS (\$)** 2021 **Future Phases** This is an annual program. The annual structures (bridges and Cost/Quote: 0 0 culverts) program includes detailed visual inspection, condition survey/design and cost effective maintenance program. The results 148,100 **Internal Charges:** 0 are used to identify the structures that require rehabilitation. **External Consulting:** 0 Rehabilitation of structures improves the overall condition and increase the service life. Amount requested is consistent with 2020 Sub Total: 148,100 0 Life Cycle Reserve Study Update. 0 **HST Impact:** 0 Requirement validation: This position is critical to support **Total Project Cost:** 148,100 0 structures rehabilitation projects for the City-owned structures. SOURCE(S) OF FUNDING (\$) **Components Future Funding Type TOTAL Phases Budget** Operating Funded Life Cycle 148,100 0 0 0 0 0 0 TOTAL FUNDING 148,100 0 0 Personnel Non Personnel Revenues Expenditures/(Revenues) OPERATING BUDGET IMPACT \$0 \$0 \$0 \$0 DCA/LIFE CYCLE DETAILS **DCA** Amount in **Life Cycle** Year Name **Amount** Study Amount in Study: 148,100 Amount Incl HST 148,100 Year in the study 2021 DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:



21153 Number:

Project Cost:

Duniant Manner III	D 1D D1	1 •1• 4•	***			Project (Cost:	\$437	,400
Project Name: Toogood		abilitation	Works				Repair/F	Replace	3
Commission: Communit	ty & Fire Services				Ţ	Jseful Life:	30 F	re Apı	proval:
Department: ES - Infras					Category:	Maior			
Project Mgr: Hossein S				Co	st Validation:		estimate		
Ward(s): $CW \square 1 \square$	2 □ 3 ✔ 4 □		1		t Validation:				
5 🗆	□ 6□ 7□ 8□			xequiremen	it vandation.	Condition t	issessifient		
DETAILED DESCRIPTION									
Design and installation of sunctional test and full flow Dam Safety Review).									
BUILDING MARKHAM	I'S FUTURE TOG	ETHER:	Safe & Su	stainable Co	mmunity				
PROJECT COSTS (\$)	2021	Future Ph	1666	NOTES					
Cost/Quote:	429,800		0		includes the unctional test		v test in acc	cordan	ce with
Internal Charges:	0			2011 MNR		and full flov	v test in acc	ordan	SC WITH
External Consulting:	0		0 -		ety boom, wir			-	•
Sub Total:	429,800		t	o permit sto capability	op log operati	ons in order	to provide	flow n	nanagement
HST Impact:	7,564	-	$\frac{0}{0}$	1					
Total Project Cost:	437,400		0						
OURCE(S) OF FUNDIN	<u>[G (\$)</u>			Comp	onents				<u>Future</u>
unding Type	Budget						<u>TOT</u>	<u>ral</u>	<u>Phases</u>
perating Funded Life Cycle	437,400		0	0	0	()	0	0
TOTAL FUNDING	437,400							0	0
OPERATING BUDGET	_{ІМРАСТ} Ре	rsonnel N	on Perso	onnel R	levenues	Expenditu	res/(Reven	nues)	
DI ERATING BUDGET	IVITACI	\$0	\$0		\$0		\$0		
CA/LIFE CYCLE DET	AILS								
<u>DCA</u>					Amount in	<u>Life</u>	<u>Cycle</u>		
Name			Year	Amount	Study	– Amou	ınt in Study	/:	437,400
							nt Incl HS		437,400
							in the stud		2021
DCA 1/ 1 :f- C1	E1-: :£41 :-	1	1			1 Cai	iii tiic stud	у	2021
DCA and/or Life Cycle	e: Explain il there is	a change in	ne year a	nd/or cost:					





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2021 PROJECT FUNDING REQUEST FORM ARKHAM 21154 **Number: Project Cost:** \$9.800 Project Name: Toogood Pond Dam - Structural Inspection Studies/Pilot Programs Commission: Community & Fire Services Pre Approval: Useful Life: Department: ES - Infrastructure Category: Minor Project Mgr: Hossein Sharif Cost Validation: Third party estimate CW □ 1□ 2□ 3 ✓ 4□ Ward(s): Requirement Validation: Multiple(specify) **DETAILED DESCRIPTION (SCOPE OF PROJECT):** This program is to carry out visual condition inspection of Toogood Pond Dam to comply with Ontario Ministry of Natural Resources (OMNR) Guideline entitled "Public Safety Around Dams, Best Management Practices" as per 2018 Consultant's Report (Toogood Dam

BUILDING MARKHAM'S FUTURE TOGETHER:

Safety Review). Refer to attached map.

Safe & Sustainable Community

PROJECT COSTS (\$)	<u>2021</u>	<u>Future Phases</u>
Cost/Quote:	0	0
Internal Charges:	0	0
External Consulting:	9,600	0
Sub Total:	9,600	0
HST Impact:	169	0
Total Project Cost:	9,800	0

NOTES

Visual condition inspection will be carried out annually while the in-water inspection for the Dam will be carried out every 5 years (last in-water inspection was carried out under #20246 in 2020). Toogood Dam was constructed in 1960. The City owns the Dam as it provides very little flood control benefit.

For reference, Milne Dam is owned and operated by TRCA as it was built specifically for flood control.

Amount requested is consistent with 2020 Life Cycle Reserve Study Update.

SOURCE(S) OF FUNDING (\$			Compone	ents			Euturo
Funding Type	<u>Budget</u>					TOTAL	<u>Future</u> <u>Phases</u>
Operating Funded Life Cycle	9,800	0	0	0	0	0	0
TOTAL FUNDING	9,800				_	0	

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

DCA/LIFE CYCLE DETAILS **DCA** Amount in Life Cycle Year Name **Amount** Study Amount in Study: 9,800 Amount Incl HST 9,800 Year in the study 2021 DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:

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-//	2021 DDO IECT EINI	INC DECLIERT EA	DIA		
MARKHAM	1 2021 PROJECT FUND	ING KEQUEST FO	'K'M]	Number:	21155
Project Name: D	ACH CULL FILID & C'4	T 4. 4.	Project	Cost:	\$124,900
Toject Name: Don I	Mills Channel - Flood Proofing Site	e Investigation		Studie	es/Pilot Programs
Commission: Comm	nunity & Fire Services	_			
Department: ES - S	tormwater	Į	Jseful Life:	0	Pre Approval: \square
Project Mgr: Zahra		Category:	Major		
<i>s</i> =		Cost Validation:	Internal p	eer review	7
ward(s). CW	1 2 3 4	Requirement Validation:	Other(spe	cify in No	tes)

DETAILED DESCRIPTION (SCOPE OF PROJECT):

5 □ 6 □ 7 □ 8 ✔

The Don Mills Channel project includes infrastructure improvements, and a flood proofing education program as approved by Council in June 2018. The Flood Proofing Education program has a total cost of \$1.5M over a ten years (2019-2028). This request includes flood proofing site investigation of 10 sites and associated buildings and distribution of general education material.

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

PROJECT COSTS (\$)	<u>2021</u>	Future Phases
Cost/Quote:	122,700	0
Internal Charges:	0	0
External Consulting:	0	0
Sub Total:	122,700	0
HST Impact:	2,160	0
Total Project Cost:	124,900	0

NOTES

Flood proofing program includes site investigation and general education material. 2019 capital budget request assessed 33 sites. This request is to assess 10 sites and distribution of general education material.

Funding Source: Stormwater Fee

SOURCE(S) OF FUNDING	G (\$)		Compone	ents			E4
Funding Type	<u>Budget</u>					TOTAL	<u>Future</u> <u>Phases</u>
Reserve Fund	124,900	0	0	0	0	0	0
TOTAL FUNDING	124,900					0	

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

OP	EKATING BUDGET IMPACT					
		\$0	\$0	\$0	\$0	
<u>DC</u>	A/LIFE CYCLE DETAILS					
	<u>DCA</u>			Amount in	<u>Life Cycle</u>	
	Name		Year Am	ount Study	Amount in Study:	
					Amount in Study.	
ı					Amount Incl HST	
ı					Year in the study	
	DCA and/or Life Cycle: Explain if the	re is a change	in the year and/or	cost:		
İ						

Program Name: Don Mills Channel Flood Control Program

Department: Environmental Services

Component	Project #	Past	2021	Future	Total
Property Acquisition		\$11,100,000	\$17,500,000		\$28,600,000
Stormwater Pond	#19259	\$300,000	\$1,160,000	\$3,440,000	\$4,900,000
Culverts				\$35,700,000	\$35,700,000
Flood Proofing Program	#19231	\$152,600	\$124,900	\$1,222,500	\$1,500,000
	#21155		(This request)		
Staffing		\$0	\$0	\$1,300,000	\$1,300,000
Total		\$11,552,600	\$18,660,000	\$41,662,500	\$72,000,000

Description of Program

Don Mills Channel Flood Control Program was approved by Council in June 2018 to provides 5 year level of protection. Total Cost \$72M includes 5 components: property acquisition, new stormwater pond, 4 culvert upgrades, flood proofing program and staffing.

What was completed in the past

As of August 2020, the following has been completed:

- 1) Property acquisition of 115/135 Torbay
- 2) Storm Pond component demolition of buildings on 115/135 Torbay
- 3) Flood proofing program: award of consultant services for 33 site assessment & \$10k allocated to education program for area businesses

Current ask

Flood Proofing Program

- 1) \$114,900 Retain consultant services to conduct 10 site assessments and provide options incentive program.
- 2) \$10,000 education/marketing material for area business

Future Phases

Staff will evaluate the result of the individual site assessement and options for incentive program and report back to Council with recommendation for any future phases.

Related 2021 Project(s)

Don Mills Channel Flood Control Program - Stormwater Pond - Design / CA (#21156): \$1,160,000

Map N/A



21156 **Number: Project Cost:** \$1,160,000 Project Name: Don Mills Channel Flood Control Program -Pond Design/CA Studies/Pilot Programs Commission: Community & Fire Services Pre Approval: Useful Life: Department: ES - Stormwater Category: Major Project Mgr: Alan Manlucu Cost Validation: Internal peer review Ward(s): Requirement Validation: Other(specify in Notes) 5 □ 6 □ 7 □ 8 ☑ **DETAILED DESCRIPTION (SCOPE OF PROJECT):** To hire a Consultant for design, contract administration and public consultation associated with the flood control pond as part of the Don Mills Channel Flood Control Program. The pond will be designed to to reduce flooding in the area.

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

PROJECT COSTS (\$)	<u>2021</u>	Future Phases
Cost/Quote:	0	3,380,503
Internal Charges:	0	0
External Consulting:	1,139,900	0
Sub Total:	1,139,900	3,380,503
HST Impact:	20,062	59,497
Total Project Cost:	1,160,000	3,440,000

NOTES

The Flood Control Pond was approved by Council in June 2018 as the first phase of the Don Mills Channel Flood Control Program. Total program cost: \$72M

Funding Source: Stormwater Fee. 40% of the project cost (\$464k) will be reimbursed through the Disaster Mitigation and Adaptation Fund (DMAF) grant. Net cost to the City (\$696k).

SOURCE(S) OF FUNDING	<u>G (\$)</u>		Compone	ents			E4
Funding Type	<u>Budget</u>					TOTAL	<u>Future</u> <u>Phases</u>
Reserve Fund	1,160,000	0	0	0	0	0	3,440,000
TOTAL FUNDING	1,160,000				=	0	3,440,000

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

PERATING BUDGET IMPACT	Personnei	Non Personner	Revenues	Expenditures/(Revenues)	
	\$0	\$0	\$0	\$0	
CA/LIFE CYCLE DETAILS					
<u>DCA</u>			Amount in	Life Cycle	
Name		Year Amo	unt Study	— Amount in Study:	
				Amount Incl HST	
				Year in the study	
DCA and/or Life Cycle: Explain if the	here is a change	in the year and/or o	ost:	,	
DCA and/or Life Cycle: Explain if the	nere is a change	in the year and/or c	OSI:		

Program Name: Don Mills Channel Flood Control Program

Department: Environmental Services

Component	Project #	Past	2021	Future	Total
Property Acquisition		\$11,100,000	\$17,500,000		\$28,600,000
Stormwater Pond	#19259	\$300,000	\$1,160,000	\$3,440,000	\$4,900,000
	#21156		(This Request)		
Culverts				\$35,700,000	\$35,700,000
Flood Proofing Program	#19231	\$152,600	\$124,900	\$1,222,500	\$1,500,000
Staffing		\$0	\$0	\$1,300,000	\$1,300,000
Total		\$11,552,600	\$17,624,900	\$41,662,500	\$72,000,000

Description of Program

Don Miller Channel Flood Control Program was approved by Council in June 2018 to provides 5 year level of protection. Total Cost \$72M includes 5 components: property acquisition, new stormwater pond, 4 culvert upgrades, flood proofing program and staffing.

What was completed in the past

As of August 2020, the following has been completed:

- 1) Property acquisition of 115/135 Torbay
- 2) Storm Pond component demolition of buildings on 115/135 Torbay
- 3) Flood proofing program: award of consultant services for 33 site assessment & \$10k allocated to education program for area businesses

Current ask

Stormwater Pond - Design / Contract Administration (#21156): \$1,160,000

Retain consultant for design, construction, contract administration and public consultation for a flood control stormwater pond as part of the Don Mills Channel Flood Control Program

Future Phases

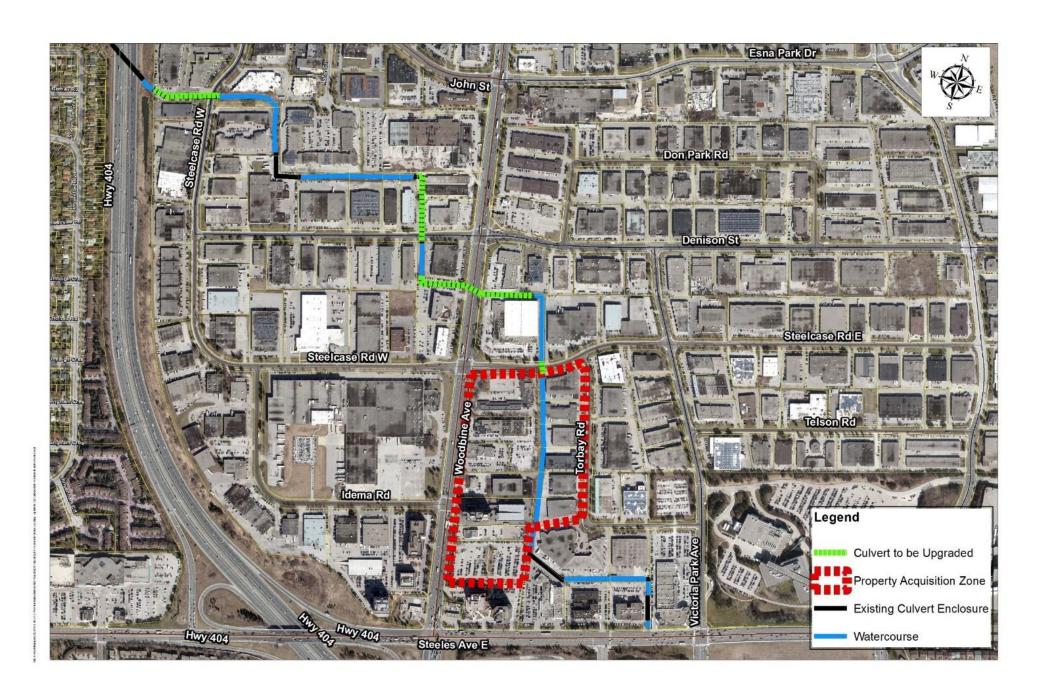
2022 - Construction of the stormwater pond at the estimated cost of \$3,250,000

Related 2021 Project(s)

Don Mills Channel Flood Control Program - Flood Proofing Site Investigation (#21155): \$124,900

Map N/A

Don Mills Channel Flood Control Pond – Design/CA





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Number: 21157

Project Name: Erosion R	estoration Prog	ram			Project C	ost: \$89	8,800
Commission: Community						Repair/Repla	ce
Department: ES - Stormy				Ţ	Jseful Life:	0 Pre A	pproval: \square
Project Mgr: Alan Manlu				Category:	Major		
Ward(s): CW ✓ 1			Co	st Validation:	Recent awar	ds	
	6 7 8		Requiremen	nt Validation:	Condition as	sessment	
		POIECT).					
DETAILED DESCRIPTIO Erosion restoration at unplan	· · · · · · · · · · · · · · · · · · ·	·	nfrastructure fr	om failure.			
1	1						
BUILDING MARKHAM'S	S FUTURE TOG	ETHER: Safe &	Sustainable Co	mmunity			
PROJECT COSTS (\$)	2021	Future Phases	NOTES				
Cost/Quote:	813,300	0				side funding to tal cost include	
Internal Charges:	0	0	construction	n, contract adr	ninistration ar	nd approval age	
External Consulting:	70,000	0	Funding sou	ırce: 35% Life	ecycle; 65% D	OC .	
Sub Total:	883,300	0					
HST Impact:	15,546	0					
Total Project Cost:	898,800	0					
=	<u> </u>						
SOURCE(S) OF FUNDING	<u>(\$)</u>		Comp	onents			<u>Future</u>
Funding Type	Budget	$\underline{Design + CA}$	Construction	:		TOTAL	<u>Phases</u>
DCA	584,300	46,300	538,000	0	0	584,300	(
Operating Funded Life Cycle	314,500	24,930	289,570	0	0	314,500	(
TOTAL FUNDING	898,800					898,800	
	Do	rsonnel Non Pe	ersonnel F	Revenues	Expenditur	es/(Revenues)	
				te i ciiues	Expenditur	cs/(Ite/chacs)	
OPERATING BUDGET IN	MPACT 1 C		0	\$0		\$0	
	<u>MPACT</u>		0	\$0		\$0	
	<u>MPACT</u>	\$0 \$		\$0 Amount in	<u>Life (</u>	·	
DCA/LIFE CYCLE DETA	<u>MPACT</u>			Amount in	Life (Cycle	314.500
DCA/LIFE CYCLE DETA DCA	<u>MPACT</u>	\$0 \$		Amount in	Life (Cycle nt in Study:	314,500 314,500
DCA/LIFE CYCLE DETA DCA	<u>MPACT</u>	\$0 \$		Amount in	Life (— Amour	Cycle It in Study:	314,500
	ILS	\$0 \$ Yes	ar Amount	Amount in	Life (— Amour	Cycle nt in Study:	

Program Name: Erosion Restoration Program

Department: Environmental Services

Year	Project #	Past	2021	Future	Total
2017	#17194	\$829,100			\$829,100
2019	#19232	\$863,900			\$863,900
2021	#21157 (This Request)		\$898,800		\$898,800
2023 Onwards				varies	varies
Total		\$1,693,000	\$898,800	\$0	

Description of Program

Erosion restoration at unplanned sites to protect the lands and/or infrastructure from failure 65% from DC (\$584,300) and 35% from LC (\$314,500)

What was completed in the past

See above table

Current ask

Erosion Restoration Program (#21157): \$898,800

Future Phases

Varies

Related 2021 Project(s)

N/A

Map N/A



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V IARKHAM					Numb	er:	21158
		.		Projec	et Cost:	\$2	19,800
Project Name: Oil Grit S	Separators (OGS	S) - Inspection a	nd Cleaning		Str	udies/Pilo	t Programs
Commission: Community	& Fire Services			Useful Life			Approval:
Department: ES - Storm	water				e: 0	Pre I	Approvai: □
Project Mgr: Zahra Parh	izgari			: Minor			
Ward(s): CW ✓ 1	2 □ 3 □ 4 □		Cost Validation				
	6 7 8		Requirement Validation	: Conditio	n assess	ment	
ETAILED DESCRIPTIO	ON (SCOPE OF P	ROJECT):					
ior to stormwater being dis	scharged downstrea gram will identify e a year (spring &	am. The accumulat the OGS that requiwinter).	ve sediment, screen debris, ed pollutants need to be rer tre cleaning to monitor and to Sustainable Community	noved as pa	rt of a r	egular ma	intenance
2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2			NOTES				
ROJECT COSTS (\$)	<u>2021</u>	Future Phases	This is an annual progra	ım.			
Cost/Quote:	197,000	0	Future requests may be				
Internal Charges:	0	0	Requirement Validation compliance (Section 53				
External Consulting:	19,000	0	compliance (Section 33	oi Ontario	water R	resources	Act)
Sub Total:	216,000	0					
HST Impact:	3,802	0					
HST Impact: Total Project Cost:	3,802 219,800	0 					
Total Project Cost:	219,800		Components				
Total Project Cost: URCE(S) OF FUNDING	219,800		Components			TOTAL	
Total Project Cost: URCE(S) OF FUNDING Inding Type	219,800 G (\$)	0			0	TOTAI 219,800	
Total Project Cost: URCE(S) OF FUNDING Inding Type S Tax	219,800 G (\$) Budget 219,800	0	Cleaning		0	219,800	<u>Phases</u>
Total Project Cost: URCE(S) OF FUNDING Inding Type S Tax	219,800 G (\$) Budget	0	Cleaning		0 =		<u>Phases</u>
Total Project Cost: DURCE(S) OF FUNDING Inding Type S Tax FOTAL FUNDING	219,800 Budget 219,800 219,800	Inspection 19,400 ersonnel Non Personnel No	Cleaning		=	219,800	Phases
Total Project Cost: DURCE(S) OF FUNDING Inding Type S Tax FOTAL FUNDING PERATING BUDGET I	219,800 Budget 219,800 219,800 219,800 Pe	Inspection 19,400 ersonnel Non Personnel No	Cleaning 200,400 0 ersonnel Revenues		itures/(I	219,800 219,800	Phases
Total Project Cost: PURCE(S) OF FUNDING IN TAX OTAL FUNDING PERATING BUDGET I CA/LIFE CYCLE DETA DCA	219,800 Budget 219,800 219,800 219,800 Pe		Cleaning 200,400 0 ersonnel Revenues \$0 \$0 Amount in	Expendi	itures/(I	219,800 219,800 Revenues	Phases
Total Project Cost: DURCE(S) OF FUNDING Inding Type S Tax FOTAL FUNDING PERATING BUDGET I	219,800 Budget 219,800 219,800 219,800 Pe		Cleaning	Expendi n <u>Li</u>	itures/(1 \$0	219,800 219,800 Revenues	Phases
Total Project Cost: DURCE(S) OF FUNDING nding Type S Tax FOTAL FUNDING PERATING BUDGET I CA/LIFE CYCLE DETA DCA	219,800 Budget 219,800 219,800 219,800 Pe		Cleaning 200,400 0 ersonnel Revenues \$0 \$0 Amount in	Expendi n <u>Li</u> — An	\$0	219,800 219,800 Revenues	219,800
Total Project Cost: DURCE(S) OF FUNDING Inding Type S Tax FOTAL FUNDING PERATING BUDGET I CA/LIFE CYCLE DETA DCA	219,800 Budget 219,800 219,800 219,800 Pe		Cleaning 200,400 0 ersonnel Revenues \$0 \$0 Amount in	Expendi n <u>Li</u> — An	\$0 sife Cycl	219,800 219,800 Revenues le Study:	(i)



Page 446 **433**

\$259,500

Number: 21159

Project Cost:

Project Name: Swan Lal	ke Chemical Tre	atment				Studies/Pilot	Programs
	water			Category: st Validation: nt Validation:	Internal pee	0 Pre A	pproval:
5 ⊻ DETAILED DESCRIPTIO		ROJECT).					
o carry out chemical treatr xpanded monitoring after t	nent of Swan Lake,	including project p	lanning, conti	act administra	ntion, chemica	al treatment app	olication and
BUILDING MARKHAM	'S FUTURE TOG	ETHER: Safe &	Sustainable Co	mmunity			
PROJECT COSTS (\$)	2021	Future Phases	NOTES Chemical to	reatment was a	approved by (Council in June	2020 and is
Cost/Quote:	190,000	0	required to	improve the v	vater quality a	at Swan Lake. I	
Internal Charges:	0	0	the program	n to be determ	ined by Coun	C11 1ft 2021.	
External Consulting:	65,000	0					
Sub Total: HST Impact:	255,000 4,488	$\frac{0}{0}$					
Total Project Cost:	259,500	0					
OURCE(S) OF FUNDING	C (\$)		Com	onents			
unding Type	Budget	Consulting	Construction			TOTAL	<u>Future</u> <u>Phases</u>
perating Funded Life Cycle	259,500	66,144	193,356	0	C	259,500	0
TOTAL FUNDING	259,500					259,500	0
OPERATING BUDGET I	MPACT Per	rsonnel Non Pe	rsonnel l	Revenues	Expenditu	res/(Revenues)	1
		\$0 \$	0	\$0		\$0	
OCA/LIFE CYCLE DETA DCA	AILS			Amount in	Life	<u>Cycle</u>	
Name		Yea	ar Amount	Study	— Amou	nt in Study:	259,500
					Amou	nt Incl HST	259,500
					Year	in the study	2021
DCA and/or Life Cycle	Explain if there is	a change in the year	r and/or cost:				



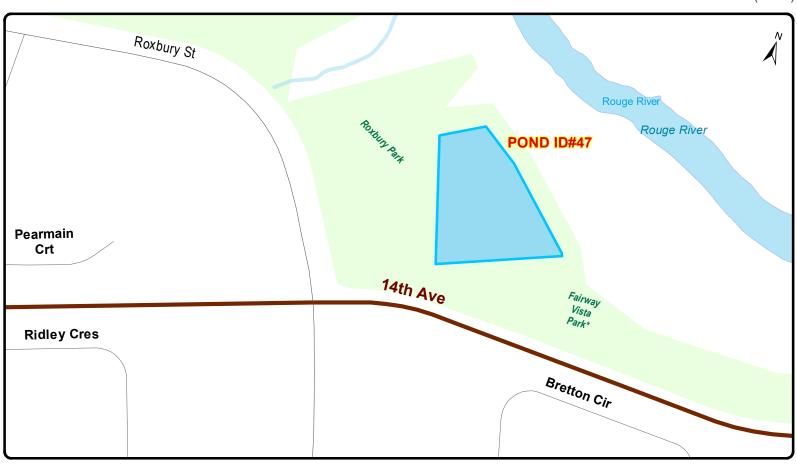
Number: 21160

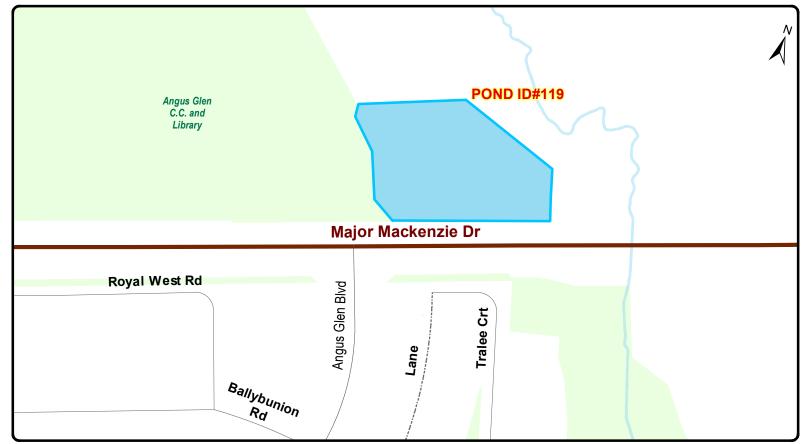
Project Name: SWM Por	nd Cleaning Deg	ian P. CA. I	D#47 8-	#110		Project (Cost:	\$152	2,600
		igii & CA - I	D#4/ &	#119			Repair	·/Replac	e
Commission: Community					Į	seful Life:	20	Pre Ap	proval:
Department: ES - Storm					Category:	Major		1	1
Project Mgr: Alan Manlu				C	lost Validation:		rde		
Ward(s): $CW \square 1 \square$	2 🗆 3 🗆 4 🗆		D.		ent Validation:				
5 🗆	6 ▼ 7 ▼ 8□		IX.	equirein	ent vanuation.	Condition a	.88688111611	n	
DETAILED DESCRIPTION	N (SCOPE OF P	ROJECT):							
Design and contract adminis Pond #47: Roxbury Pond (W with current sediment level of SWM Ponds require mainter sediment is above regulatory control function of the pond BUILDING MARKHAM'	Vard 7) with current of 58%. Refer to attract to function ef a limits (varies dependent) is maintained.	t sediment leve cached location fficiently. Seding ending on the p	d: 52% and map. ment level ond design	nd Pond els need gn), pon	#119: Angus G	len Commui	nity Centr	re Pond	(Ward 6) accumulated
DDOIECT COSTS (\$)	2021	E (DI	N	OTES					
PROJECT COSTS (\$)	<u>2021</u>	Future Phas	To	otal inve	ntory: 57 wet po				
Cost/Quote:	0	519,000			ent Validation: (se (Section 53, C				
Internal Charges:	0	0	O		s is responsible				
External Consulting:	150,000	0		VM pon	ds while ES is 1	esponsible f	or all oth	er aspec	ets including
Sub Total:	150,000	519,000	_ ata		 sediment clear Unit cost is cor 				
HST Impact:	2,640	9,134			est is for design				
Total Project Cost:	152,600	528,100			in 2022.	·			
SOURCE(S) OF FUNDING	3 (\$)			Com	ponents				
Funding Type	Budget						<u>TC</u>	<u>)TAL</u>	<u>Future</u> <u>Phases</u>
Gas Tax	152,600	0		0	0	()	0	528,100
TOTAL FUNDING	152,600						-	0	528,100
OPERATING BUDGET I	MPACT Per	rsonnel No	n Person	nel	Revenues	Expenditu	res/(Rev	enues)	
OT DANTAL TO DED GET 1	<u></u>	\$0	\$0		\$0		\$0		
DCA/LIFE CYCLE DETA	ILS								
<u>DCA</u>					Amount in	<u>Life</u>	Cycle		
Name			Year	Amour	nt Study	– Amou	ınt in Stu	dy:	680,700
							nt Incl H	• –	680,700
							in the stu		2021
	T 1: 'C1 '	1 ' 1		1/		1 Cai	iii tiic stu	idy	2021
DCA and/or Life Cycle:	Explain if there is	a change in the	e year an	d/or cos	ι:				



Location Map SWM Pond Cleaning - Design & CA (IDs #47 & #119)

ES - Infrastructure (2021)







2021 DDO IECT FUNDING DECUEST FORM

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Project Name: SWM Ponds - Condition Inspection Community & Fire Services Sudies/Pilot Department ES - Stormwater Project Mgr: Kate Rothwell Ward(s): Cw 2 3 4 Requirement Validation: ETAILED DESCRIPTION (SCOPE OF PROJECT): Ondition assessment of inlet/outlet control structures and measurement of sediment level on selected stormwater managen ands in order to update the SWM Pond database and to develop an effective pond SWM maintenance program. WILIDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community WOJECT COSTS (\$) 2021 Future Phases Cost/Quote: 0 0 Batternal Charges: 0 0 External Consulting: 26,000 0 Batternal Charges: 0 0 HST Impact: 458 0 Total Project Cost: 26,500 0 Total Project Cost: 26,500 0 Ward(s): Cw 2 2 3 4 Ward(s): Cw 2 3 4 Ward(s): Category: Minor Cost/Quote: Condition assessment of internal peer review Requirement Validation: Internal peer teview Requirement Validation: Internal peer teview Requirement V	Number: 21161				2021 PKOS	V <u>ARKHAM</u>
Commission: Community & Fire Services Useful Life: 0 Pre Appearament: ES - Stormwater Project Mgr: Kate Rothwell Ward(s): Cw 2 1 2 3 4 4 Requirement Validation: 5 6 7 8 Requirement Validation: Sequirement Validation: Sequ	Project Cost: \$26,500		o n	Inchestic	nds Canditia-	_
Department: ES - Stormwater Project Mgr: Kate Rothwell Ward(s): CW 2 1 2 3 4 Requirement Validation: Stormwater FETAILED DESCRIPTION (SCOPE OF PROJECT): Dondition assessment of inlet/outlet control structures and measurement of sediment level on selected stormwater managen and in order to update the SWM Pond database and to develop an effective pond SWM maintenance program. WILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community ROJECT COSTS (\$) 2021 Future Phases Cost/Quote: 0 0 0 Internal Charges: 0 0 0 External Consulting: 26,000 0 Sub Total: 26,000 0 HST Impact: 458 0 HST Impact: 458 0 Total Project Cost: 26,500 0 WING TOTAL FUNDING (\$) Components Components Components Components Components Components Figure Phases Components Compone	Studies/Pilot Programs		VII	шѕресио		
Department: ES - Stormwater Project Mgr: Kate Rothwell Ward(s): CW	Useful Life: 0 Pre Approval:	Use				
Ward(s): Cw 2 1 2 3 4 Cost Validation: Requirement Validation: Condition assessment STAILED DESCRIPTION (SCOPE OF PROJECT): Midition assessment of inlet/outlet control structures and measurement of sediment level on selected stormwater managements in order to update the SWM Pond database and to develop an effective pond SWM maintenance program. WILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community ROJECT COSTS (\$) 2021 Future Phases Cost/Quote: 0 0 0 Internal Charges: 0 0 0 External Consulting: 26,000 0 0 Sub Total: 26,000 0 0 HST Impact: 458 0 0 Total Project Cost: 26,500 0 0 WIRCE(S) OF FUNDING (\$) Components MINIMAL PROJECT COST (\$) Components MINIMAL PROJECT COST (\$) Components Cost/Quote: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	••					=
Requirement Validation: Condition assessment Condition assessment Condition assessment		_				<u> </u>
TAILED DESCRIPTION (SCOPE OF PROJECT): Indition assessment of inlet/outlet control structures and measurement of sediment level on selected stormwater managen ands in order to update the SWM Pond database and to develop an effective pond SWM maintenance program. Content						
Indition assessment of inlet/outlet control structures and measurement of sediment level on selected stormwater manager and in order to update the SWM Pond database and to develop an effective pond SWM maintenance program. Content						
Cost/Quote: 0 0 0 0 1 1 Sediment cleaning, SWM ponds will be inspected and determine maintenance requirements and priority rank Approximately 15-17 ponds will be surveyed out of to Operations is responsible for minor above ground main SWM ponds while Environmental Services is responsible for minor above ground main SWM ponds while Environmental Services is responsible for minor above ground main SWM ponds while Environmental Services is responsible for minor above ground main SWM ponds while Environmental Services is responsible for minor above ground main SWM ponds while Environmental Services is responsible for minor above ground main SWM ponds while Environmental Services is responsible for minor above ground main SWM ponds while Environmental Services is responsible of the raspects including inspection, sediment cleaning, and flood control strategies. There is no backlog. **DURCE(S) OF FUNDING** **DURC			nd measure	ructures and	et/outlet control str	ondition assessment of inle
Cost/Quote: 0 0 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	nunity	stainable Community	Safe &	ETHER:	'S FUTURE TOG	JILDING MARKHAM
Cost/Quote: 0 0 0 sediment cleaning, SWM ponds will be inspected and determine maintenance requirements and priority rank sediment cleaning, SWM ponds will be inspected and determine maintenance requirements and priority rank Approximately 15-17 ponds will be surveyed out of to Operations is responsible for minor above ground main SWM ponds while Environmental Services is responsion other aspects including inspection, sediment cleaning, and flood control strategies. There is no backlog. Components Comp			Phases	Future	2021	ROJECT COSTS (\$)
Internal Charges: 0 0 0				1 40410		
External Consulting: 26,000 Sub Total: 26,000 HST Impact: 458 Total Project Cost: 26,500 URCE(S) OF FUNDING (\$) Evaluating Funded Life Cycle COTAL FUNDING PERATING BUDGET IMPACT Sub Total: 26,000 Approximately 15-17 ponds will be surveyed out of to Operations is responsible for minor above ground mai SWM ponds while Environmental Services is responsion other aspects including inspection, sediment cleaning, and flood control strategies. There is no backlog. Components TOTAL Personnel Non Personnel Revenues Expenditures/(Revenues) \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$						_
Sub Total: 26,000 HST Impact: 458 Total Project Cost: 26,500 URCE(S) OF FUNDING (\$) Evaluating Funded Life Cycle 26,500 COTAL FUNDING 26,500 PERATING BUDGET IMPACT Sub Total: 26,000 Operations is responsible for minor above ground mai SWM ponds while Environmental Services is responsion other aspects including inspection, sediment cleaning, and flood control strategies. There is no backlog. Components TOTAL TOTAL Personnel Non Personnel Revenues Expenditures/(Revenues) \$0 \$0 \$0 \$0 \$0 \$0	y 15 17 pends will be surveyed out of total 57 mon	Annrovimetaly 15 17 mand			•	•
HST Impact: 458 Total Project Cost: 26,500 Description			0		26,000	Sub Total:
Components 26,500 0 and flood control strategies. There is no backlog.				-		=
Revenues Sudget TOTAL			0		26,500	Total Project Cost:
Revenues Sudget TOTAL	nents	Components			G (\$)	URCE(S) OF FUNDING
PERATING BUDGET IMPACT SO SO SO SO SO SO SO SO SO SO SO SO SO SO SO SO SO SO S	<u>Future</u>				<u>Budget</u>	nding Type
PERATING BUDGET IMPACT \$0 \$0 \$0 \$0 \$0 \$0 \$0	0 0 0	0 0	0		26,500	erating Funded Life Cycle
PERATING BUDGET IMPACT \$0 \$0 \$0	0				26,500	OTAL FUNDING
\$0 \$0 \$0	venues Expenditures/(Revenues)	onnel Revenues I	Non Pe	ersonnel	MPACT Pe	PERATING BUDGET I
	\$0 \$0	\$0	\$0	\$0		
CA/LIFE CYCLE DETAILS					AILS	
DCA Amount in Life Cycle Name Year Amount Study	Amount in Life Cvcle		Voc			
Amount in Study:		Amount Study				Name
Amount Incl HST	Study	Amount Study	1 62			
Year in the study	Study Amount in Study: 26,500	Amount Study	1 62			
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:	Amount in Study: 26,500 Amount Incl HST 26,500	Amount Study	162			



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21162 Number: **Project Cost:** \$41,100 Project Name: Water Quality Improvements Studies/Pilot Programs Commission: Community & Fire Services Pre Approval: Useful Life: Department: ES - Stormwater Category: Minor Project Mgr: Zahra Parhizgari Cost Validation: Recent awards CW □ 1□ 2□ 3 ✓ 4□ Ward(s): Requirement Validation: Other(specify in Notes) 5 ✓ 6 □ 7 □ 8 □ **DETAILED DESCRIPTION (SCOPE OF PROJECT):** This project is to carry out geese control program at Swan Lake (Ward 5) and Toogood Pond (Ward 3). Program is intended to manage recurring water quality complaints and to reduce nutrient loading into Swan Lake and Toogood Pond. Safe & Sustainable Community **BUILDING MARKHAM'S FUTURE TOGETHER: PROJECT COSTS (\$)** 2021 **Future Phases** This is an annual program to carry out geese control at Swan Lake Cost/Quote: 40,400 0 and Toogood Pond. Average 3 year expenditure (2017-2019): \$25,600 **Internal Charges:** 0 0 Requirement Validation: To protect the water quality. **External Consulting:** 0 0 Sub Total: 40,400 0 0 **HST Impact:** 711 **Total Project Cost:** 41,100 0 SOURCE(S) OF FUNDING (\$) **Components Future Funding Type TOTAL Phases Budget** Operating Funded Life Cycle 41,100 0 0 0 0 0 0 TOTAL FUNDING 41,100 0 0 Personnel Non Personnel Revenues Expenditures/(Revenues) OPERATING BUDGET IMPACT \$0 \$0 \$0 \$0 **DCA/LIFE CYCLE DETAILS DCA** Amount in **Life Cycle** Year Name **Amount** Study Amount in Study: 31,100 Amount Incl HST 31,100 Year in the study 2021 DCA and/or Life Cycle: Explain if there is a change in the year and/or cost: \$10k added for geese relocation at Swan lake



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21163 Number: **Project Cost:** \$28,100 Project Name: Water Quality Monitoring Studies/Pilot Programs Commission: Community & Fire Services Pre Approval: Useful Life: Department: ES - Stormwater Category: Major Project Mgr: Zahra Parhizgari Cost Validation: Recent awards Ward(s): Requirement Validation: Other(specify in Notes) 5 ✓ 6 □ 7 □ 8 □ **DETAILED DESCRIPTION (SCOPE OF PROJECT):** This request is to continue with the water quality sampling and analysis at Swan Lake. Safe & Sustainable Community **BUILDING MARKHAM'S FUTURE TOGETHER:** NOTES **PROJECT COSTS (\$)** 2021 **Future Phases** Req. Validation: In June 2020, Council approved continuation of Cost/Quote: 0 0 monitoring at Swan Lake. The lake needs to be monitored for 12 months followed by another 3 months of analysis and report **Internal Charges:** 0 0 generation for the effectiveness of the program. **External Consulting:** 0 27,600 Unit cost is consistent with recent budget plus inflation. Amount requested is consistent with 2020 Life Cycle Reserve Study Update. Sub Total: 27,600 0 0 **HST Impact:** 486 **Total Project Cost:** 28,100 0 SOURCE(S) OF FUNDING (\$) **Components Future Funding Type TOTAL Phases Budget** Operating Funded Life Cycle 28,100 0 0 0 0 0 0 TOTAL FUNDING 28,100 0 0 Personnel Non Personnel Revenues Expenditures/(Revenues) **OPERATING BUDGET IMPACT** \$0 \$0 \$0 \$0 DCA/LIFE CYCLE DETAILS **DCA** Amount in **Life Cycle** Year Name **Amount** Study Amount in Study: 28,100 Amount Incl HST 28,100 Year in the study 2021 DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:



Number: 21164

Project Name: West The	ambill Elaad Car	.4	4-4:	on Dh	2D Coma	Project Co	st: \$4,0	29,600
Project Name: West The		itroi impieme	піан	on - Pn	SB Cons.		Repair/Repla	ice
Commission: Community & Fire Services					Į	Jseful Life: 1	00 Pre A	pproval:
Department: ES - Storm			-		Category:	Major		
Project Mgr: Richard K	it		-	(Cost Validation:		review	
Ward(s): $CW \square 1$	2 3 4 4		ī		nent Validation:			
5 🗆	□ 6□ 7□ 8□		1	xcquircii	icht vandation.	Offici(specify	iii ivoics)	
DETAILED DESCRIPTION	ON (SCOPE OF P	ROJECT):						
To continue with the flood request is for upgrading the map. Program is as follows: •□Est. West Thornhill prog•□Previous budget approve BUILDING MARKHAM	e storm sewer pipes in: :ram cost - \$111M (a ed (up to Phase 3A) r	n Phase 3B area s of April 2019) epresents 44.9%	(east	of Hende	erson Ave. and s	outh of John S		
				NOTEG				
PROJECT COSTS (\$)	<u>2021</u>	Future Phases	2	NOTES Reg. Vali	dation: Council	direction to ur	ograde the stor	rm sewer
Cost/Quote:	3,668,894	40,803,700	S	system in	West Thornhill	to 100 year le	vel protection	
Internal Charges:	0	0			Source: Stormwa			
External Consulting:	291,018	0	administration. The City will receive 40% of the cost (\$1,611,840)					
Sub Total:	3,959,912	40,803,700						
HST Impact:	69,694	718,145	- - (\$2,417,760).					
Total Project Cost:	4,029,600	41,521,800						
SOURCE(S) OF FUNDIN	[G (\$)			Cor	nponents			
Funding Type	Budget	_ <u>CA</u>	<u>\</u>	Construc			TOTAL	<u>Future</u> <u>Phases</u>
Reserve Fund	4,029,600	296,133	3,7	733,467	0	0	4,029,600	41,521,800
TOTAL FUNDING	4,029,600						4,029,600	41,521,800
[
OPERATING BUDGET	IMPACT Per	sonnel Non	Perso	onnel	Revenues	Expenditure	s/(Revenues)	
		\$0	\$0		\$0	\$	0	
DCA/LIFE CYCLE DETA	AILS							
<u>DCA</u>		_			Amount in	Life C	<u>vcle</u>	
Name			Year	Amou	nt Study	_ Amoun	t in Study:	
						Amoun	Incl HST	
							the study	
DCA 1/ 1 'f- C1	E1.116.41.			1/	.4.	rear n	t the study	
DCA and/or Life Cycle	e: Explain if there is	a change in the	year a	ind/or co	St:			

Program Name: West Thornhill Flood Control Implementation

Department: Environmental Services

Component	Project #	Past	2021	Future	Total
Phase 1 (East of Bayview, North of Steeles, SW of CN tracks)	#8530, #9330,	\$19,673,405			\$19,673,405
	#14271, #15014				
Phase 2 (West of Bayview, East of Yonge, N of Steeles, S of	#16210, #17201,	\$18,187,888	\$0	\$0	\$18,187,888
CN Tracks)	#18279, #19232				
Phase 3 (West of Bayview, East of Yonge, S of John, N of CN	#16211, #20252	\$11,019,559	\$4,029,600	\$19,077,745	\$34,126,904
tracks)	#21164				
	(This Request)				
Phase 4 (Royal Orchard/ Romfield - West of Bayview, East of	#18280	\$911,803	\$15,655,900	\$22,444,100	\$39,011,803
Yonge)	#21165				
Total		\$49,792,655	\$19,685,500	\$41,521,845	\$111,000,000
		44.9%	17.7%	37.4%	

Description of Program

To upgrade the storm sewer system in West Thornhill to 100 year level protection

What was completed in the past

8 phases have been completed or in progress (out of 14 phases) since 2013 - 2020: \$49.8M

Current ask

Phase 3B Construction of storm sewer upgrades (east of Henderson Ave. and south of John St) (#21164): \$4,029,600

Future Phases

Phase 3C Construction 2022-2023 - \$19.1M Phase 4B, 4C, 4D Construction 2023 - 2026 - \$22.4M Total - \$41.5M

Related 2021 Project(s)

West Thornhill Flood Control Implementation - Phase 4A Construction (#21165): \$15,655,900 Royal Orchard Sanitary Sewer Upgrades (West Thornhill Phase 4A) (#21172): \$3,471,000

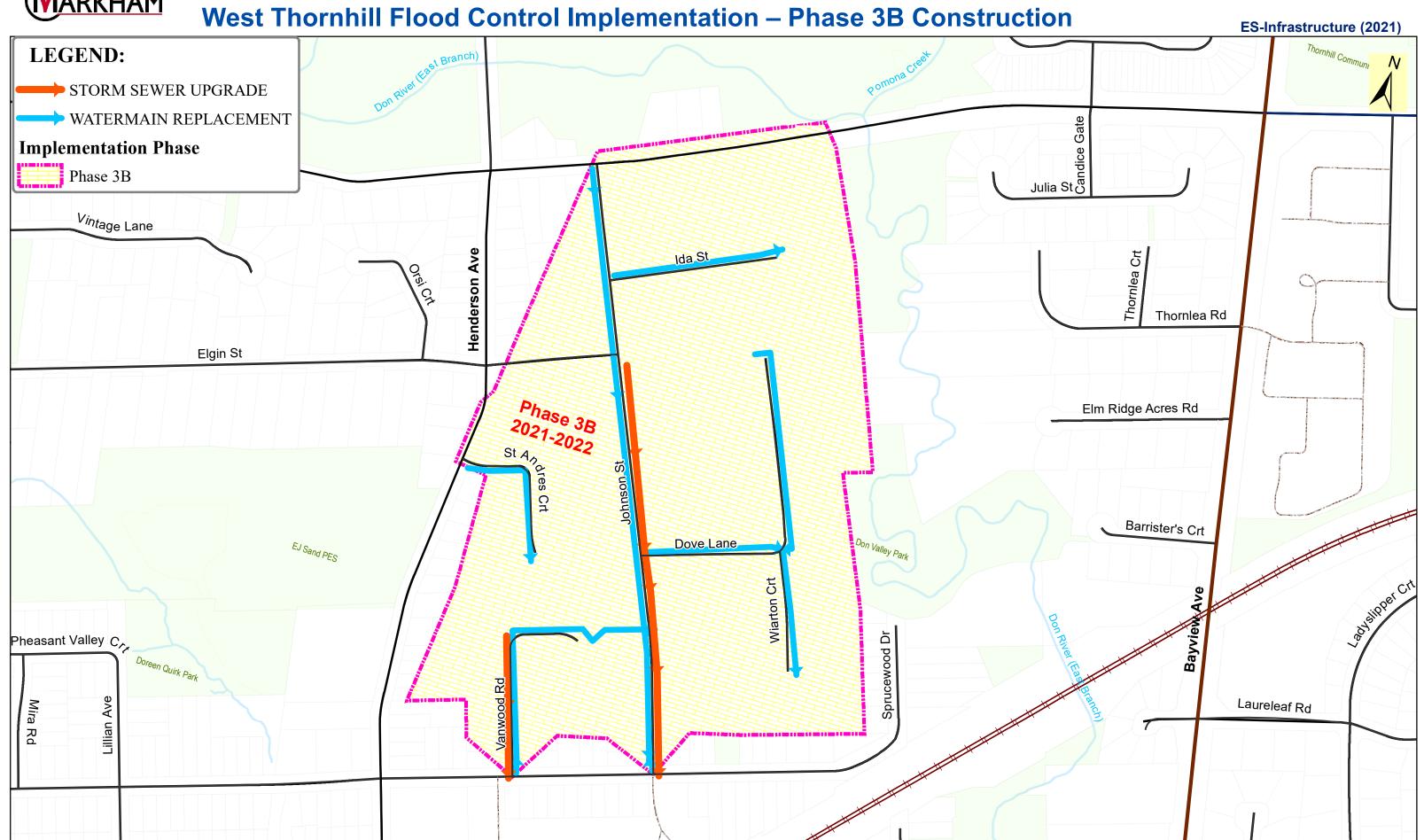
Map Attached

PROGRAM STATUS

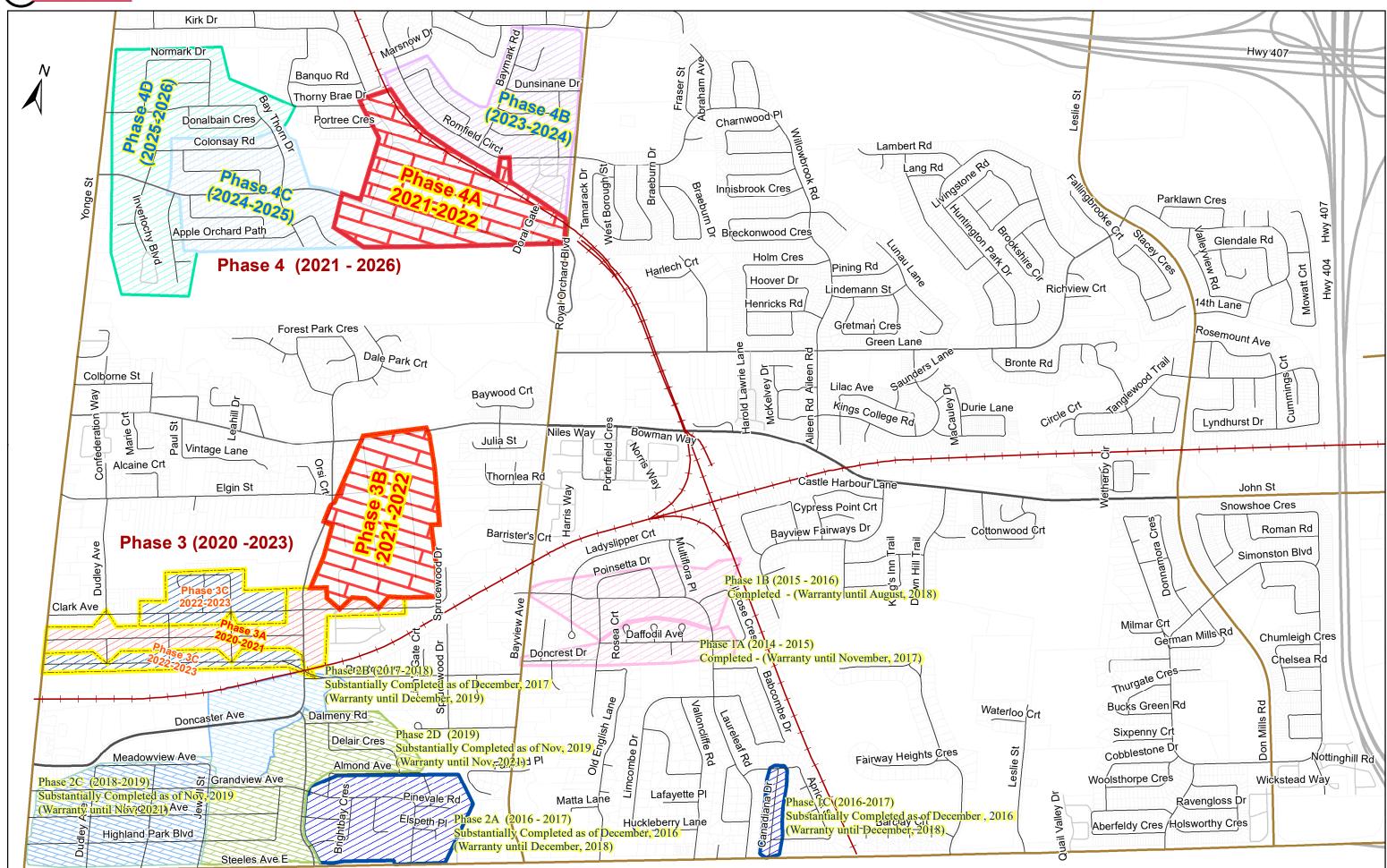
Phases	Project Status				
1A (Doncrest Dr and Daffodil Ave)	Total completion in Aug 2017				
1B (Laureleaf Rd, Poinsetta Dr, Multiflora Pl)	Total completion in Aug 2018				
1C (Canadiana Dr)	Total completion in Dec 2018				
2A (Grandview Ave, Brightbay Cr, Courtham Ave, Rayneswood Cr, Pineval Dr, Elspeth Pl)	Total completion in Dec 2018				
2B (Grandview Park, Henderson Ave and Proctor Ave)	Total completion in Dec 2019				
2C (Grandview Ave/ Woodward Ave/ Highland Park Blvd - between Jewll St and Yonge St, Meadow Ave, Willowdale Blvd, Dudley Ave, Jewell St)	Substantially completed in Nov 2019; Under warranty until Nov 2021				
2D (Grandview Ave/ Woodward Ave/Highland Park Blvd - between Henderson Ave and Jewell St.; Dalmeny Rd, Delcair Cr, Henderson Ave between Grandview Ave and Dalmeny Rd)	Substantially completed in Nov 2019; Under warranty until Nov 2021				
3A (Morgan Ave - between Henderson ad Yonge; Clark Ave - between Hendwerson and Johnson)	Project commenced in May 2020; Anticipated Substantial completion in Nov 2021				
3B (This Request) (Johnson St, Vanwood Rd, St. Andreas Crt, Ida St, Dove Ln, Wiarton Crt)	Design 100% completed; Construction in 2021 - 2022				
3C (Clark Ave and Glen Cameron Rd - west of Henderson Ave)	Design 100% completed; Construction in 2022 - 2023				
4A (Royal Orchard - between Doral Gate to Pomona Creek, Kirk Dr, Knotty Pine Trail, Blus Spruce Ln, Doral Gate, Augusta Crt)	Design 90% completed; Construction in 2021 - 2022				
4B, 4C & 4D (Romfield Cir Area; Royal Orchard - between Yonge St. and Bay Thorn Dr, Wild Cherry Ln, Apple Orchard Path, Silver Aspen Dr, Normark Dr, Donalbain Cr)	Design 90% completed; Construction in 2023 - 2026				



Location Map:



MARKHAM WEST THORNHILL FLOOD CONTROL IMPLEMENTATION PHASES





Number: 21165

_					Project (lost: \$15	655,900
Project Name: West T	hornhill Flood Coi	ntrol Impleme	ntation - P	h 4A Cons.	110,000	420,	
Commission: Commun	ity & Fire Services					Repair/Repla	
Department: ES - Stor	mwater					100 Pre A	Approval: \square
Project Mgr: Jawaid K				Category:	Major		
Ward(s): CW 1	✓ 2□ 3□ 4□			Cost Validation:	Recent awa	rds	
			Require	ement Validation:	Other(speci	fy in Notes)	
DETAILED DESCRIPT		ROJECT):					
To continue with the flood equest is for upgrading the □Est. West Thornhill pro □Previous budget approv BUILDING MARKHAN	d remediation program ne storm sewer pipes i gram cost - \$111M (a yed (up to Phase 3A)	n in the West The n Phase 4A area s of April 2019) represents 44.9%	(west of Bay	yview Av. and sou	th of CNR tra		
PROJECT COSTS (\$)	2021	Future Phases	NOTE	<u>S</u>			
Cost/Quote:	2021 14,297,361	40,803,700	Req. V	alidation: Council			
_				in West Thornhill g Source: Stormw			l.
Internal Charges: External Consulting:	542,923 554,195	0	Interna	l charges include a	associated sta	ff recoveries. I	
				include contract			
Sub Total: HST Impact:	<u>15,394,479</u> <u>261,387</u>	40,803,700 718,145	(\$6,262,360) through a Federal Grant (see life cycle section for more details). Net cost to the City will be 60% (\$9,393,540).				
Total Project Cost:			-				
10001110,1001 00000	15,655,900	41,521,800					
OURCE(S) OF FUNDING (\$) Components							
unding Type	<u>Budget</u>	CA	<u>Constr</u>	uction Internal	<u>staff</u>	TOTAL	<u>Future</u> <u>Phases</u>
as Tax	2,000,000	0	2,000,000	0	C	2,000,000	0
eserve Fund	13,655,900	563,949	12,549,028	3 542,923	C	13,655,900	41,521,800
TOTAL FUNDING	15,655,900					15,655,900	41,521,800
						10,000,000	1,521,000
	Per Per	sonnel Non	Personnel	Revenues	Expenditu	res/(Revenues)
OPERATING BUDGET	<u>TIMPACT</u>	\$0	\$0	\$0	-	\$0	
CA/LIFE CYCLE DET	<u>rails</u>						
<u>DCA</u>				Amount in	<u>Life</u>	Cycle	
Name			Year Amo	ount Study	— Amou	nt in Study:	
						nt Incl HST	
						in the study	
DCA and/on Life Cyc	ola. Evalain if those is	a abanca in tha	ricon and/an a	aget.	1 Cai	in the study	
DCA and/or Life Cyc	tie: Explain if there is	a change in the	year and/or o	COST			
1							

Program Name: West Thornhill Flood Control Implementation

Department: Environmental Services

Component	Project #	Past	2021	Future	Total
Phase 1 (East of Bayview, North of Steeles, SW of CN tracks)	#8530, #9330, #14271, #15014	\$19,673,405			\$19,673,405
Phase 2 (West of Bayview, East of Yonge, N of Steeles, S of CN Tracks)	#16210, #17201, #18279, #19232	\$18,187,888	\$0	\$0	\$18,187,888
Phase 3 (West of Bayview, East of Yonge, S of John, N of CN tracks)	#16211, #20252, #21164	\$11,019,559	\$4,029,600	\$19,077,745	\$34,126,904
Phase 4 (Royal Orchard/ Romfield - West of Bayview, East of Yonge)	#18280 #21165 (This Request)	\$911,803	\$15,655,900	\$22,444,100	\$39,011,803
Total		\$49,792,655	\$19,685,500	\$41,521,845	\$111,000,000

44.9%

17.7%

37.4%

Description of Program

To upgrade the storm sewer system in West Thornhill to 100 year level protection

What was completed in the past

8 phases have been completed or in progress (out of 14 phases) since 2013 - 2020: \$49.8M

Current ask

Phase 4A Construction of storm sewer upgrades (west of Bayview Ave; and south of CNR tracks) (#21165): \$15,655,900

Future Phases

Phase 3C Construction 2022-2023 - \$19.1M Phase 4B, 4C, 4D Construction 2023 - 2026 - \$22.4M Total - \$41.5M

Related 2021 Project(s)

West Thornhill Flood Control Implementation - Phase 3B Construction (#21164): \$4,029,600 Royal Orchard Sanitary Sewer Upgrades (West Thornhill Phase 4A) (#21172): \$3,471,000

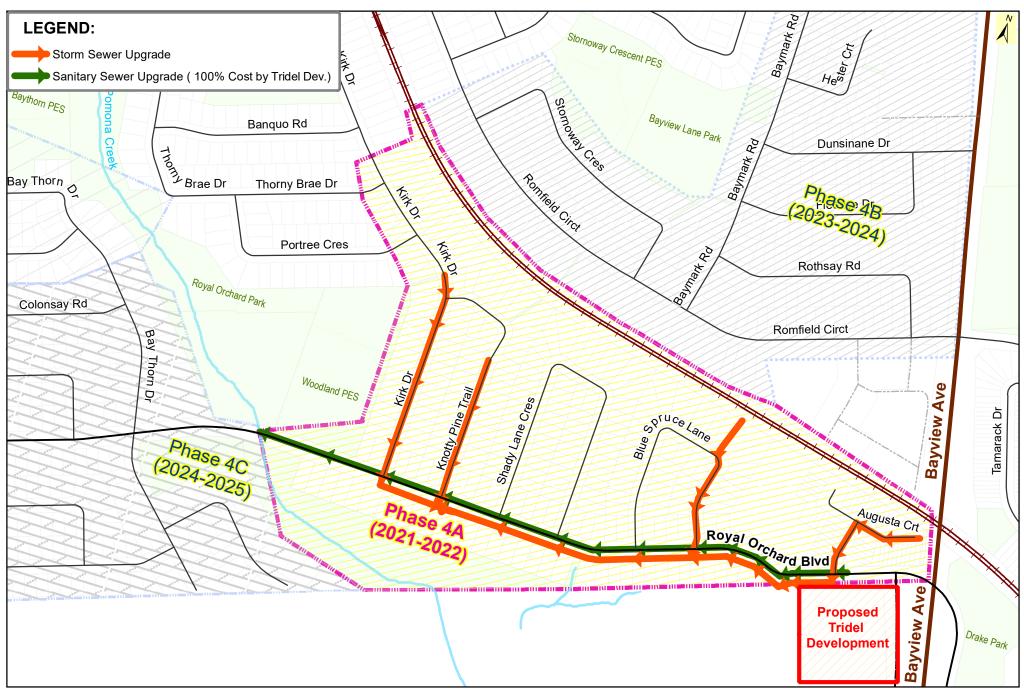
Мар Attached

PROGRAM STATUS

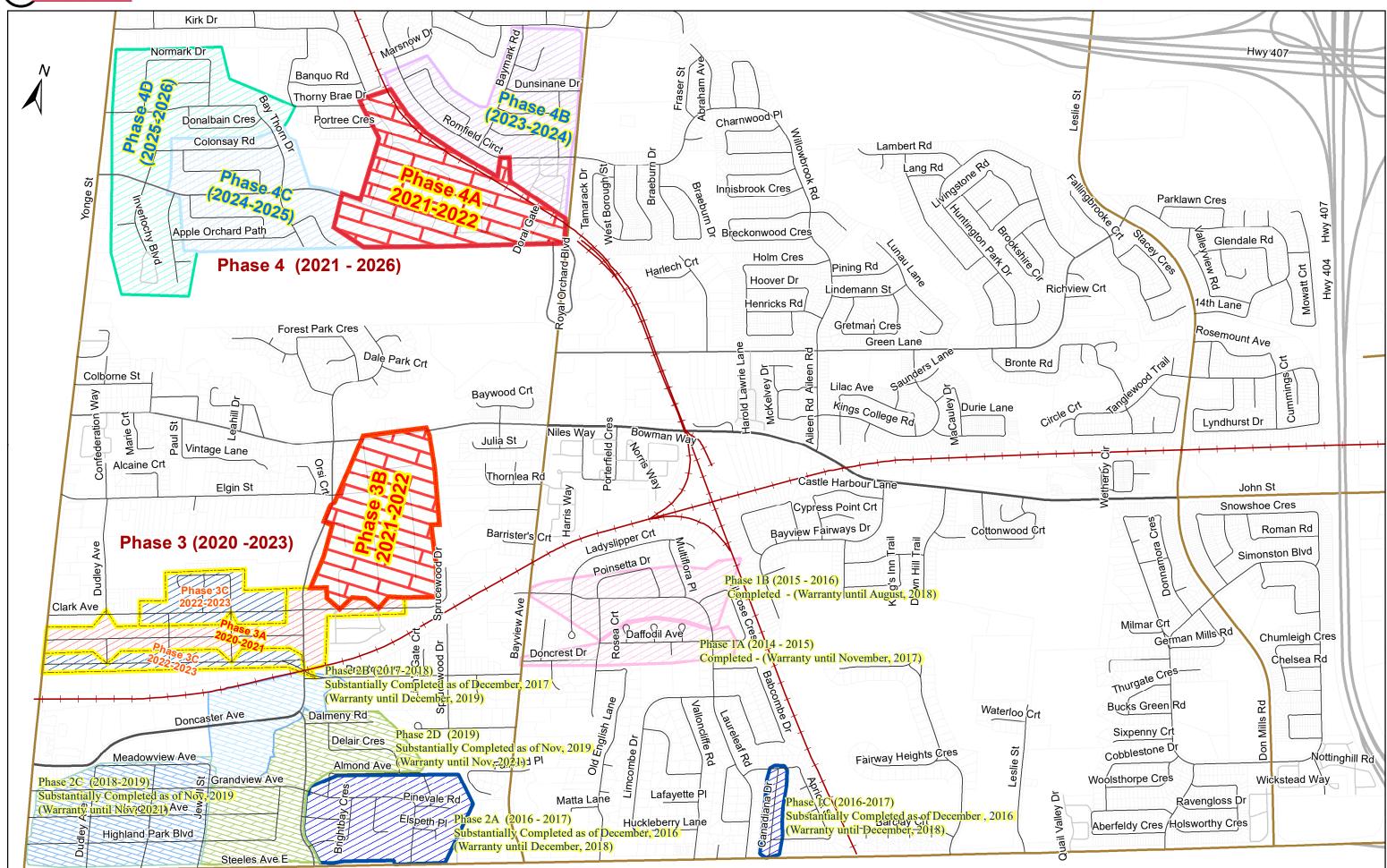
Phases	Project Status				
1A (Doncrest Dr and Daffodil Ave)	Total completion in Aug 2017				
1B (Laureleaf Rd, Poinsetta Dr, Multiflora Pl)	Total completion in Aug 2018				
1C (Canadiana Dr)	Total completion in Dec 2018				
2A (Grandview Ave, Brightbay Cr, Courtham Ave, Rayneswood Cr, Pineval Dr, Elspeth PI)	Total completion in Dec 2018				
2B (Grandview Park, Henderson Ave and Proctor Ave)	Total completion in Dec 2019				
2C (Grandview Ave/ Woodward Ave/ Highland Park Blvd - between Jewll St and Yonge St, Meadow Ave, Willowdale Blvd, Dudley Ave, Jewell St)	Substantially completed in Nov 2019; Under warranty until Nov 2021				
2D (Grandview Ave/ Woodward Ave/Highland Park Blvd - between Henderson Ave and Jewell St.; Dalmeny Rd, Delcair Cr, Henderson Ave between Grandview Ave and Dalmeny Rd)	Substantially completed in Nov 2019; Under warranty until Nov 2021				
3A (Morgan Ave - between Henderson ad Yonge; Clark Ave - between Hendwerson and Johnson)	Project commenced in May 2020; Anticipated Substantial completion in Nov 2021				
3B (Johnson St, Vanwood Rd, St. Andreas Crt, Ida St, Dove Ln, Wiarton Crt)	Design 100% completed; Construction in 2021 - 2022				
3C (Clark Ave and Glen Cameron Rd - west of Henderson Ave)	Design 100% completed; Construction in 2022 - 2023				
4A (This Request) (Royal Orchard - between Doral Gate to Pomona Creek, Kirk Dr, Knotty Pine Trail, Blus Spruce Ln, Doral Gate, Augusta Crt)	Design 90% completed; Construction in 2021 - 2022				
4B, 4C & 4D (Romfield Cir Area; Royal Orchard - between Yonge St. and Bay Thorn Dr, Wild Cherry Ln, Apple Orchard Path, Silver Aspen Dr, Normark Dr, Donalbain Cr)	Design 90% completed; Construction in 2023 - 2026				

Location Map: West Thornhill Flood Control Implementation – Phase 4A Construction

ES-Infrastructure (2021)



MARKHAM WEST THORNHILL FLOOD CONTROL IMPLEMENTATION PHASES





Page 470 **455**

2021 PROJECT FUNDING REQUEST FORM 21166 Number: **Project Cost:** \$102,000 Project Name: Incremental Growth Related Waste Management Vehicles New Asset/Expansion Commission: Community & Fire Services Pre Approval: Useful Life: Department: ES - Waste Category: Annual Project Mgr: Claudia Marsales Cost Validation: Internal peer review CW ✓ 1 □ 2 □ 3 □ 4 □ Ward(s): Requirement Validation: Other(specify in Notes) 5 🗆 6 🗆 7 🗆 8 🗆 **DETAILED DESCRIPTION (SCOPE OF PROJECT):** Development Charge (DC) funding for additional growth-related waste management vehicles purchased by contractor. If waste management was done in-house, these vehicles would need to be purchased by the City, so this request is to obtain DC funding to offset a portion of the capital cost included in the waste management contract paid through Operating accounts. Exceptional Services by Exceptional People **BUILDING MARKHAM'S FUTURE TOGETHER:** NOTES **PROJECT COSTS (\$)** 2021 **Future Phases** Amount requested as per 2017 Development Charges Background Cost/Quote: 102,000 0 Study. **Internal Charges:** 0 0 **External Consulting:** 0 0 Sub Total: 102,000 0 0 **HST Impact:** 0 **Total Project Cost:** 102,000 0 SOURCE(S) OF FUNDING (\$) **Components Future Funding Type TOTAL Phases Budget** DCA 102,000 0 0 0 0 0 0 TOTAL FUNDING 102,000 0 0 Personnel Non Personnel Revenues Expenditures/(Revenues) **OPERATING BUDGET IMPACT** \$0 \$0 \$0 \$0 DCA/LIFE CYCLE DETAILS **DCA** Amount in **Life Cycle** Year Name **Amount** Study 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:

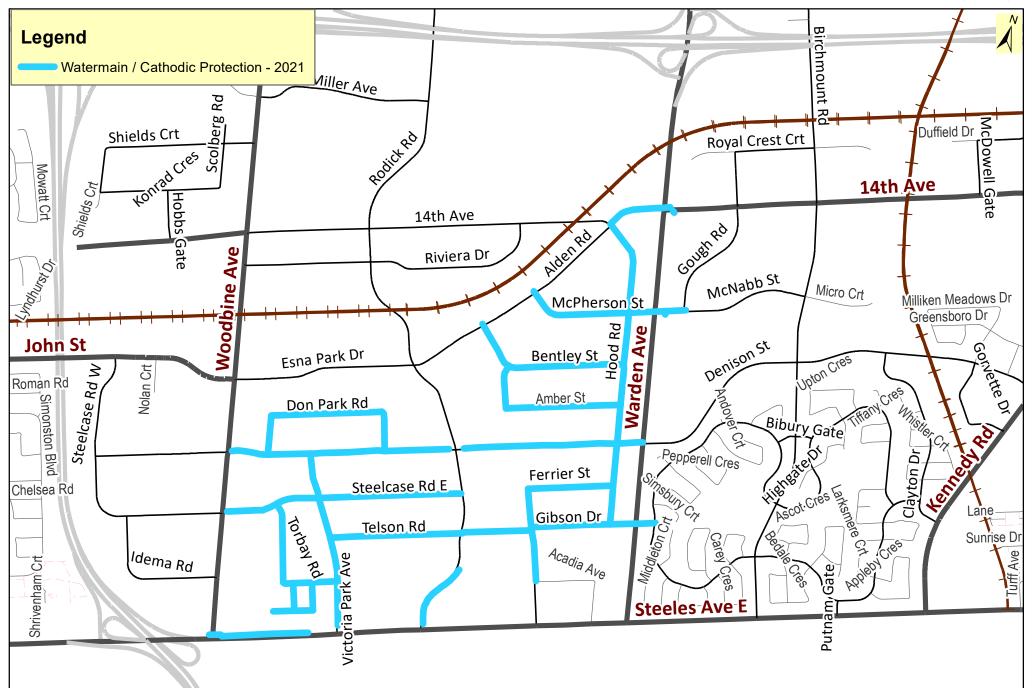


Page 472 **459**

2021 PROJECT FUNDING REQUEST FORM ARKHAM 21167 Number: **Project Cost:** \$493,100 Project Name: Cathodic Protection of Ductile Iron Watermains Repair/Replace Commission: Community & Fire Services Pre Approval: Useful Life: 20 Department: ES - Waterworks Category: Minor Project Mgr: Vikas Thakur Cost Validation: Recent awards Ward(s): Requirement Validation: Condition assessment 5 □ 6 □ 7 □ 8 ✔ **DETAILED DESCRIPTION (SCOPE OF PROJECT):** Program to install corrosion protection material (anodes) to ductile iron (DI) watermains to reduce/ prevent corrosion. Renewal of corrosion protection is necessary to replace the depleted anodes (17-19 years old) and test stations. Safe & Sustainable Community **BUILDING MARKHAM'S FUTURE TOGETHER: NOTES PROJECT COSTS (\$)** 2021 **Future Phases** This is an annual program (Phase 3 of 17). Program commenced in Cost/Quote: 435,400 0 1993 with an avg. of 120 watermain breaks/year which has reduced to an avg. of 30 breaks/ year in last five years. Second cycle of **Internal Charges:** 50,000 0 ductile and cast iron watermains corrosion protection commenced **External Consulting:** 0 This request is to install anodes for approx. 15 km length of DI Sub Total: 485,400 0 watermain (Refer to attached map). City inspector is required for 6 0 **HST Impact:** 7,663 month period each year (\$50K). Unit cost is consistent with recent **Total Project Cost:** 493,100 0 award plus inflation. SOURCE(S) OF FUNDING (\$) **Components Future Funding Type** Construction Internal staff **TOTAL Phases Budget** Waterworks 493,100 443,100 50,000 0 0 493,100 0 TOTAL FUNDING 493,100 493,100 0 Personnel Non Personnel Revenues Expenditures/(Revenues) OPERATING BUDGET IMPACT \$0 \$0 \$0 \$0 DCA/LIFE CYCLE DETAILS **DCA** Amount in **Life Cycle** Year Name **Amount** Study Amount in Study: 493,100 Amount Incl HST 493,100 Year in the study 2021

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

ES - Infrastructure (2021)





2021 PROJECT FUNDING REQUEST FORM

Project Name: CI Watermain Rehabilitation / CIPP Lining - Construction

21168 Number: **Project Cost:** \$6,623,300

ervices						
			J	Jseful Life:	90 Pre Ap	oproval: \square
	Category: Major			Major		
Project Mgr: Jawaid Khan Ward(s): CW □ 1 ✓ 2 □ 3 □ 4 □ Cost Validation:		Co	• •		rds	
•			nt Validation:			
8 🗸		requiremen	, unaunon.	- Condition a		
E OF PROJE						
ion for rehabili	tation of app	rox. of 4.2 km	of cast iron (CI) watermai	n using Cured-I	n-Place Pipe
E TOGETHE	R: Safe &	Sustainable Co	mmunity			
		NOTEG				
<u>Futu</u>	re Phases		nnual program	(Phase 3a o	f 15: ending in 2	2032).
000	0	Total CI W	atermain: 54.1	km		
0	0					
<u> </u>	0					пу гергасей
′00	0	Cost is consistent with recent award prices plus inflation.				
53	0					
300	0	Tates and is	Consistent wit	II 2020 LIIE (Cycle Reserve 3	ilidy Opdate.
		Comp	onents			Future
<u>Budget</u>	<u>CA</u>	Construction			TOTAL	<u>Phases</u>
23,300	264,400	6,358,900	0	(6,623,300	0
23,300					6,623,300	0
Personne	l Non Pe	rsonnel I	Revenues	Expenditu	res/(Revenues)	
\$0	\$	0	\$0		\$0	
· · · · · · · · · · · · · · · · · · ·						
			Amount in	Life	<u>Cycle</u>	
	Yea	ar Amount	Study			1 107 200
				– Amou	int in Study: 1	1.10/.500
						1,107,300
				Amou	nt Incl HST	6,623,300
f there is a chan		.,		Amou		
	Futu 900 0 300 700 553 300 Budget 23,300 Personne	Future Phases Puture Phase	Safe & Sustainable Continued Sustainable Continued	Future Phases OOO OOO OOOOOOOOOOOOOOOOOOOOOOOOOOO	Future Phases OOO OOO OOOOOOOOOOOOOOOOOOOOOOOOOOO	Future Phases OOO

Program Name: CI Watermain Rehabilitation / Replacement

Department: Environmental Services

Component	Project #	Past	2021	Future	Total
Phase 1 (West Thornhill Ph 2D; McCowan Rd & Heritage St.; Old	#19245, #19243	\$13,624,200			\$13,624,200
English Lane & Limcombe Dr Area)					
Phase 2 (West Thornhill Ph 3A; Laureleaf Area / Milmar Crt Area)	#19242, #20257, #20258	\$12,034,200			\$12,034,200
Phase 3a (John St & 14th Ave end Section (Re-Lining))	#20256,	\$437,100	\$6,623,300		\$7,060,400
	#21168 (This request)				
Phase 3b (West Thornhill Area - Phase 3B)	#21170		\$4,036,300		\$4,036,300
Phase 4a - Design (Gladiator Rd/ Bakerdale / Southdale Area)	#21169		\$447,700	\$4,675,100	\$5,122,800
Phase 4b to Phase 15	N/A			\$66,896,100	\$66,896,100
Total		\$26,095,500	\$11,107,300	\$71,571,200	\$108,774,000

Description of Program

To replace aged cast iron watermain (current age: 58 years; service life: 60 years) with PVC watermain (service life: 90 years)

What was completed in the past

2 phases (Phase 1 & 2) have been completed (out of 15 phases) since 2019 - \$25.7M Phase 3a (design) completed - \$0.4M Total (2019-2020): \$26.1M

Current ask

Phase 3a Relining of Cast Iron watermains (John St & 14th Ave end Section) (#21168): \$6,623,300

Future phases

Phase 4a (construction) (2022) - \$4.7M Phase 4b to Phase 15 (2022- 2032) - \$66.9M Total (2022-2032): \$71.6M

Related 2021 project(s)

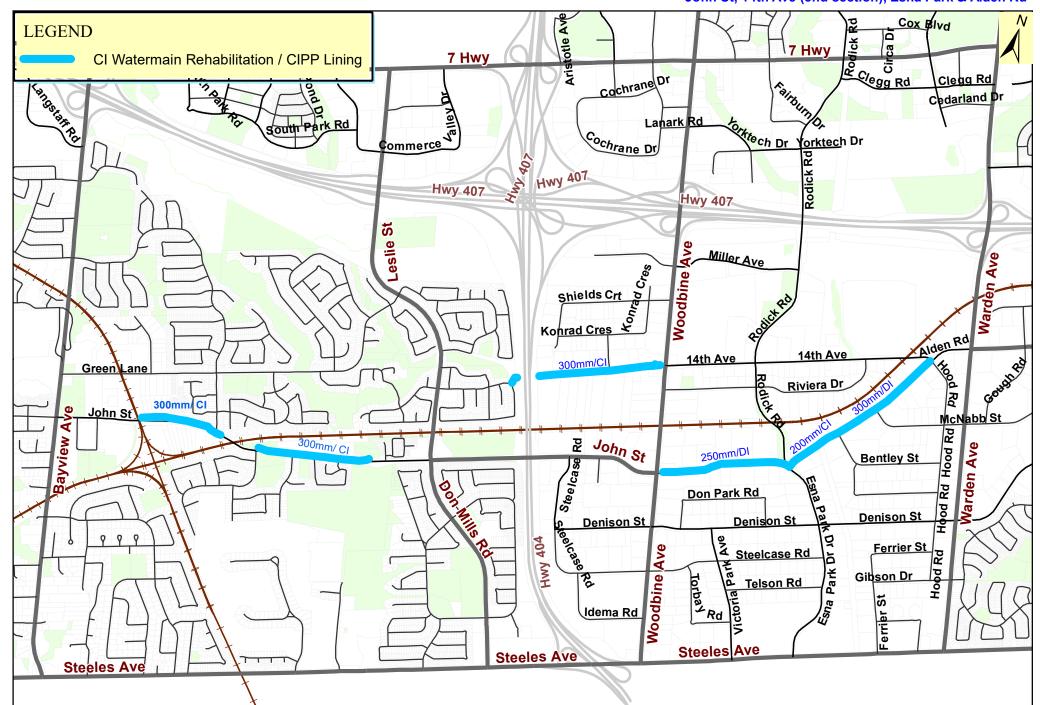
Replacement of Cast Iron watermains (West Thornhill phase 3B area) (#21170): \$4,036,300 Design of Cast Iron watermains (Gladiator Rd/ Bakerdale / Southdale Area) (#21169): \$447,700

Map Attached

PROGRAM STATUS

Phases	Project Status
Phase 1 (West Thornhill Ph 2D: Grandview Ave/ Woodward Ave/Highland	Completed in 2019
Park Blvd - between Henderson Ave and Jewell St.; Dalmeny Rd,	
Delcair Cr; McCowan Rd & Heritage St.; Old English Lane & Limcombe	
Dr Area)	
Phase 2a (Design)	Completed in 2019
(Laureleaf Area / Milmar Crt & Alden Rd)	
Phase 2a (Construction)	Completed in 2020
(Laureleaf Area / Milmar Crt & Alden Rd)	
Phase 2b	Completed in 2020
(West Thornhill Area - Phase 3A: Morgan Ave - between Henderson	
ad Yonge; Clark Ave - between Hendwerson and Johnson)	
Phase 3a (Design)	Completed in 2020
(John St & 14th Ave end Section (Re-Lining))	
Phase 3a (Construction) (This request)	2021
(John St & 14th Ave end Section (Re-Lining))	
Phase 3b	2021
(West Thornhill Area - Phase 3B: Johnson St, Vanwood Rd, St.	
Andreas Crt, Ida St, Dove Ln, Wiarton Crt)	
Phase 4a (Design)	2021
(Gladiotor Rd / Bakerdale / Southdale / Bakerdale Area)	
Phase 4a (Construction)	2022
(Gladiotor Rd / Bakerdale / Southdale / Bakerdale Area)	
Phase 4b to Phase 15 (various streets)	2022 - 2032

John St, 14th Ave (end section), Esna Park & Alden Rd





Project Name: CI Watermain Replacement - Design

2021 PROJECT FUNDING REQUEST FORM

Page 480 **465**

\$447,700

Repair/Replace

G REQUEST FORM Number: 21169

Project Cost:

Commission: Community	& Fire Services		•	T C 1 T 1 C	2 P	· □
Department: ES - Water	works			Useful Life:	0 Pre A	pproval:
Project Mgr: Richard Ki	t		Category:			
Ward(s): CW ☐ 1 ☐	2 □ 3 □ 4 ✔		Cost Validation:			
5 🗆] 6□ 7□ 8□		Requirement Validation:	Condition a	ssessment	
ETAILED DESCRIPTION	ON (SCOPE OF P	ROJECT):				
		· · · · · · · · · · · · · · · · · · ·	atermain in Southdale Driv	e area (refer t	o attached map).
BUILDING MARKHAM'	S FUTURE TOGI	ETHER: Safe &	Sustainable Community			
ROJECT COSTS (\$)	<u>2021</u>	<u>Future Phases</u>	NOTES This is an annual program	n (Phase 4a o	f 15: ending in	2032) Total
Cost/Quote:	0	4,594,200	CI Watermain: 54.1 km.			
Internal Charges:	148,100	0	program, 92% of aged Cl	watermain v	vill be replaced	with PVC and
External Consulting:	294,400	0	8% will be rehabilitated v			
Sub Total:	442,500	4,594,200	of cast iron watermain replacement design of 2.9km (5%) of CI watermain.			ŕ
HST Impact:	5,181	80,858	Construction and contrac		on costs will be	requested
Total Project Cost:	447,700	4,675,100	through 2022 capital budget request.			
OURCE(S) OF FUNDING	<u>G (\$)</u>		Components			<u>Future</u>
unding Type	<u>Budget</u>	<u>Design</u>	Internal staff		TOTAL	Phases
aterworks	447,700	299,600	148,100 0	(447,700	4,675,100
TOTAL FUNDING	447,700				447,700	4,675,100
PERATING BUDGET I	MPACT Per		rsonnel Revenues	Expenditu	res/(Revenues)	
~		\$0 \$	0 \$0		\$0	
<u>CA/LIFE CYCLE DETA</u> <u>DCA</u>	AILS			7.10	<u> </u>	
<u>DCA</u> Name		Yea	Amount in ar Amount Study		<u>Cycle</u>	
- Tunic			Staay	— Amou	nt in Study: 1	1,107,300
				Amou	nt Incl HST	447,700
				Year	in the study	2021
DCA and/or Life Cycle	: Explain if there is	a change in the year	ar and/or cost:			

Program Name: CI Watermain Rehabilitation / Replacement

Department: Environmental Services

Component	Project #	Past	2021	Future	Total
		4			4
Phase 1 (West Thornhill Ph 2D; McCowan Rd & Heritage St.; Old	#19245, #19243	\$13,624,200			\$13,624,200
English Lane & Limcombe Dr Area)					
Phase 2 (West Thornhill Ph 3A; Laureleaf Area / Milmar Crt Area)	#19242, #20257,	\$12,034,200			\$12,034,200
	#20258				
Phase 3a (John St & 14th Ave end Section (Re-Lining))	#20256, #21168	\$437,100	\$6,623,300		\$7,060,400
Phase 3b (West Thornhill Area - Phase 3B)	#21170		\$4,036,300		\$4,036,300
Phase 4a - Design (Gladiator Rd/ Bakerdale / Southdale Area)	#21169		\$447,700	\$4,675,100	\$5,122,800
	(This request)				
Phase 4b to Phase 15	N/A			\$66,896,100	\$66,896,100
Total		\$26,095,500	\$11,107,300	\$71,571,200	\$108,774,000

Description of Program

To replace aged cast iron watermain (current age: 58 years; service life: 60 years) with PVC watermain (service life: 90 years)

What was completed in the past

2 phases (Phase 1 & 2) have been completed (out of 15 phases) since 2019 - \$25.6M Phase 3a (design) completed - \$0.4M Total (2019-2020): \$26.1M

Current ask

Phase 4a Design of Cast Iron watermains (Gladiator Rd/ Bakerdale / Southdale Area) (#21169): \$447,700

Future phases

Phase 4a (construction) (2022) - \$4.7M Phase 4b to Phase 15 (2022- 2032) - \$66.9M Total (2022-2032): \$71.6M

Related 2021 project(s)

Phase 3a Relining of Cast Iron watermains (John St & 14th Ave end Section) (#21168): \$6,623,300 Phase 3b Replacement of Cast Iron watermains (West Thornhill phase 3B area) (#21170): \$4,036,300

Map Attached

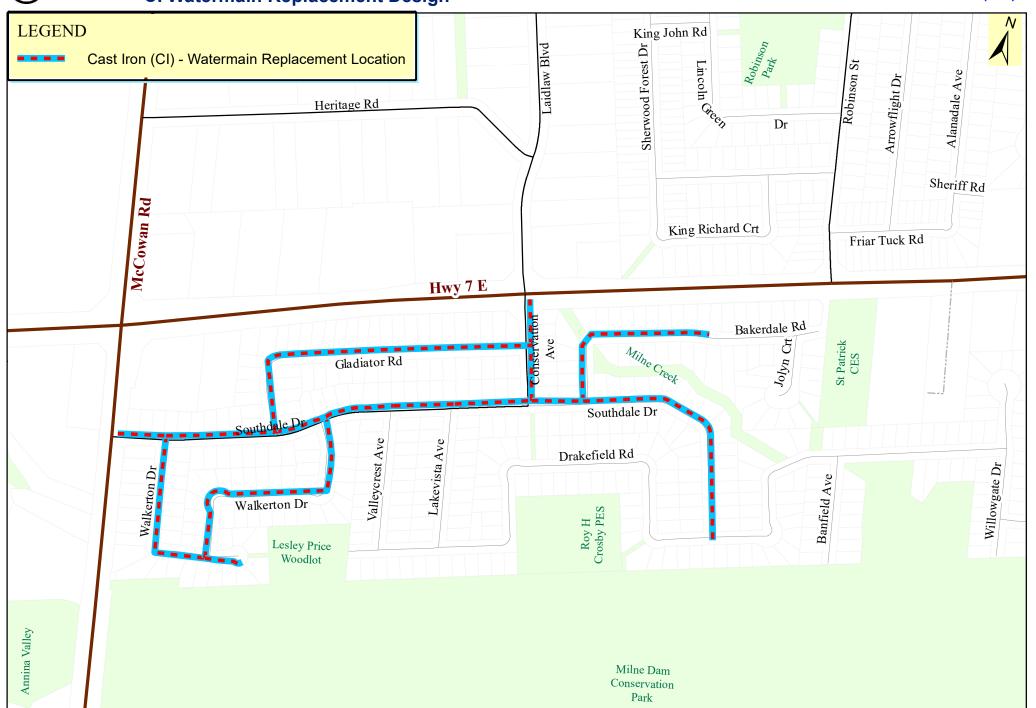
PROGRAM STATUS

PROGRAMISTATUS	
Phases	Project Status
Phase 1	Completed in 2019
(West Thornhill Ph 2D: Grandview Ave/ Woodward Ave/Highland	
Park Blvd - between Henderson Ave and Jewell St.; Dalmeny Rd,	
Delcair Cr; McCowan Rd & Heritage St.; Old English Lane & Limcombe	
Dr Area)	
Phase 2a (Design)	Completed in 2019
(Laureleaf Area / Milmar Crt & Alden Rd)	
Phase 2a (Construction)	Completed in 2020
(Laureleaf Area / Milmar Crt & Alden Rd)	
Phase 2b	Completed in 2020
(West Thornhill Area - Phase 3A: Morgan Ave - between Henderson	
ad Yonge; Clark Ave - between Hendwerson and Johnson)	
Phase 3a (Design)	Completed in 2020
(John St & 14th Ave end Section (Re-Lining))	
Phase 3a (Construction) (This request)	2021
(John St & 14th Ave end Section (Re-Lining))	
Phase 3b	2021
(West Thornhill Area - Phase 3B: Johnson St, Vanwood Rd, St.	
Andreas Crt, Ida St, Dove Ln, Wiarton Crt)	
Phase 4a (Design) (This request)	2021
(Gladiotor Rd / Bakerdale / Southdale / Bakerdale Area)	
Phase 4a (Construction)	2022
(Gladiotor Rd / Bakerdale / Southdale / Bakerdale Area)	
Phase 4b to Phase 15 (various streets)	2022 - 2032

ES - Infrastructure (2021)

Location Map CI Watermain Replacement Design

acement Design Gladiotor Rd / Bakerdale / Southdale / Bakerdale Area (B02)





2021 PROJECT FUNDING REQUEST FORM

Number: 21170

\$4,036,300

Project Cost:

riojectivame. Cryatt	rmaın Kepiaceme	ent-West Thornh	ill Ph 3B		
				Repair/Rep	olace
Commission: Community				Useful Life: 90 Pre	Approval:
Department: ES - Wate			Category	Major	
Project Mgr: Jawaid Kh			Cost Validation	: Recent awards	
	2 3 4		Requirement Validation:	Condition assessment	_
	□ 6□ 7□ 8□		_		
DETAILED DESCRIPTI		· ·	d ' 1'C . /D . C	(11	
				tached map). As part of the 60 years) will be replaced	
vatermain (1.6 km) with a			ie age co jeans, service me	oo years, war oo repraeed	With the T v C
		C-f- 0-	C		
BUILDING MARKHAM	I'S FUTURE TOG	ETHER: Sale &	Sustainable Community		
PROJECT COSTS (\$)	2021	Future Phases	NOTES		
Cost/Quote:	3,772,500	0		ntory: 54.1 km as of 2019 replaced by the year 2032	There is no
Internal Charges:	0	0	backlog in the watermain		. There is no
External Consulting:	194,000	0			
Sub Total:	3,966,500	0			
HST Impact:	69,810				
Total Project Cost:	4,036,300	0			
OTID CE(C) OF FUNDIN	τ α (Φ)		~		
OURCE(S) OF FUNDIN	<u>(G (\$)</u>		Components		– Future
	Budget	Construction	CA CA	TOTA	Future Phases
unding Type Vaterworks		<u>Construction</u> 3,838,900		TOTA 0 4,036,300	<u>L</u> <u>Phases</u>
Vaterworks	4,036,300		<u>CA</u>	0 4,036,300	Phases 0 0
<u>'unding Type</u>	Budget		<u>CA</u>	·	Phases 0 0
Vaterworks TOTAL FUNDING	4,036,300 4,036,300		CA 197,400 0	0 4,036,300	Phases
Vaterworks	4,036,300 4,036,300	3,838,900	CA 197,400 0 rsonnel Revenues	0 4,036,300 4,036,300	Phases 0 0 0 0 0 0
Vaterworks TOTAL FUNDING	4,036,300 4,036,300 Per	3,838,900	CA 197,400 0 rsonnel Revenues	0 4,036,300 4,036,300 Expenditures/(Revenue	Phases 0 0 0 0 0 0
Vaterworks TOTAL FUNDING DPERATING BUDGET DCA/LIFE CYCLE DET DCA	4,036,300 4,036,300 Per	3,838,900 rsonnel Non Pe \$0 \$	CA 197,400 0	0 4,036,300 4,036,300 Expenditures/(Revenue \$0	Phases
Cunding Type Vaterworks TOTAL FUNDING OPERATING BUDGET OCA/LIFE CYCLE DET	4,036,300 4,036,300 Per	3,838,900	CA 197,400 0 rsonnel Revenues 0 \$0 Amount in	0 4,036,300 4,036,300 Expenditures/(Revenue \$0	Phases
Vaterworks TOTAL FUNDING DPERATING BUDGET DCA/LIFE CYCLE DET DCA	4,036,300 4,036,300 Per	3,838,900 rsonnel Non Pe \$0 \$	CA 197,400 0	0 4,036,300 4,036,300 Expenditures/(Revenue \$0 Life Cycle	Phases 0 0 0 0 11,107,300
Vaterworks TOTAL FUNDING DPERATING BUDGET DCA/LIFE CYCLE DET DCA	4,036,300 4,036,300 Per	3,838,900 rsonnel Non Pe \$0 \$	CA 197,400 0	0 4,036,300 4,036,300 4,036,300 4,036,300 Expenditures/(Revenue \$0 Life Cycle Amount in Study: Amount Incl HST	Phases 0 0 0 0 11,107,300 4,036,300
Aunding Type Vaterworks TOTAL FUNDING DPERATING BUDGET DCA/LIFE CYCLE DET DCA Name	### Budget 4,036,300 4,036,300 IMPACT Per AILS	3,838,900 rsonnel Non Pe \$0 \$	rsonnel Revenues 0 \$0 Amount in Study	0 4,036,300 4,036,300 Expenditures/(Revenue \$0 Life Cycle Amount in Study:	Phases 0 0 0 0 11,107,300
Vaterworks TOTAL FUNDING DPERATING BUDGET DCA/LIFE CYCLE DET DCA	### Budget 4,036,300 4,036,300 IMPACT Per AILS	3,838,900 rsonnel Non Pe \$0 \$	rsonnel Revenues 0 \$0 Amount in Study	0 4,036,300 4,036,300 4,036,300 4,036,300 Expenditures/(Revenue \$0 Life Cycle Amount in Study: Amount Incl HST	Phases 0 0 0 0 11,107,300 4,036,300
Vaterworks TOTAL FUNDING DPERATING BUDGET DCA/LIFE CYCLE DET DCA Name	### Budget 4,036,300 4,036,300 IMPACT Per AILS	3,838,900 rsonnel Non Pe \$0 \$	rsonnel Revenues 0 \$0 Amount in Study	0 4,036,300 4,036,300 4,036,300 4,036,300 Expenditures/(Revenue \$0 Life Cycle Amount in Study: Amount Incl HST	Phases 0 0 0 0 11,107,300 4,036,300
Aunding Type Vaterworks TOTAL FUNDING DPERATING BUDGET DCA/LIFE CYCLE DET DCA Name	### Budget 4,036,300 4,036,300 IMPACT Per AILS	3,838,900 rsonnel Non Pe \$0 \$	rsonnel Revenues 0 \$0 Amount in Study	0 4,036,300 4,036,300 4,036,300 4,036,300 Expenditures/(Revenue \$0 Life Cycle Amount in Study: Amount Incl HST	Phases 0 0 0 0 11,107,300 4,036,300
Vaterworks TOTAL FUNDING DPERATING BUDGET DCA/LIFE CYCLE DET DCA Name	### Budget 4,036,300 4,036,300 IMPACT Per AILS	3,838,900 rsonnel Non Pe \$0 \$	rsonnel Revenues 0 \$0 Amount in Study	0 4,036,300 4,036,300 4,036,300 4,036,300 Expenditures/(Revenue \$0 Life Cycle Amount in Study: Amount Incl HST	Phases 0 0 0 0 11,107,300 4,036,300
Aunding Type Vaterworks TOTAL FUNDING DPERATING BUDGET DCA/LIFE CYCLE DET DCA Name	### Budget 4,036,300 4,036,300 IMPACT Per AILS	3,838,900 rsonnel Non Pe \$0 \$	rsonnel Revenues 0 \$0 Amount in Study	0 4,036,300 4,036,300 4,036,300 4,036,300 Expenditures/(Revenue \$0 Life Cycle Amount in Study: Amount Incl HST	Phases 0 0 0 0 11,107,300 4,036,300

Program Name: CI Watermain Rehabilitation / Replacement

Department: Environmental Services

Component	Project #	Past	2021	Future	Total
Phase 1 (West Thornhill Ph 2D; McCowan Rd & Heritage St.; Old	#19245, #19243	\$13,624,200			\$13,624,200
English Lane & Limcombe Dr Area)					
Phase 2 (West Thornhill Ph 3A; Laureleaf Area / Milmar Crt Area)	#19242, #20257,	\$12,034,200			\$12,034,200
	#20258				
Phase 3a (John St & 14th Ave end Section (Re-Lining))	#20256, #21168	\$437,100	\$6,623,300		\$7,060,400
Phase 3b (West Thornhill Area - Phase 3B)	#21170		\$4,036,300		\$4,036,300
	(This request)				
Phase 4a - Design (Gladiator Rd/ Bakerdale / Southdale Area)	#21169		\$447,700	\$4,675,100	\$5,122,800
Phase 4b to Phase 15	N/A			\$66,896,100	\$66,896,100
Total		\$26,095,500	\$11,107,300	\$71,571,200	\$108,774,000

Description of Program

To replace aged cast iron watermain (current age: 58 years; service life: 60 years) with PVC watermain (service life: 90 years)

What was completed in the past

2 phases (Phase 1 & 2) have been completed (out of 15 phases) since 2019 - \$25.7M Phase 3a (design) completed - \$0.4M Total (2019-2020): \$26.1M

Current ask

Phase 3b Replacement of Cast Iron watermains (West Thornhill phase 3B area) (#21170): \$4,036,300

Future phases

Phase 4a (construction) (2022) - \$4.7M Phase 4b to Phase 15 (2022- 2032) - \$66.9M Total (2022-2032): \$71.6M

Related 2021 project(s)

Phase 3a Relining of Cast Iron watermains (John St & 14th Ave end Section) (#21168): \$6,623,300 Phase 4a Design of Cast Iron watermains (Gladiator Rd/ Bakerdale / Southdale Area) (#21169): \$447,700

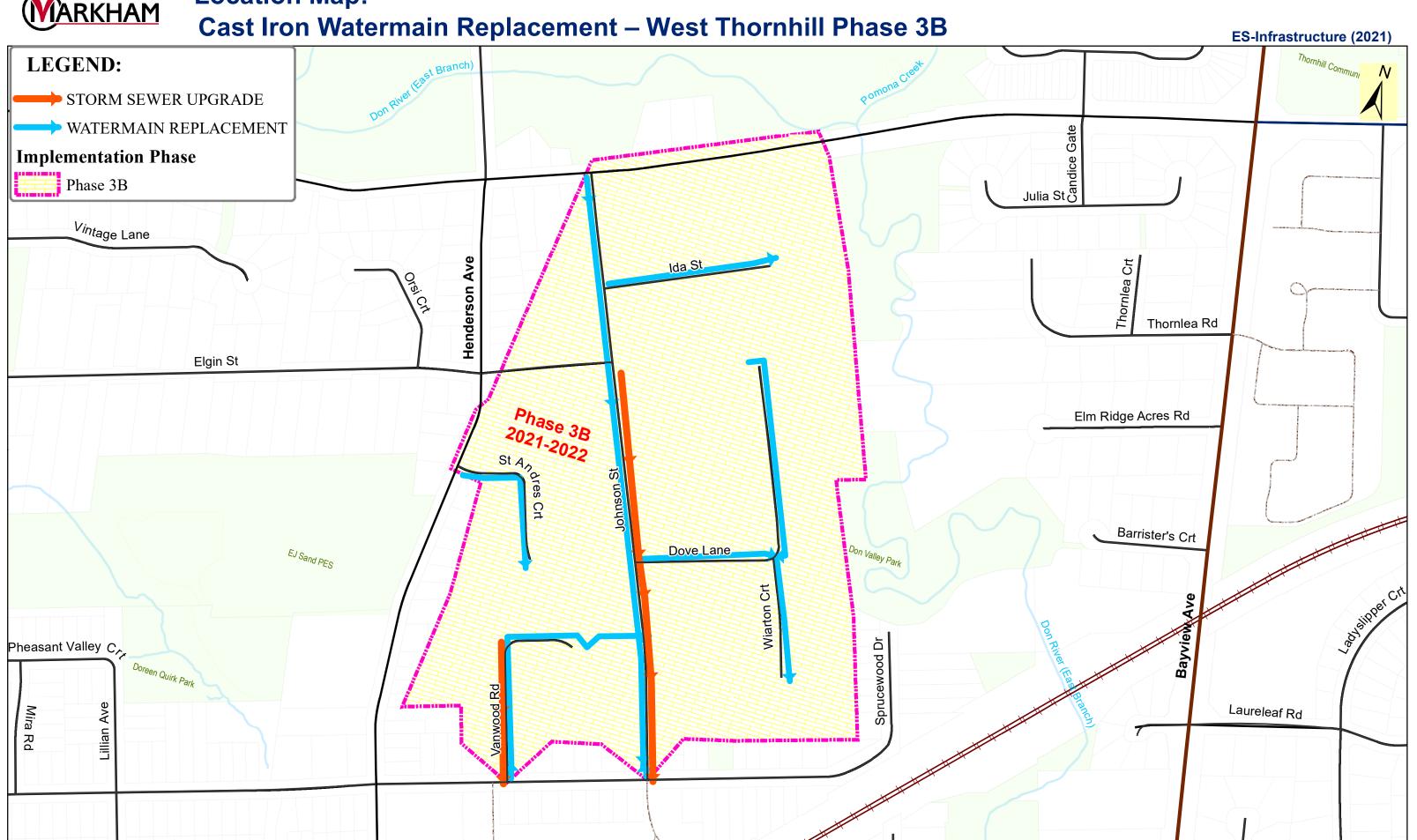
Map Attached

PROGRAM STATUS

PROGRAM STATUS	
Phases	Project Status
Phase 1	Completed in 2019
(West Thornhill Ph 2D: Grandview Ave/ Woodward Ave/Highland	
Park Blvd - between Henderson Ave and Jewell St.; Dalmeny Rd,	
Delcair Cr; McCowan Rd & Heritage St.; Old English Lane & Limcombe	
Dr Area)	
Phase 2a (Design)	Completed in 2019
(Laureleaf Area / Milmar Crt & Alden Rd)	
Phase 2a (Construction)	Completed in 2020
(Laureleaf Area / Milmar Crt & Alden Rd)	
Phase 2b	Completed in 2020
(West Thornhill Area - Phase 3A: Morgan Ave - between Henderson	
ad Yonge; Clark Ave - between Hendwerson and Johnson)	
Phase 3a (Design)	Completed in 2020
(John St & 14th Ave end Section (Re-Lining))	
Phase 3a (Construction)	2021
(John St & 14th Ave end Section (Re-Lining))	
Phase 3b (This request)	2021
(West Thornhill Area - Phase 3B: Johnson St, Vanwood Rd, St.	
Andreas Crt, Ida St, Dove Ln, Wiarton Crt)	
Phase 4a (Design)	2021
(Gladiotor Rd / Bakerdale / Southdale / Bakerdale Area)	
Phase 4a (Construction)	2022
(Gladiotor Rd / Bakerdale / Southdale / Bakerdale Area)	
Phase 4b to Phase 15 (various streets)	2022 - 2032



Location Map:





Total Project Cost:

714,900

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2021 PROJECT FUNDING REQUEST FORM ARKHAM 21171 **Number: Project Cost:** \$714,900 Project Name: Curb Box Inspection and Replacement Program Repair/Replace Commission: Community & Fire Services Pre Approval: Useful Life: 20 Department: ES - Waterworks Category: Minor Project Mgr: Vikas Thakur Cost Validation: Recent awards CW □ 1 ✓ 2 □ 3 □ 4 □ Ward(s): Requirement Validation: Condition assessment 5 □ 6 □ 7 □ 8 ✔ **DETAILED DESCRIPTION (SCOPE OF PROJECT):** Program to conduct inspection of curb boxes and repair /replace defective curb boxes which are normally located at the property line. Curb box/ stop valve is the main control appurtenance for the City to turn on/off water supply to the private property. Over time, curb boxes/ stop valves deteriorate and become inoperable. Proactive inspection and repairs are required to ensure continuous water supply and reduce service interruption. **BUILDING MARKHAM'S FUTURE TOGETHER:** Safe & Sustainable Community NOTES **PROJECT COSTS (\$) 2021 Future Phases** This is an annual program. Cost/Ouote: 653,400 0 Total inventory: 84,350 curb boxes. This request is to inspect approx. 3,913 curb boxes and replacement of approx. 25% curb Internal Charges: 50,000 0 boxes and damaged sidewalk bays as required (Refer to attached **External Consulting:** 0 map). City inspector is required for 6 month period (\$50k). There is no substantial backlog and curb boxes are in a state of Sub Total: 703,400 0 good repair. Unit cost is consistent with recent award plus inflation. 0 **HST Impact:** 11,500

SOURCE(S) OF FUNDING (\$)			Componer	nts			Futumo
Funding Type	Budget	<u>Design</u>	Internal charge			TOTAL	<u>Future</u> <u>Phases</u>
Waterworks	714,900	664,900	50,000	0	0	714,900	0
TOTAL FUNDING	714,900				=	714,900	0

0

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)	
OI EXCITING BODGET TIME ICE	\$0	\$0	\$0	\$0	

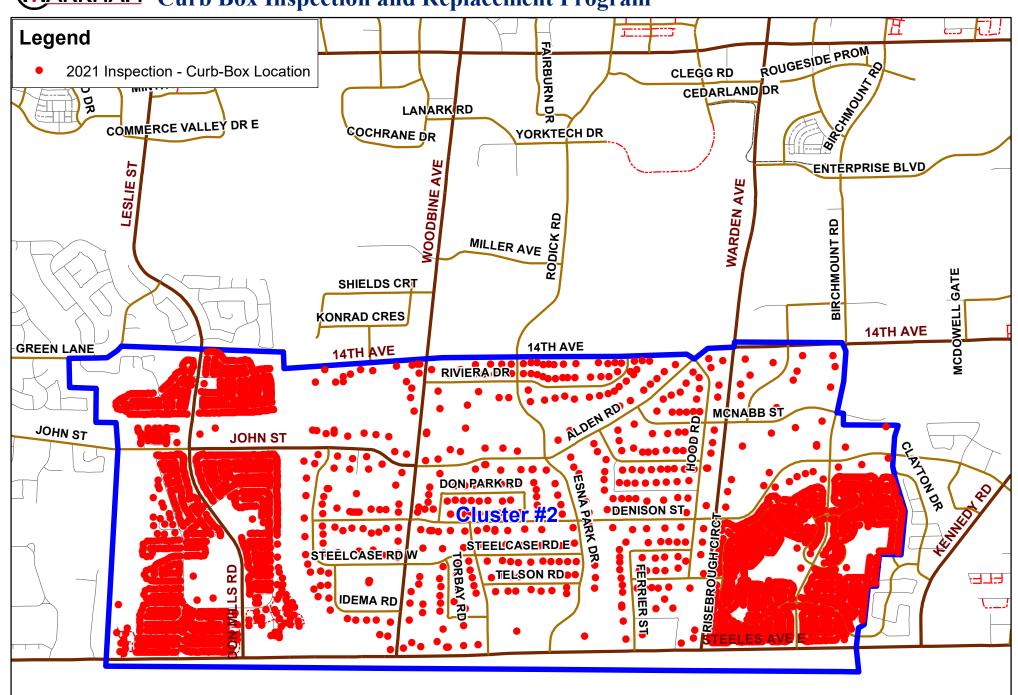
DCA/LIFE CYCLE DETAILS DCA Amount in Life Cycle Year **Amount** Study Name Amount in Study: 714,900 Amount Incl HST 714,900 2021 Year in the study DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:

Additional Project Information for Projects > \$500k

Environmental Services

Project	Curb Box Inspection and Replacement Program
2021 Capital Request (#21171)	\$714,900
Funding Source	Waterworks Reserves
Description of Program	Program to conduct inspection of curb boxes and repair /replace defective curb boxes which are normally located at the property line. This is an annual program. Total inventory: 83,179 curb boxes. This request is to inspect approx. 3,913 curb boxes and replacement of approx. 25% curb boxes and damaged sidewalk bays as required. City inspector is required for 6 month period (\$50k).
Project Rationale	Curb box/ stop valve is the main control appurtenance for the City to turn on/off water supply to the private property. Over time, curb boxes/ stop valves deteriorate and become inoperable. Proactive inspection and repairs are required to ensure continuous water supply and reduce service interruption.
Legislative Requirement	Yes – Drinking Water Quality Management System (DWQMS)
History	Historically 2,000 – 3,000 curb boxes were inspected annually
Future Phases	This is an annual program. approx. 3,300 – 4,300 curb boxes are inspected and 25% of curb boxes are replaced
Total Project Cost (incl. all phases)	Varies
Related Projects	None
Related Maps	Location Map
Alignment to the Strategic Plan	 Safe and Sustainable Community Timely rehabilitation of curb boxes reduces service interruptions, maintains water quality and supports City's vision for a sustainable community

ES Infrastructures 2021



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\$3,471,000

Repair/Replace



202

Project Name: Royal Orchard Sanitary Upgrades (West Thornhill - Ph. 4A)

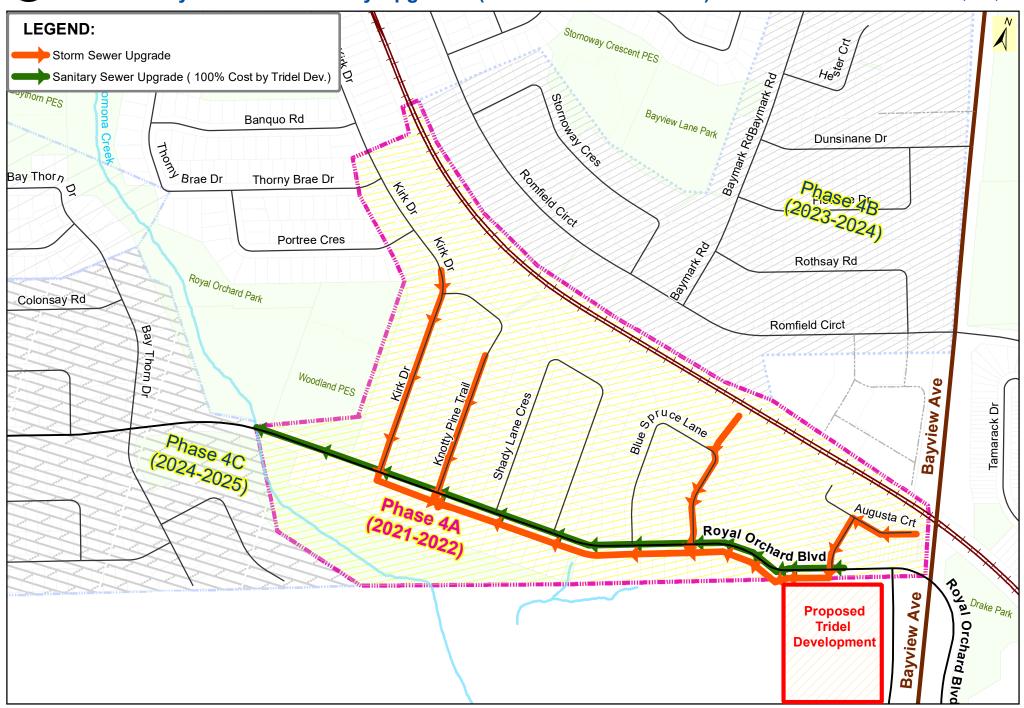
1 PROJECT FUNDING REQUEST FORM	Number:	21172	

Project Cost:

Commission: Community	& Fire Services				ī	Jseful Life: 5	50 Pre Ap	proval:
Department: ES - Water								novai. —
Project Mgr: Jawaid Khan				Category: Major Cost Validation: Recent awards				
Ward(s): CW ☐ 1 ✓	2 🗆 3 🗆 4 🗆				ent Validation:	-		
5 🗆	6 7 8			Requirem	ent vandation:	Other(specify	III Notes)	
ETAILED DESCRIPTION	ON (SCOPE OF P	ROJECT):					
his budget request is to upgayview Ave. and south of contacted map)								
UILDING MARKHAM	S FUTURE TOG	ETHER:	Safe &	Sustainable C	Community			
ROJECT COSTS (\$)	<u>2021</u>	Future 1	Phases	NOTES			. 1.	1
Cost/Quote:	3,410,928	•	0		lation: Capacity			
Internal Charges:	0		0	Tridel Development Condominiums at Ladies Golf Course. Funding Source: Tridel Development will pay the full cost of				cost of
External Consulting:	0		0	_	ewer upgrades a	-	-	•
Sub Total:	3,410,928		0		contingent on re nsistent with red			
HST Impact:	60,032		0					
Total Project Cost:	3,471,000		0					
=								
OURCE(S) OF FUNDING	<u></u>			Com	ponents			<u>Future</u>
ınding Type	<u>Budget</u>						TOTAL	<u>Phases</u>
eveloper Funding	3,471,000		0	0	0	0	0	C
TOTAL FUNDING	3,471,000						0	
PERATING BUDGET I	MPACT Per	rsonnel	Non Per		Revenues	Expenditures		
CA/LIFE CYCLE DETA	ATT S	\$0	\$0	<u> </u>	\$0	\$0	<u> </u>	
DCA					Amount in	Life Cy	<u>ycle</u>	
Name		Ye			ar Amount Study		in Study:	
							Incl HST	
							the study	
DCA and/on Life Cycle	. Evaloin if those is	a ahanaa	in the wee	m and/an aga	4.	1 cur iii	the study	
DCA and/or Life Cycle	: Explain if there is	a change	in the yea	r and/or cos	t:			

Location Map: Royal Orchard Sanitary Upgrades (West Thornhill – Ph. 4A)

ES-Infrastructure (2021)





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2021 PROJECT FUNDING REQUEST FORM 21173 Number: **Project Cost:** \$1,405,000 Project Name: Sanitary Sewers - Rehabilitation Repair/Replace Commission: Community & Fire Services Pre Approval: Useful Life: 50 Department: ES - Waterworks Category: Major Project Mgr: Roseller Corcuera Cost Validation: Recent awards CW ✓ 1 □ 2 □ 3 □ 4 □ Ward(s): Requirement Validation: Condition assessment 5 🗆 6 🗆 7 🗆 8 🗆 **DETAILED DESCRIPTION (SCOPE OF PROJECT):** Program to rehabilitate the main sanitary sewer, service laterals using structural liner including repairs to manholes. Safe & Sustainable Community **BUILDING MARKHAM'S FUTURE TOGETHER: NOTES PROJECT COSTS (\$)** 2021 **Future Phases** This is an annual program. 1,321,700 Cost/Quote: 0 Program is to rehabilitate the main sanitary sewer, service laterals using structural liner and repairs to manholes identified through the **Internal Charges:** 60,000 0 inspection programs. City inspector required for a 8 month period **External Consulting:** 0 0 Sanitary sewers are in a state of good repair. 1,381,700 Sub Total: 0 0 **HST Impact:** 23,262 **Total Project Cost:** 1,405,000 0 SOURCE(S) OF FUNDING (\$) **Components Future Funding Type** Internal Construction **TOTAL Phases Budget** Waterworks 1,405,000 60,000 1,345,000 0 0 1,405,000 0 TOTAL FUNDING 1,405,000 1,405,000 0 Personnel Non Personnel Revenues Expenditures/(Revenues) **OPERATING BUDGET IMPACT** \$0 \$0 \$0 \$0 DCA/LIFE CYCLE DETAILS **DCA** Amount in **Life Cycle** Year Name **Amount** Study Amount in Study: 1,405,000 Amount Incl HST 1,405,000 Year in the study 2021 DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:

Additional Project Information for Projects > \$500k

all phases)

Related Projects

Alignment to the Strategic Plan

Related Maps

Environmental Services

Project	Sanitary Sewers – Rehabilitation
2021 Capital Request	\$1,406,000
Funding Source	Waterworks Reserves
Description of Program	Program to rehabilitate the main sewer, service laterals using structural liner including repairs to manholes identified through CCTV inspection.
Project Rationale	Timely rehabilitation of sewer pipes will extend the service life of the sanitary sewer system and reduce maintenance cost / liabilities
Legislative Requirement	None
History	Annually \$0.9M - \$1M budget spent (based on past 3 years actuals)
Future Phases	Varies – Based on the outcome of the CCTV inspection results.
Total Project Cost (incl.	25 Years Life Cycle Cost \$45.03M

homes and supports City's vision for a sustainable community

Effective maintenance of sanitary sewer system reduces service interruptions, sewer backups into

• Sanitary Sewer CCTV inspection

Safe and Sustainable Community

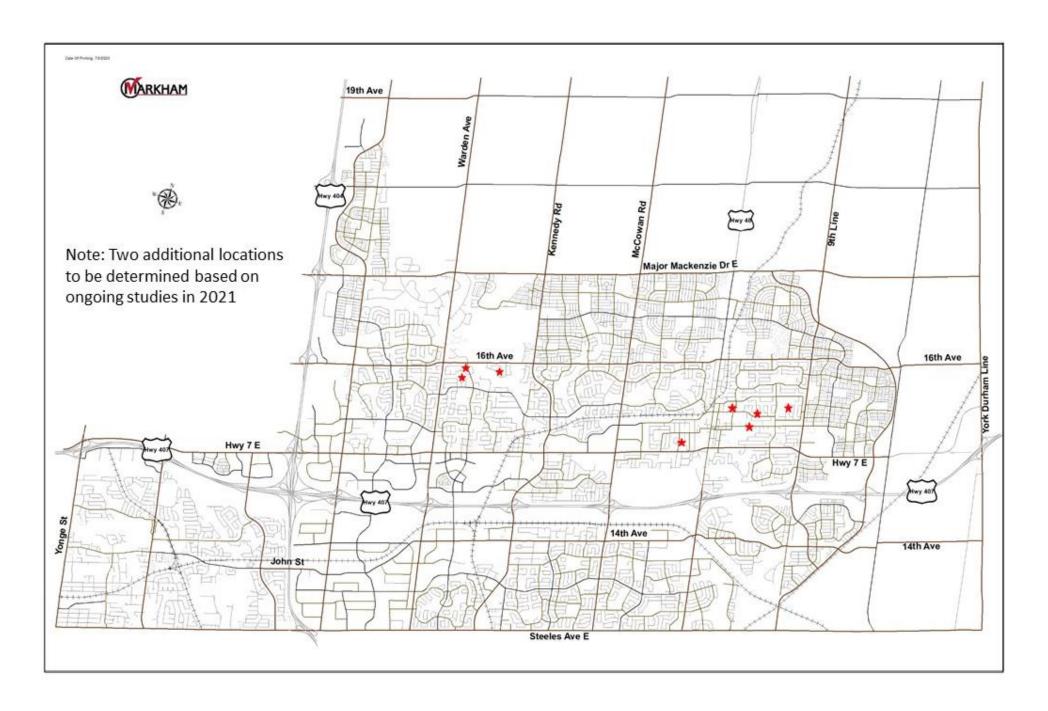


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ARKHAM	2021 PROJECT FUNDING REQUEST FORM	Number:	21174	
	The second secon		4400 600	

Duciost Nomes TT/ 4	4 1711 1876 14	•						2,200
Project Name: Wastewa	iter Flow Monito	ring					Studies/Pilot	Programs
Commission: Communic	ty & Fire Services				ī	Jseful Life:		pproval:
Department: ES - Water					Category:		0 HCA	pprovar. –
Project Mgr: Lijing Xu				C .	• •		1.	
Ward(s): CW ✓ 1	□ 2□ 3□ 4□		D		t Validation:			
5	□ 6□ 7□ 8□		K	equiremen	Validation:	Other(speci	ry in Notes)	
ETAILED DESCRIPTI	ON (SCOPE OF P	ROJECT):						
nis program is to hire a Comedial works to reduce the pprox. 10 locations will be	ne wastewater system be monitored in 202 fall events.	m flood risk d 1 (refer to atta	uring large sched map	e storm eve	ents from inflo sh the level of	ow and infilt	ration (I/I).	
ROJECT COSTS (\$)	2021	E-4 Dl	1	NOTES				
	<u>2021</u>	Future Ph	T T	his is an an			g is for 12 month	
Cost/Quote:	0						report generatio f improvement	
Internal Charges:	0		Um m				Project cost is	
External Consulting:	120,100		<u>0</u> cı		act (expires i	_	·	
Sub Total:	120,100		0					
HST Impact:	2,114		0					
Total Project Cost:	122,200		0					
OURCE(S) OF FUNDIN	[G (\$)			Compo	onents			
nding Type	Budget						TOTAL	<u>Future</u> <u>Phases</u>
terworks	122,200		0	0	0	() 0	
	122,200						0	
TOTAL FUNDING	<u> </u>							
PERATING BUDGET	IMPACT Pe	ersonnel N \$0	on Person	nnel R	evenues \$0	Expenditu	res/(Revenues) \$0	
PERATING BUDGET	IMPACT Pe			nnel R	\$0		\$0	
PERATING BUDGET	IMPACT Pe			nnel R		<u>Life</u>	\$0 Cycle	
PERATING BUDGET CA/LIFE CYCLE DET DCA	IMPACT Pe		\$0		\$0 Amount in	<u>Life</u> — Amou	\$0 Cycle unt in Study:	122,200
PERATING BUDGET CA/LIFE CYCLE DET DCA	IMPACT Pe		\$0		\$0 Amount in	Life — Amou Amou	\$0 Cycle Int in Study: Int Incl HST	122,200 122,200
	IMPACT Pe		\$0		\$0 Amount in	Life — Amou Amou	\$0 Cycle unt in Study:	122,200 122,200
PERATING BUDGET CA/LIFE CYCLE DET DCA	IMPACT Pe	\$0	\$0 Year	Amount	\$0 Amount in	Life — Amou Amou	\$0 Cycle Int in Study: Int Incl HST	122,200
PERATING BUDGET CA/LIFE CYCLE DET DCA Name	IMPACT Pe	\$0	\$0 Year	Amount	\$0 Amount in	Life — Amou Amou	\$0 Cycle Int in Study: Int Incl HST	122,200 122,200

Wastewater Flow Monitoring





2021 PROJECT FUNDING REQUEST FORM

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Year in the study

2021

21175 Number: **Project Cost:** \$1,013,200 Project Name: Water Meters - Replacement Program Repair/Replace Commission: Community & Fire Services Pre Approval: Useful Life: 20 Department: ES - Waterworks Category: Minor Project Mgr: Vikas Thakur Cost Validation: Recent awards CW ✓ 1 □ 2 □ 3 □ 4 □ Ward(s): Requirement Validation: Condition assessment 5 🗆 6 🗆 7 🗆 8 🗆 **DETAILED DESCRIPTION (SCOPE OF PROJECT):** Replacement of Residential, Multi Residential and Industrial/Commercial/Institutional (ICI) water meters that have reached the end of their service life (20 years). Safe & Sustainable Community **BUILDING MARKHAM'S FUTURE TOGETHER: NOTES PROJECT COSTS (\$)** 2021 **Future Phases** This is an annual program. Total inventory: 83,177. This request is Cost/Quote: 995,700 0 to replace approx. 3,929 water meters (3,800 residential, 24 multi residential and 105 ICI) and perform random testing of approx. 5% 0 **Internal Charges:** 0 of meters for accuracy per AWWA C700 (Recommendation #1 for **External Consulting:** 0 0 Improvement on Metering Practices, 2015 by Region of York). There is no substantial backlog and water meters are in a state of Sub Total: 995,700 0 good repair. Unit cost is consistent with recent award plus inflation. 0 **HST Impact:** 17,524 **Total Project Cost:** 1,013,200 0 SOURCE(S) OF FUNDING (\$) **Components Future Funding Type TOTAL Phases Budget** Waterworks 1,013,200 0 0 0 0 0 0 TOTAL FUNDING 1,013,200 0 0 Personnel Non Personnel Revenues Expenditures/(Revenues) OPERATING BUDGET IMPACT \$0 \$0 \$0 \$0 DCA/LIFE CYCLE DETAILS **DCA** Amount in **Life Cycle** Year Name **Amount** Study Amount in Study: 1,013,200 Amount Incl HST 1,013,200

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

Program Name: Water Meters - Replacement Program

Department: Environmental Services

Year	Project #	Past	2021	Future	Total
2018	#18303	\$691,000			\$691,000
2019	#19253	\$802,500			\$802,500
2020	#20266	\$996,700			\$996,700
2021	#21175		\$1,013,200		\$1,013,200
2022 Onwards				varies	varies
Total		\$1,799,200	\$1,013,200		

Type of Water Meter	Total Inventory	2020	2021 Program	
	(as of Jan 2020)	Program		
Residential	80,529	3,800	3,800	(4.7%)
Multi Residential	505	25	24	(4.8%)
Industrial/ Commercial/ Institutional (ICI	2,143	105	105	(4.9%)
Total	83,177	3,930	3,929	(4.7%)

Description of Program

Replacement of Residential, Multi-Residential and Industrial/Commercial/Institutional (ICI) water meters that have reached the end of their service life (20 years)

What was completed in the past

See above table

Current ask

Water Meters - Replacement Program (#21175): \$1,013,200

Future Phases

Varies

Related 2021 Project(s)

N/A

Map N/A



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21176 Number: **Project Cost:** \$37,500 Project Name: Watermain Leak Detection Program Studies/Pilot Programs Commission: Community & Fire Services Pre Approval: Useful Life: Department: ES - Waterworks Category: Minor Project Mgr: Shu Min Gao Cost Validation: Recent awards CW ✓ 1 □ 2 □ 3 □ 4 □ Ward(s): Requirement Validation: Other(specify in Notes) 5 6 7 8 **DETAILED DESCRIPTION (SCOPE OF PROJECT):** This program is to perform leak detection on all metalic watermain within the City (total inventory of 280 km which has been reduced over the years as cast iron pipes have been replaced with PVC). The results of investigation will idenify leak location to be repaired. Safe & Sustainable Community **BUILDING MARKHAM'S FUTURE TOGETHER:** NOTES **PROJECT COSTS (\$)** 2021 **Future Phases** This program is performed once every 2 years. The last program Cost/Quote: 0 0 undertaken in 2019 identified a total of 20 detectable leaks (1 watermain, 19 from service connections). This prevented potential 0 **Internal Charges:** 0 watermain breaks. Amount requested is consistent with 2020 **External Consulting:** 36,900 0 Waterworks Reserve Study Update. Sub Total: 36,900 0 0 **HST Impact:** 649 **Total Project Cost:** 37,500 0 SOURCE(S) OF FUNDING (\$) **Components Future Funding Type TOTAL Phases Budget** Waterworks 37,500 0 0 0 0 0 0 TOTAL FUNDING 37,500 0 0 Personnel Non Personnel Revenues Expenditures/(Revenues) OPERATING BUDGET IMPACT \$0 \$0 \$0 \$0 DCA/LIFE CYCLE DETAILS **DCA** Amount in **Life Cycle** Year Name **Amount** Study Amount in Study: 41,200 Amount Incl HST 37,500 Year in the study 2021 DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:



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Number: 21177

Draiget Names C. 4 C. 14 LC. 4		Project (Cost:	\$1,557,100
Project Name: Corporate Capital Contingency Commission: Corporate Wide Department: Corporate Wide	_	Jseful Life:	New 0	Asset/Expansion Pre Approval:
Project Mgr:	Category: Cost Validation: Requirement Validation:	Other(speci		
DETAILED DESCRIPTION (SCOPE OF PROJECT): Total amount of contingency for 2021 applicable capital projects.				

BUILDING MARKHAM'S FUTURE TOGETHER:

PROJECT COSTS (\$)	<u>2021</u>	Future Phases
Cost/Quote:	1,557,093	0
Internal Charges:	0	0
External Consulting:	0	0
Sub Total:	1,557,093	0
HST Impact:	0	0
Total Project Cost:	1,557,100	0

NOTES

Other Internal funding breakdown: \$8,960 Non-DC Growth, \$3,800 Waterworks reserve, \$2,510

Development fee reserve

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

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)	
OT EXECUTION DEPOSED A MARKET	\$0	\$0	\$0	\$0	

Page 511 **498 DCA/LIFE CYCLE DETAILS DCA** Life Cycle Amount in Year Name **Amount** Study 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:



Page 512 **499**

21004 Number: **Project Cost:** \$25,400 Project Name: Theatre Fire Alarm 2 Stage Conversion Repair/Replace Commission: Development Services Pre Approval: Useful Life: 20 Department: Theatre Category: Minor Project Mgr: Andrew Rosenfarb Cost Validation: Third party estimate Ward(s): CW ✓ 1 □ 2 □ 3 □ 4 □ 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. Safe & Sustainable Community **BUILDING MARKHAM'S FUTURE TOGETHER:** NOTES **PROJECT COSTS (\$)** 2021 **Future Phases** Amount requested is consistent with life cycle. All theatres and Cost/Ouote: 25,000 0 attractions researched have 2 stage alarms to avoid unnecessary evacuations and is considered industry standard. Fire department Internal Charges: 0 0 has been consulted and they have no concerns as long as the **External Consulting:** 0 0 Ontario Fire Code Regulations are met. Sub Total: 25,000 0 **HST Impact:** 0 440 **Total Project Cost:** 25,400 0 SOURCE(S) OF FUNDING (\$) **Components Future**

Funding Type	<u>Budget</u>					TOTAL	<u>Phases</u>
Operating Funded Life Cycle	25,400	0	0	0	0	0	0
TOTAL FUNDING	25,400					0	0

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

DCA/LIFE CYCLE DETAILS

<u>DCA</u>			Amount in	<u>Life Cycle</u>	
Name	Year	Amount	Study	Amount in Study:	2,739,100
				Amount Incl HST	25,400
				Year in the study	2021
DCA and/or Life Cycle: Explain if the	ere is a change in the year ar	nd/or cost:			



2021 PROJECT FUNDING REQUEST FORM 21019 Number:

_					Project (Cost:	\$465.	.200	
Project Name: Berczy B	Beckett Park (Che	rna Ave.) - Desi	gn & Constru	ction		New A	sset/Exp	·	_
Commission: Developm	ent Services			Ша	afal Lifa.	-			
Department: Design					eful Life:	25	Pre App	proval: \square	
Project Mgr: Richard F	ournier			Category: N					
Ward(s): $CW \square 1$	□ 2□ 3□ 4□			Validation: _ F					
5[□ 6♥ 7□ 8□		Requirement	Validation: C	Other(speci	fy in Note	es)		
DETAILED DESCRIPTI		ROJECT):							
This project is to design an measures for existing tree dworks. This will be the last	d construct the 0.44 a luring construction. t park in the Berczy s	acre (0.17 ha) park Program amenities subdivision.	include retainir	ng wall, shade					
BUILDING MARKHAM	I'S FUTURE TOGE	ETHER: Engage	ed, Diverse & Thr	iving City					
PROJECT COSTS (\$)	2021	Eutuma Dhagag	NOTES						_
	<u>2021</u>	Future Phases		\$\$2,736,470 (\$					
Cost/Quote:	370,000	0		zed operating 22. Estimated					
Internal Charges:	37,800	0		ie Life Cycle F					
External Consulting:	50,000	0		ased on update		•			
Sub Total:	457,800	0							
HST Impact:	7,392	0							
Total Project Cost:	465,200	0							
SOURCE(S) OF FUNDIN	[G (\$)		Compo	nents					=
Funding Type	<u>Budget</u>					<u>TO</u>	TAL	<u>Future</u> <u>Phases</u>	
OCA	418,680	0	0	0	()	0	0	_
Parks Cash-in-Lieu	46,520	0	0	0	()	0	0	
TOTAL FUNDING	465,200						0	0	
						<u> </u>			_
OPERATING BUDGET	IMBACT Per	sonnel Non Pe	rsonnel Re	venues I	Expenditu	res/(Reve	nues)		
OI EKATING BUDGET	IVII ACT	\$0 \$	0	\$0		\$0			
DCA/LIFE CYCLE DET	<u>AILS</u>								
<u>DCA</u>				Amount in	<u>Life</u>	Cycle			
Name		Ye		Study	Amor	ınt in Stud	lv:		
Parks - Berczy Beckett N	Neighbourhood Park	20	117 418,680) - ^	int Incl HS	•		
TOTAL FUNDING			418,680	661,500	,				
					Year	in the stu	dy		
DCA and/or Life Cycl	-		ar and/or cost:						
The amenities are less	than anticipated in D	CBS.							



PROJECT COSTS (\$) 2021 Future Phases Cost/Quote: 450,000 0 D Separating cost is \$1,716,563 (\$549,300/0.32ha) or \$691,900 per Annualized operating cost is \$2,934 (0.32ha X \$9,170). Estimate the cost of the cost	
Department: Design Project Mgr: Richard Fournier Ward(s): CW	
Department: Design Project Mgr: Richard Fournier Ward(s): CW 1	
Ward(s): CW 1 2 3 4 Requirement Validation: Requirement Validation: Requirement Validation: Other(specify in Notes) PETAILED 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 Cost/Quote: 450,000 0 NOTES Cost/Quote: 450,000 0 Cost per ha is \$1,716,563 (\$549,300/0.32ha) or \$691,900 per Annualized operating cost is \$2,934 (0.32ha X \$9,170). Estimate of the cost per has in the project of the cost per	
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 (\$) Cost/Quote: 450,000 PROJECT COSTS (\$) Cost/Quote: 450,000 DOTES Cost per ha is \$1,716,563 (\$549,300/0.32ha) or \$691,900 per Annualized operating cost is \$2,934 (0.32ha X \$9,170). Estimated to the Life Cost per half and the Life Cost per	
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 Cost/Quote: 450,000 DOBE Service of Green Lane and Harold Lawrie Lane. Society and associated landscape works. NOTES Cost per ha is \$1,716,563 (\$549,300/0.32ha) or \$691,900 per Annualized operating cost is \$2,934 (0.32ha X \$9,170). Estimate and Harold Lawrie Lane. Cost/Quote: 450,000 OD Cost/Quote: 450,000 OD Cost/Quote: 450,000 Cost/Quote: 450,000 OD Cost/Quote: 450,000	
PROJECT COSTS (\$) 2021 Future Phases Cost/Quote: 450,000 Solve Phases NOTES Cost per ha is \$1,716,563 (\$549,300/0.32ha) or \$691,900 per Annualized operating cost is \$2,934 (0.32ha X \$9,170). Estimate the period of t	
Cost per ha is \$1,716,563 (\$549,300/0.32ha) or \$691,900 per Annualized operating cost is \$2,934 (0.32ha X \$9,170). Estimate the Life Cost per ha is \$1,716,563 (\$549,300/0.32ha) or \$691,900 per Annualized operating cost is \$2,934 (0.32ha X \$9,170). Estimate the Life Cost per ha is \$1,716,563 (\$549,300/0.32ha) or \$691,900 per Annualized operating cost is \$2,934 (0.32ha X \$9,170). Estimate the Life Cost per ha is \$1,716,563 (\$549,300/0.32ha) or \$691,900 per Annualized operating cost is \$2,934 (0.32ha X \$9,170). Estimate the Life Cost per ha is \$1,716,563 (\$549,300/0.32ha) or \$691,900 per Annualized operating cost is \$2,934 (0.32ha X \$9,170). Estimate the Life Cost per ha is \$1,716,563 (\$549,300/0.32ha) or \$691,900 per Annualized operating cost is \$2,934 (0.32ha X \$9,170). Estimate the Life Cost per ha is \$1,716,563 (\$549,300/0.32ha) or \$691,900 per Annualized operating cost is \$2,934 (0.32ha X \$9,170). Estimate the Life Cost per ha is \$1,716,563 (\$549,300/0.32ha) or \$691,900 per Annualized operating cost is \$1,900 per Annualized oper	
1 C1 40 700 In Service date: U3 2022. Costs will be included in the Life C	ated
Reserve Study at time of park assumption based on undated	/cie
External Consulting: 50,000 0 replacement cost for each amenity.	
Sub Total: 540,500 0	
HST Impact: 8,800 0	
Total Project Cost:	
OURCE(S) OF FUNDING (\$) Components	
<u>Futu</u> unding Type Budget TOTAL Pha	
CA 494,370 0 0 0 0	0
arks Cash-in-Lieu 54,930 0 0 0 0	0
TOTAL FUNDING 549,300 0	0
Personnel Non Personnel Revenues Expenditures/(Revenues)	
DPERATING BUDGET IMPACT	
\$0 \$0 \$0 \$0	
CA/LIFE CYCLE DETAILS	
DCA/LIFE CYCLE DETAILS DCA Amount in Life Cycle	
DCA/LIFE CYCLE DETAILS	
DCA/LIFE CYCLE DETAILS DCA Name Amount in Life Cycle Year Amount Study Amount in Study	
DCA/LIFE CYCLE DETAILS DCA Name Parks - Yonge Canac Park DCA Year Amount in Study Amount in Study Amount in Study: 2021 494,370 696,807	
DCA/LIFE CYCLE DETAILS Amount in Name Life Cycle Amount in Study Parks - Yonge Canac Park 2021 494,370 696,807 Amount in Study: Amount in Study: Amount Incl HST TOTAL FUNDING 494,370 696,807 Amount Incl HST	
DCA/LIFE CYCLE DETAILSDCAAmount in YearAmount in AmountLife CycleNameYearAmountStudyParks - Yonge Canac Park2021494,370696,807TOTAL FUNDING494,370696,807Amount Incl HSTYear in the study	
DCA/LIFE CYCLE DETAILSDCAAmount in YearAmount in AmountLife CycleNameYearAmountStudyParks - Yonge Canac Park2021494,370696,807TOTAL FUNDING494,370696,807Amount Incl HSTYear in the study	
DCA/LIFE CYCLE DETAILSDCAAmount in YearAmount in AmountLife CycleNameYearAmountStudyParks - Yonge Canac Park2021494,370696,807TOTAL FUNDING494,370696,807Amount Incl HSTYear in the study	
DCA/LIFE CYCLE DETAILSDCAAmount in YearAmount in AmountLife CycleNameYearAmountStudyParks - Yonge Canac Park2021494,370696,807TOTAL FUNDING494,370696,807Amount Incl HSTYear in the study	

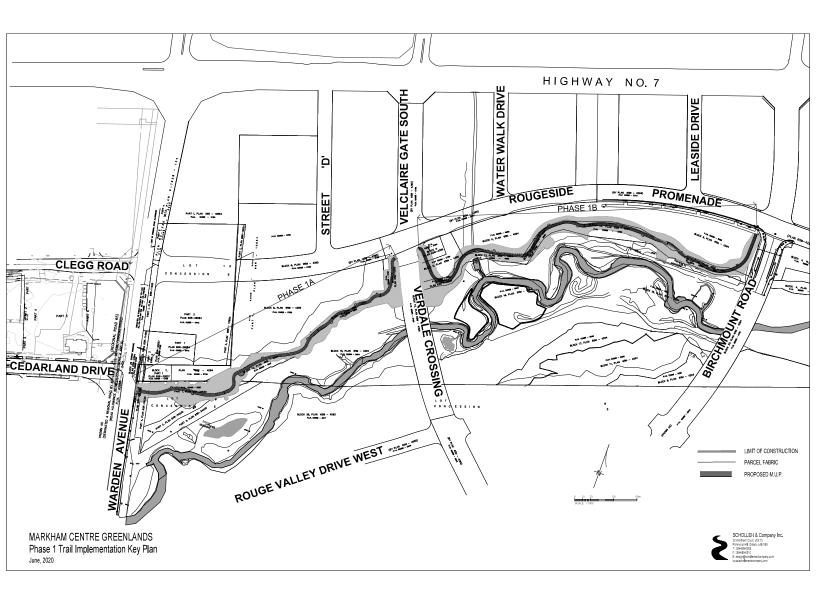


Project Name: Warras are	d Cuandrian Da	ul. Dagian and	l Camataur	a4: a	F	Project (Cost:	\$637	,900
Project Name: Yonge an		irk - Design and	Constru	cuon			New	Asset/Exp	pansion
Commission: Developme	ent Services				Usefu	ıl Life:	25	Pre App	proval:
Department: Design				C	Category: Ma	ior			
Project Mgr: Richard Fo					alidation: Red		rds		
	2 3 4 0		Requir		lidation: Oth			otes)	
	6 7 8	- o o							
DETAILED DESCRIPTION This project is to design and anticipated park amenities in the second	l construct the 0.73	ac (0.29 ha) park l							
BUILDING MARKHAM	'S FUTURE TOG	ETHER: Engag	ged, Diverse	& Thrivin	ng City				
PROJECT COSTS (\$)	2021	Future Phases	NOTI		100 555 (05	35 000 10	201	фо ло (20.5
Cost/Quote:	530,000	0			2,199,655 (\$63 cating cost is \$				
Internal Charges:	47,700	0	in serv	ce date: (Q3 2022. Cost	s will be	e includ	ed in the l	Life Cycle
External Consulting:	50,000	0			t time of park t for each ame		ion bas	ed on upd	ated
Sub Total:	627,700	0	Гергаес	ment cos	t for each and	anty.			
HST Impact:	10,208	0							
Total Project Cost:	637,900	0							
OURCE(S) OF FUNDING	G (\$)		C	omponer	nts				
unding Type	Budget						1	OTAL	<u>Future</u> <u>Phases</u>
CA	574,110	0		0	0	()	0	0
arks Cash-in-Lieu	63,790	0		0	0	()	0	0
TOTAL FUNDING	637,900							0	0
	Pe	rsonnel Non P	ersonnel	Rever	nues Ex	penditu	res/(Re	venues)	
OPERATING BUDGET I	<u>MPACT</u>		\$0	\$0	·	p	\$0	, 0114103)	
CA/LIFE CYCLE DETA	AILS								
<u>DCA</u>		* 7			nount in	Life	<u>Cycle</u>		
Name Parks - Yonge Devron Pa	nels		ear Amo 2020 5	ount ;	Study 613,974	Amou	ınt in Sı	udy:	
TOTAL FUNDING	шк	2		74,110	613,974	Amou	nt Incl	HST	
TOTAL FUNDING			===		013,974	Year	in the s	tudy	
DCA and/or Life Cycle	e: Explain if there is	a change in the ye	ear and/or	cost:					



<u> </u>							
Project Name: Markhar	n Centre Trail Ph	ase 1R Construc	rtion	I	Project Cost:	\$816	,000
		ase 15 Constitut			Nev	w Asset/Ex ₁	pansion
Commission: Developme				Usefi	ul Life: 0	Pre Ap	proval: 🗹
Department: Engineerin Project Mgr: Alberto Li	**			Category: Ma	ıjor		
			Cost V	Validation: Re	cent awards		
, ,	3		Requirement V	alidation: Oth	ner(specify in I	Notes)	
DETAILED DESCRIPTION		OIECT).					
This Budget Request is for			rails on Markha	m Centre. This	location is on	the north si	de of
Rouge River from Verdale							
BUILDING MARKHAM	'S FUTURE TOGE	THER: Safe & S	Sustainable Comm	nunity		-	
PROJECT COSTS (\$)	2021	Future Phases	NOTES				
Cost/Quote:	723,270	0	The 2020 appr				
_				se 1 due to new neable asphalt o			
Internal Charges: External Consulting:	80,000	0	Other internal	is section 37 fu	inding.		
			Operating impa award.	acts will be det	ermined at the	time of cor	ıstruction
Sub Total: HST Impact:	803,270 12,730	0	awaru.				
Total Project Cost:	816,000						
	310,000	0					
OURCE(S) OF FUNDIN	<u>G (\$)</u>		Compon	ents			<u>Future</u>
unding Type	<u>Budget</u>					TOTAL	<u>Phases</u>
CA	530,400	0	0	0	0	0	0
ther Internal	285,600	0	0	0	0	0	0
TOTAL FUNDING	816,000					0	0
	Per Per	sonnel Non Per	rsonnel Rev	enues Ex	penditures/(R	Revenues)	
OPERATING BUDGET		\$0 \$0)	\$0	\$0		
OCA/LIFE CYCLE DETA	AILS						
<u>DCA</u>				mount in	Life Cycle	2	
Name	C. W. I D.I I	Yea		Study	Amount in S	Study:	
Hard - Special Projects - and Regional Land	City Wide - Bike Lane	s on City	530,400	11,325,356	Amount Inc		
TOTAL FUNDING			530,400	11,325,356	Year in the	study	
DCA and/or Life Cycle	e: Explain if there is	a change in the year	r and/or cost:			,	
Deri ana or Ene cycle	2. Explain if there is	a change in the year	and/or cost.				

Markham Centre Phase 1B Construction





Ward(s):

2021 PROJECT FUNDING REQUEST FORM 21049 **Number: Project Cost:** \$290,700 Project Name: Civic Centre Vestibule Repairs and/or Replacements Repair/Replace Commission: Corporate Services Pre Approval: Useful Life: Department: Asset Management Category: Minor Project Mgr: Sameem Shah

DETAILED DESCRIPTION (SCOPE OF PROJECT):

CW □ 1□ 2 ✓ 3□ 4□

Project includes repair/replacement of various components of the Milliken and Great Hall Entrace 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 (\$)	<u>2021</u>	Future Phases
Cost/Quote:	285,672	0
Internal Charges:	0	0
External Consulting:	0	0
Sub Total:	285,672	0
HST Impact:	5,028	0
Total Project Cost:	290,700	0

NOTES \$290,700 - Great Hall Entrance and Milliken Entrance vestibule repair/replacement (1988)

Cost Validation: Published guidelines

Requirement Validation: Condition assessment

Amount is consistent with the 2020 Life Cycle Reserve Study update.

SOURCE(S) OF FUNDING (\$)			Compone	ents			Б.
Funding Type	<u>Budget</u>	Great Hall and Milliken Vestibule				TOTAL	<u>Future</u> <u>Phases</u>
Operating Funded Life Cycle	290,700	290,700	0	0	0	290,700	0
TOTAL FUNDING	290,700				=	290,700	

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)	
OI DAMINIO DODGET IVITATO	\$0	\$0	\$0	\$0	

	\$0	\$0		\$0	\$0	
CA/LIFE CYCLE DETAILS						
<u>DCA</u>				Amount in	<u>Life Cycle</u>	
Name		Year	Amount	Study	Amount in Study:	868,800
					Amount Incl HST	290,700
					Year in the study	2021
DCA and/or Life Cycle: Exp	plain if there is a change in	n the year ar	nd/or cost:			
	·	-				



Courate capital budget request for 2021. The 37 year old HVAC system is original to the building and has been deemed at the end of suseful life. This project includes replacement of the venues major HVAC equipment including all air handlers and associated quipment (\$1,382,602) and the building automation system (\$424,198) RUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community ROJECT COSTS (\$)
Department: Asset Management Project Mgr: Jason Vasilaki Ward(s): CW 1 2 3 4 5 6 7 8 8 Cost Validation: Cost Validation: Codition assessment Project Mgr: Jason Vasilaki Ward(s): CW 2 1 2 3 4 4 5 6 7 8 8 Cost Validation: Codition assessment Project Mgr: Jason Vasilaki Requirement Validation: Codition assessment Project Mgr: Jason Vasilaki Cost Validation: Codition assessment Requirement Validation: Codition assessment Project Mgr: Jason Vasilaki Codition assessment Project Mgr: Jason Vasilaki Codition assessment Project Mgr: Jason Vasilaki Codition assessment Requirement Validation: Codition assessment Requirement Validation: Codition assessment Project Mgr: Jason Vasilaki Codition assessment Requirement Validation: Codition assessment Requirement Validation: Codition assessment Project Mgr: Jason Vasilaki Requirement Validation: Codition assessment Project Mgr: Jason Vasilaki Requirement Validation: Codition assessment Requirement Validation: Codition assessment Requirement Validation: Codition assessment Project Costs Quote: 1, 201, 1 1 2 3 4 4 4 1 2 4 4 2 4 4 2 4 4 2 4 4 2 4 4 4 4
Project Mgr: Jason Vasilaki Ward(s): CW
Ward(s): CW Z 1
Requirement Validation: Condition assessment
The Ayear 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 suefful life. This project includes replacement of the venues major HVAC equipment including all air handlers and associated quipment (\$1,382,602) and the building automation system (\$424,198) **BUILDING MARKHAM'S FUTURE TOGETHER:** **Safe & Sustainable Community** **ROJECT COSTS (\$)
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 suesful life. This project includes replacement of the venues major HVAC equipment including all air handlers and associated quipment (\$1,382,602) and the building automation system (\$424,198) **ROJECT COSTS (\$)** **COSt/Quote:** 1,806,800
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. DURCE(S) OF FUNDING (\$)
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.
Internal Charges: 80,000 0
External Consulting: 80,000 0 0
Sub Total: 1,966,800 HST Impact: 33,208 Total Project Cost: 2,000,000 0
HST Impact: 33,208 0 0
Cource Cost Components Components Future Phases
Components Future Phases
Non Personnel Revenues Sundatures Su
Non Personnel Sudest Sud
Personnel Non Personnel Revenues Expenditures/(Revenues)
TOTAL FUNDING 2,000,000
Personnel Non Personnel Revenues Expenditures/(Revenues) \$0 \$0 \$0 \$0 CCA/LIFE CYCLE DETAILS DCA Amount in Life Cycle
\$0 \$0 \$0 \$0 CCA/LIFE CYCLE DETAILS DCA Amount in Life Cycle
\$0 \$0 \$0 \$0 CCA/LIFE CYCLE DETAILS DCA Amount in Life Cycle
\$0 \$0 \$0 \$0 CCA/LIFE CYCLE DETAILS DCA Amount in Life Cycle
DCA Amount in Life Cycle
Amount in Entertyte
Name Year Amount Study
Amount in Study: 2,739,100
Amount Incl HST 91,200
Year in the study 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 inplace 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:

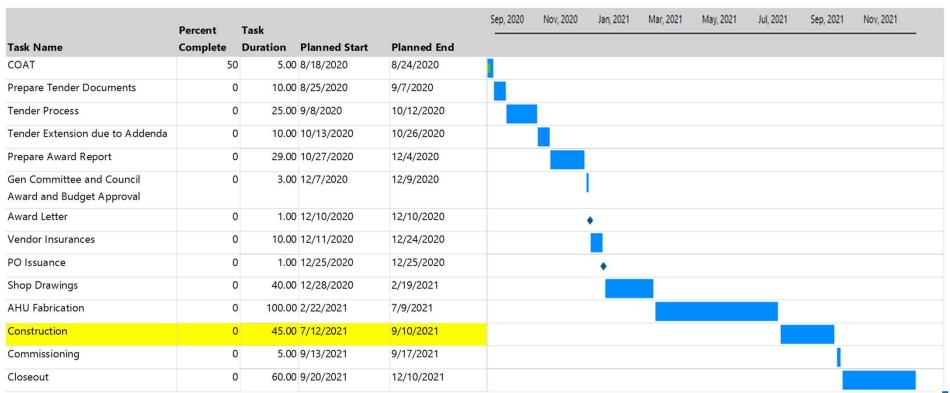
- Construction work is expected to take place beginning of July to mid-September of 2021.
- The time line above:
 - allows for sufficient factory fabrication time of the new units once procured (approximately 6 months lead time required)
 - is beneficial for moderating temperatures within the building 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





BUILDING MARKHAM'S FUTURE TOGETHER 2020 – 2023 Strategic Plan



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
•	Internal Charges -	\$	80,000
•	Total Project Cost	\$ 2	,000,000

- \$24,400 estimated annual energy efficiency savings (21% reduction)
- \$13,000 estimated one-time energy conservation incentives



Page 536 **523**

21071 Number: **Project Cost:** \$63,300 Project Name: SCBA Decontamination Machine New Asset/Expansion Commission: Community & Fire Services Pre Approval: Useful Life: 10 Department: Fire & Emergency Services Category: Minor Project Mgr: Adam Grant Cost Validation: Third party estimate CW ✓ 1 □ 2 □ 3 □ 4 □ Ward(s): Requirement Validation: Other(specify in Notes) 5 🗆 6 🗆 7 🗆 8 🗆 **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. Safe & Sustainable Community **BUILDING MARKHAM'S FUTURE TOGETHER:** NOTES **PROJECT COSTS (\$)** 2021 **Future Phases** After each firefighting operation, it is standard procedure for Cost/Ouote: 62.246 0 firefighters to launder their bunker gear (jacket, pants, boots) at one of two laundry stations. However, SCBA gear is currently not **Internal Charges:** 0 0 decontaminated after each operation. Markham Fire Services would **External Consulting:** 0 0 like to include the decontamination of SCBA gear after each operation as part of standard procedure. The decontamination Sub Total: 62,246 0 practice reduces the risk of developing job related cancers. Cost of 1,096 0 **HST Impact:** each decontamination machine unit is \$31.650. **Total Project Cost:** 63,300 0 SOURCE(S) OF FUNDING (\$) **Components Future Funding Type TOTAL Phases Budget** Tax 63,300 0 0 0 0 0 0 TOTAL FUNDING 63,300 0 0 Personnel Non Personnel Revenues Expenditures/(Revenues) OPERATING BUDGET IMPACT \$0 \$0 \$0 \$0 DCA/LIFE CYCLE DETAILS **DCA** Amount in **Life Cycle** Year Name **Amount** Study 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:



Page 538 **525**

2021 PROJECT FUNDING REQUEST FORM	Number:	21101

Project Name: Ambalt 1	Dogwyfo oin a				Project (Cost:	\$6,815	5,800
Project Name: Asphalt 1						Repair/I	Replace	;
Commission: Communit				Ţ	Jseful Life:	20 I	Pre App	oroval: 🔽
Department: Operations				Category:	Minor			
Project Mgr: Zoyeb Val			Co	ost Validation:		rds		
Ward(s): $CW \boxed{\bullet} 1$	2 3 4			nt Validation:				
5	□ 6□ 7□ 8□		requireme	iii vandation.	Condition a			
DETAILED DESCRIPTION Asphalt resurfacing of road overall goal is to maintain a sesigned to extend pavement esting, route and seal, steel BUILDING MARKHAM	s throughout the Ci an acceptable paven at life and reduce o , and AC index. Va	ty utilizing a pavem nent condition index verall maintenance of rious strategies are	and user sati	sfaction by impad network. On the specific bases	plementing c ther work inc	ost effectiveludes inter	ve strate rlock, n	egies
PROJECT COSTS (\$)	2021	Enture Dhagag	NOTES					
	<u>2021</u>	Future Phases	_	surfacing of ap				
Cost/Quote:	6,610,428	0		6.8km of four omparable to la				
Internal Charges:	89,002	0		this program. I				
External Consulting:	0	0	annually in	dicates 2019 p	avement con	dition resu	lt show	s that
Sub Total:	6,699,430	0	72.9% of t	ne road networ	k is deemed	good or be	tter (tai	get = 80%).
HST Impact:	116,344	0						
Total Project Cost:	6,815,800							
OURCE(S) OF FUNDIN	<u>G (\$)</u>		Com	ponents				F-4
unding Type	<u>Budget</u>					<u>TO :</u>	<u>ral</u>	<u>Future</u> <u>Phases</u>
	< 71 7 000	0	0	0	()	0	0
as Tax	6,715,800	0	U					
	6,715,800	0	0	0	()	0	0
ras Tax rperating Funded Life Cycle TOTAL FUNDING				0	(0	0
perating Funded Life Cycle	100,000			0	(
rperating Funded Life Cycle TOTAL FUNDING	100,000 6,815,800	0	0	0 Revenues	Expenditu		0	
perating Funded Life Cycle	100,000 6,815,800	orsonnel Non Pe	0				0	
perating Funded Life Cycle TOTAL FUNDING DPERATING BUDGET DCA/LIFE CYCLE DETA	100,000 6,815,800 Per IMPACT	orsonnel Non Pe	ersonnel	Revenues		res/(Rever	0	
perating Funded Life Cycle TOTAL FUNDING DPERATING BUDGET DCA/LIFE CYCLE DETA DCA	100,000 6,815,800 Per IMPACT	ersonnel Non Pe	orsonnel	Revenues \$0 Amount in	Expenditu	res/(Rever	0	
perating Funded Life Cycle TOTAL FUNDING DPERATING BUDGET DCA/LIFE CYCLE DETA	100,000 6,815,800 Per IMPACT	orsonnel Non Pe	orsonnel	Revenues \$0 Amount in	Expenditure Life	res/(Rever	nues)	
perating Funded Life Cycle TOTAL FUNDING DPERATING BUDGET DCA/LIFE CYCLE DETA DCA	100,000 6,815,800 Per IMPACT	ersonnel Non Pe	orsonnel	Revenues \$0 Amount in	Expenditure Life Amou	res/(Rever \$0	nues)	0
perating Funded Life Cycle TOTAL FUNDING DPERATING BUDGET DCA/LIFE CYCLE DETA DCA	100,000 6,815,800 Per IMPACT	ersonnel Non Pe	orsonnel	Revenues \$0 Amount in	Expenditure Life Amou	res/(Rever \$0 Cycle nt in Study	nues) y: 6, T 6,	815,800
TOTAL FUNDING DPERATING BUDGET DCA/LIFE CYCLE DET DCA Name	100,000 6,815,800 IMPACT Per AILS	ersonnel Non Personnel SO S	orsonnel o ar Amoun	Revenues \$0 Amount in Study	Expenditure Life Amou	res/(Rever \$0 Cycle ant in Study	nues) y: 6, T 6,	815,800 815,800
perating Funded Life Cycle TOTAL FUNDING DPERATING BUDGET DCA/LIFE CYCLE DETA DCA	100,000 6,815,800 IMPACT Per AILS	ersonnel Non Personnel SO S	orsonnel o ar Amoun	Revenues \$0 Amount in Study	Expenditure Life Amou	res/(Rever \$0 Cycle ant in Study	nues) y: 6, T 6,	815,800 815,800
TOTAL FUNDING DPERATING BUDGET DCA/LIFE CYCLE DET DCA Name	100,000 6,815,800 IMPACT Per AILS	ersonnel Non Personnel SO S	orsonnel o ar Amoun	Revenues \$0 Amount in Study	Expenditure Life Amou	res/(Rever \$0 Cycle ant in Study	nues) y: 6, T 6,	815,800 815,800
TOTAL FUNDING DPERATING BUDGET DCA/LIFE CYCLE DET DCA Name	100,000 6,815,800 IMPACT Per AILS	ersonnel Non Personnel SO S	orsonnel o ar Amoun	Revenues \$0 Amount in Study	Expenditure Life Amou	res/(Rever \$0 Cycle ant in Study	nues) y: 6, T 6,	815,800 815,800
TOTAL FUNDING DPERATING BUDGET DCA/LIFE CYCLE DET DCA Name	100,000 6,815,800 IMPACT Per AILS	ersonnel Non Personnel SO S	orsonnel o ar Amoun	Revenues \$0 Amount in Study	Expenditure Life Amou	res/(Rever \$0 Cycle ant in Study	nues) y: 6, T 6,	815,800 815,800
perating Funded Life Cycle TOTAL FUNDING DPERATING BUDGET DCA/LIFE CYCLE DET DCA Name	100,000 6,815,800 IMPACT Per AILS	ersonnel Non Personnel SO S	orsonnel o ar Amoun	Revenues \$0 Amount in Study	Expenditure Life Amou	res/(Rever \$0 Cycle ant in Study	nues) y: 6, T 6,	815,800 815,800



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\$678,900

21113 **Number:**

Project Cost:

Parking I	Lots- Renabilitat	1011					Repair/Rep	lace
Commission: Community	y & Fire Services				ī	Jseful Life:		Approval:
Department: Operations	- Roads						20 116	Approvai. —
Project Mgr: Zoyeb Vah	ora			_	Category:			
Ward(s): CW ✓ 1	2 3 4 4				Cost Validation:			
5] 6□ 7□ 8□			Requirem	ent Validation:	Condition a	ssessment	
DETAILED DESCRIPTION	ON (SCOPE OF P	ROJECT)	:					
Complete rehabilitation of s nd asphalt infrastructure, a		-	_	•		al and replac	cement of con	crete, interlock
BUILDING MARKHAM	S FUTURE TOG	ETHER:	Safe &	Sustainable (Community			
PROJECT COSTS (\$)	<u>2021</u>	<u>Future F</u>	<u>'hases</u>	NOTES Pobabilita	tion of Millor	word incide a	ota (10 088sa	m), and German
Cost/Quote:	667,139		0					ne program. The
Internal Charges:	0		0	parking lo	ts are in a state	of good repa	ir.	
External Consulting:	0		0	Unit cost	is consistent wi	th recent awa	rd plus inflati	on.
Sub Total:	667,139		0					
HST Impact:	11,742		0					
Total Project Cost:	678,900	-	0					
OURCE(S) OF FUNDING	G (\$)			Com	ponents			. . .
unding Type	<u>Budget</u>	<u>Mil</u>	ller Yard	Sabist	on		TOTA	<u>Future</u> <u>L Phases</u>
as Tax	678,900	641,	400	37,500	0	(678,900	0
TOTAL FUNDING	678,900						678,900	0
OPERATING BUDGET I	MPACT Per	rsonnel	Non Pe	rsonnel	Revenues	Expenditu	res/(Revenue	s)
TERATING BUDGET I	MACI	\$0	\$	0	\$0		\$0	
CA/LIFE CYCLE DETA	AILS							
<u>DCA</u> Name			Yea	ar Amoui	Amount in Study		Cycle	1.157.100
							nt in Study:	1,475,600
						Amou	nt Incl HST	678,900
						Voor	in the study	2021
						1 cai	in the study	2021
DCA and/or Life Cycle	: Explain if there is	a change i	n the yea	ar and/or cos	t:	1 car	in the study	2021
DCA and/or Life Cycle	: Explain if there is	a change i	n the yea	ar and/or cos	t:	Teal	in the study	2021
DCA and/or Life Cycle	: Explain if there is	a change i	n the yea	ar and/or cos	t:	Tear	in the study	2021
DCA and/or Life Cycle	: Explain if there is	a change i	n the yea	ar and/or cos	t:	Teal	in the study	2021
DCA and/or Life Cycle	: Explain if there is	a change i	n the yea	ar and/or cos	t:	Teat	in the study	2021
DCA and/or Life Cycle	: Explain if there is	a change i	n the yea	ar and/or cos	t:	Teal	in the study	2021

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.

\$1,017,600



2021 PROJECT FUNDING REQUEST FORM

REQUEST FORM Number: 21119

Project Cost:

-	BIOCK Pru	ıning Initiative -	Year 2 of 3				
Commissies	on: Community & Fire Services			<u> </u>		Repair/Repla	ice
	_				Useful Life:	0 Pre A	pproval: 🗹
Department: <u>O</u> Project Mgr: N				Category	: Major		
3 0 =				Cost Validation	: Third party	estimate	
Ward(s): C		2 3 4 0		Requirement Validation	: Visual insp	ection	
		6□ 7□ 8□			-		
		ON (SCOPE OF P)	· · · · · · · · · · · · · · · · · · ·	. 1			
damage resistance tree pruning of 23	and reduces, 3,333 trees		ints which currently ontracted services.	capital project to prune Cit y are over 2,700 per year. T			
				NOTES			
PROJECT COS		<u>2021</u>	Future Phases	Phase 1 is 95% complete			
	/Quote:	1,000,000	777,127	in the neighborhoods wh			
Internal C	_	0	0	trees have been pruned to addressed as part of the			
External Con	isulting:	0	0	budget is being increased	d by \$50K eac	ch year from 20	20 to 2022 to
	b Total:	1,000,000	777,127	ensure a total of \$150K at 2023. Currently, the tree			
	Impact:	17,600	13,677	backlog led to this proac			
Total Projec	et Cost: =	1,017,600	790,800				
SOURCE(S) OF	FUNDING	<u>; (\$)</u>		Components			<u>Future</u>
Funding Type		Budget				TOTAL	Phases Phases
Гах		1,017,600	0	0 0	(0 0	790,800
		1.015.600				0	790,800
TOTAL FUND	OING	<u>1,017,600</u>					
		Per	rsonnel Non Po	ersonnel Revenues	Expenditu	res/(Revenues)	
		Per		ersonnel Revenues 50 \$0	Expenditu	res/(Revenues))
OPERATING B	UDGET I	MPACT Per			Expenditu		
OPERATING B DCA/LIFE CYC DCA	UDGET I	MPACT Per	\$0	Amount in)
OPERATING B	UDGET I	MPACT Per		Amount in	<u>Life</u>	\$0 Cycle	
OPERATING B DCA/LIFE CYC DCA	UDGET I	MPACT Per	\$0	Amount in	Life — Amou	\$0 Cycle unt in Study:	
OPERATING B DCA/LIFE CYC DCA	UDGET I	MPACT Per	\$0	Amount in	Life — Amou	\$0 Cycle unt in Study: unt Incl HST	
OPERATING B DCA/LIFE CYC DCA Name	UDGET I	MPACT Per	\$0 \$\frac{9}{2}\$	Amount in Study	Life — Amou	\$0 Cycle unt in Study:	
OPERATING B DCA/LIFE CYC DCA Name	UDGET I	MPACT Per	\$0 \$\frac{9}{2}\$	Amount in Study	Life — Amou	\$0 Cycle unt in Study: unt Incl HST	
OPERATING B DCA/LIFE CYC DCA Name	UDGET I	MPACT Per	\$0 \$\frac{9}{2}\$	Amount in Study	Life — Amou	\$0 Cycle unt in Study: unt Incl HST	
OPERATING B DCA/LIFE CYC DCA Name	UDGET I	MPACT Per	\$0 \$\frac{9}{2}\$	Amount in Study	Life — Amou	\$0 Cycle unt in Study: unt Incl HST	
OPERATING B DCA/LIFE CYC DCA Name	UDGET I	MPACT Per	\$0 \$\frac{9}{2}\$	Amount in Study	Life — Amou	\$0 Cycle unt in Study: unt Incl HST	
OPERATING B DCA/LIFE CYC DCA Name	UDGET I	MPACT Per	\$0 \$\frac{9}{2}\$	Amount in Study	Life — Amou	\$0 Cycle unt in Study: unt Incl HST	

Project: Block Pruning 3 Year Project

Total Project Cost Table

		Past Projects	Current	Future			
	Project Number(s)	(\$)	Project (\$)	Projects (\$)	Total (\$)		
Project Component 1	20197		\$ 1,244,396		\$ 1,244,396		
Project Component 2			\$ 1,017,600		\$ 1,017,600		
Project Component 3			\$ 790,804		\$ 790,804		
Total (\$)		\$ -	\$ 3,052,800	\$ -	\$ 3,052,800		
Description of Project What was completed in the past?	resistance and reduce year.				•		
What was completed in the past?	Year 1 program was 7	' complete bloc	ks which represe	ented the highes	t risk trees. The		
Include timeline of works done.	year 1 program will b	e 100% complet	te by December	31, 2020.			
Current project objective	Year 2 of the program will be to complete 6 complete blocks which represent the next highest risk trees. The goal is to start in late fall and be complete by June 1, 2021.						
Description of future work required.							
Include estimated timing.	Complete block pruni	ng of map grids	E5,G4,G5,H6,J4	,J5 by June 1, 20	21		

Neighbourhood Tree Maintenance Project 2020, 2021 and 2022 Grids







Project Name: Corporate Fleet Replacement - Non-Fire

2021 PROJECT FUNDING REQUEST FORM

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\$1,620,700

Repair/Replace

21140 Number:

Project Cost:

Commission: Community	y & The Services			Ţ	Jseful Life:	5 Pre	Approval: \square	
Department: Operations - Fleet				Category:				
Project Mgr: Raymond l	Law/Peter Englezak	os	C					
Ward(s): CW ✓ 1	2 3 4		Cost Validation: Other(specify in Notes) Requirement Validation: Multiple(specify)					
5	6□ 7□ 8□		Requirement	Validation:	Multiple(spec	1fy)		
DETAILED DESCRIPTION	ON (SCOPE OF P	ROJECT):						
2021 Annual Fleet Replacer								
optimal replacement interva contained in this program ha program. Total units - 31 un BUILDING MARKHAM	ave reached or surpa its	assed the ORI. User		ere consulte				
PROJECT COSTS (\$)	<u>2021</u>	Future Phases	NOTES	ries 1 to 12	2 years based o	n unite type	Operations	
Cost/Quote:	1,592,680	0			cord trimmers			
Internal Charges:	0	0	Cost Validation	on- Most rec	ent purchase o	f similar uni	it type;	
External Consulting:	0	0			Condition assessed costs. Units sp			
Sub Total:	1,592,680	0	will be purcha	ased with the	most recent te	chnology av	vailable at time	
HST Impact:	28,031	0		roviding ma	ximized fuel ec	conomy with	n minimal	
Total Project Cost:	1,620,700	0	emissions.					
SOURCE(S) OF FUNDIN	G (\$)		Compo	nents			- Eutuma	
Funding Type	<u>Budget</u>	Licensed	Non Licensed	Non F	<u>leet</u>	TOTAL	Future Phases	
Operating Funded Life Cycle	1,620,700	727,633	840,131	52,936	0	1,620,700	0	
TOTAL FUNDING	1,620,700					1,620,700	0	
OPERATING BUDGET 1	MPACT Per	rsonnel Non Pe	rsonnel Re	venues	Expenditures	s/(Revenues	s)	
		\$0 \$	0	\$0	\$0	0		
DCA/LIFE CYCLE DETA	AILS							
DCA Amount in				Life C	<u>ycle</u>			
		Va	Year Amount Study				2,440,500	
<u>DCA</u> Name		Yea	ar Amount	Study	Amount	in Study:	2, : : 0,0 0 0	
		Yea	ar Amount	Study		in Study: Incl HST	1,620,700	
		Yea	ar Amount	Study	Amount	Incl HST	1,620,700	
Name	· Explain if there is			Study	Amount	•		
	e: Explain if there is			Study	Amount	Incl HST	1,620,700	
Name	e: Explain if there is			Study	Amount	Incl HST	1,620,700	
Name	e: Explain if there is			Study	Amount	Incl HST	1,620,700	
Name	e: Explain if there is			Study	Amount	Incl HST	1,620,700	
Name	e: Explain if there is			Study	Amount	Incl HST	1,620,700	

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		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	
								Project 18247 - life extended, deferred to 2021
1426	TRACTOR 4 WD WITH CAB-6320	2003		7,011	OPERATIONS-Non Licensed	Non Licensed		to be re-submitted
1913	90 ' V BIN STOCKPILING CONVEYOR-	2010		4,370	OPERATIONS-Non Licensed	Non Licensed		Deferred from 2020 to 2021
1973	TRAILER-TRAILER	2009			OPERATIONS-Licensed	Licensed		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	F1 270	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	\$30,370 pius 2% lilliation
3328	FULL SIZE PICKUP 4X4 WITH 8' ARCTIC PLOW-F250 FULL SIZE PICKUP 4X4 WITH 8' ARCTIC PLOW-F250	2013	117,208		OPERATIONS / PARKS-Licensed	Licensed	42,838	
3334	ONE TON CREW CAB FLATBED DIESEL-C3500 SILV	2013	81.822		OPERATIONS / PARKS-LICENSED	Licensed	62.242	
3344	CREW CAB DIESEL 9' DUMP	2010	68,384		OPERATIONS-Licensed	Licensed	,	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		Deferred from 2019 to 2021
3458	4 X 4 TRACTOR LOADER	2007			OPERATIONS-Non Licensed	Non Licensed	Previously approved in 2019 (Project 192 \$85,200) - to be resubmitted in 2021 due budget shortfall; Updated price based or 0-20 - \$125k, plus 2% inflation	
3471	ZERO TURN 60" DIESEL POWERED-ZD21F ZERO TURN	2012		1.532	OPERATIONS-Non Licensed	Non Licensed		Deferred from 2020 to 2021
3472	ZERO TURN 60" DIESEL POWERED-ZD21F ZERO TURN	2012		1,306		Non Licensed		Deferred from 2020 to 2021
3493	ZERO TURN MOWER 60" DIESEL POWERED-ZD21F ZERO TURN	2012		1,676	OPERATIONS-Non Licensed	Non Licensed		Deferred from 2020 to 2021
3494	ZERO TURN MOWER 60" DIESEL POWERED-ZD21F ZERO TURN	2012		1,460	•	Non Licensed		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		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	
					 	+		<u> </u>
						Total Pre-Tax HST impact	1,592,680 28,031	
						1131 mipact	20,031	4

 HST impact
 28,031

 Total Project Cost
 1,620,712

 Rounded Off - Project Cost
 1,620,700



2021 PROJECT FUNDING REQUEST FORM

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Number: 21177

D		Project (Cost:	\$1,557,100
Project Name: Corporate Capital Contingency Commission: Corporate Wide Department: Corporate Wide		Useful Life:	New 0	Asset/Expansion Pre Approval: ✓
Project Mgr: Ward(s): 1 □ _ 2 □ _ 3 □ _ 4 □	Category: Cost Validation:	n: Other(specify in Notes)		otes)
ward(s).	Requirement Validation:	Other(speci	fy in No	otes)
DETAILED DESCRIPTION (SCOPE OF PROJECT):				
Total amount of contingency for 2021 applicable capital projects.				

BUILDING MARKHAM'S FUTURE TOGETHER:

PROJECT COSTS (\$)	<u>2021</u>	Future Phases
Cost/Quote:	1,557,093	0
Internal Charges:	0	0
External Consulting:	0	0
Sub Total:	1,557,093	0
HST Impact:	0	0
Total Project Cost:	1,557,100	0

NOTES Other Internal funding breakdown:

\$8,960 Non-DC Growth, \$3,800 Waterworks reserve, \$2,510

Development fee reserve

SOURCE(S) OF FUNDING	CE(S) OF FUNDING (\$)		Components				Future
Funding Type	<u>Budget</u>					TOTAL	Phases
DCA	1,206,461	0	0	0	0	0	0
Gas Tax	217,400	0	0	0	0	0	0
Operating Funded Life Cycle	42,600	0	0	0	0	0	0
Other Internal	15,270	0	0	0	0	0	0
Parks Cash-in-Lieu	70,169	0	0	0	0	0	0
Tax	5,200	0	0	0	0	0	0
TOTAL FUNDING	1,557,100				=	0	0

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

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DCA
Name
Year Amount in Study

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: