## CITY OF MARKHAM 2018 CAPITAL AND OTHER PROGRAMS BUDGET

by Department

# Project Description	Total	Operating Non-Life Cycle	<i>Operating</i> Life Cycle	DC - Reserve	DC - Developer	Other	Description of Other Funding
rojects Under Consideration							
evelopment Services							
Culture							
18000 Culture Public Art Coordinator	45,000	45,000					
TOTAL Culture	45,000	45,000	-	-	-	-	=
Museum							
18001 Museum - Baptist Church	34,000		34,000				
18002 Museum - Strickler Barn Phase 1 of 2	109,400		109,400				
18003 Museum Maintenance	76,000		76,000				_
TOTAL Museum	219,400	-	219,400	-	-	-	=
Theatre							
18004 Stage Equipment Replacement	77,800		77,800				
18005 Building Envelope - Design	29,900		29,900				
18006 Charitable Foundation Startup - Consulting	50,900	50,900					
18007 Facility Electrical Assessment & Replacement	18,800		18,800				
18008 Facility Maintenance	17,500		17,500				
18009 Intelligent Lighting Replacement	63,600		63,600				
18010 Lighting Console & Fixtures Replacement	136,200		136,200				
18011 New Theatre Complex Study	152,600	152,600					
18012 Water Heater Replacement	23,400		23,400				_
TOTAL Theatre	570,700	203,500	367,200	-	-	-	-
Arts Centres							
18016 Gallery HVAC Cooling Tower, Chiller + Exhaust Fan	190,200		190,200				
18017 Gallery McKay House Maintenance	39,700		39,700				
18018 Gallery Varley and McKay House Signage	18,300		18,300				=
TOTAL Arts Centres	248,200	-	248,200	-	-	-	_
Planning							
18020 Secondary Suites: Communication Plan	41,800					41,800	Building Reserve
18021 Consultant Studies	100,000			90,000			Development Fees
18022 Designated Heritage Property Grant Program Yr 2 of 3	30,000						Heritage Reserve
18023 Growth Monitoring Program & Data Collection	17,300			15,570		1,730	Dev. Fees
18024 Heritage Façade Improvements/Sign Replacement	25,000	25,000					

# Project Description	Total	Operating Non-Life Cycle	Operating Life Cycle	DC - Reserve	DC - Developer	Other	Description of Other Funding
18025 Langstaff Master Plan	152,600			137,340		15,260	
18026 Markham Centre Secondary Plan Study	500,000			450,000		50,000	Dev. Fees
18027 Official Plan Conformity - 2017 Provincial Plans	236,300			212,670		23,630	Dev. Fees
18028 Unionville Core Area Streetscape Master Plan	76,300	76,300					
TOTAL Planning	1,179,300	101,300	-	905,580	-	172,420	
Design							
18030 Cornell Park Pavilion & Washrooms Construction	925,300			832,770		92,530	Parks Cash-in-lieu
18031 Box Grove Community Park Bridge -Construction	1,058,200			952,380		105,820	Parks Cash-in-lieu
18033 Markham Centre Riverwalk Urban Park - Design & Const	1,205,500			1,084,950		120,550	Parks Cash-in-lieu
18034 Wismer Park Pavilion &Washrooms - Design & Const.	1,139,600			1,025,640		113,960	Parks Cash-in-lieu
18035 Parking Lot Adjacent Yarl Cedarwood Park - Design & Constr.	150,700			135,630		15,070	Parks Cash-in-Lieu
TOTAL Design	4,479,300	-	-	4,031,370	-	447,930	=
Engineering							
18040 Active Transportation Master Plan	232,900			232,900			
18042 Cycling Awareness Program	86,500	30,275		56,225			
18043 Downstream Improvement Work Program	856,200		299,670	556,530			
18044 Intersection Improvements	695,800			695,800			
18045 John Street MUP Design	152,400	53,340		99,060			
18046 Markham Rd./Mt. Joy Secondary Plan MESP	232,900			232,900			
18047 Planning for Higher Order Transit Stations - Phase 1 of 2	116,800			116,800			
18048 Regional Mid-Block Crossing EA & Design	1,012,500			1,012,500			
18049 Rouge Valley Trail Multi-Use Pathway (Phase 4 of 5)	1,181,900	413,665		768,235			
18050 Sidewalk Construction (City Wide)	1,497,000			973,050		523,950	Gas Tax
18051 Smart Commute Markham – Richmond Hill	76,300			76,300			
18052 Standardizing Capital Works/Capital Specs for Projects	116,800			116,800			
18053 Streetlight Design Criteria & Standards Update	59,100			59,100			
18054 Streetlighting Program (Design)	289,600			289,600			
18055 Traffic Assets Replacement - Annual	175,200		175,200				
18056 Traffic Operational Improvements - Annual	40,700	40,700					
18057 Traffic Signal Controller Upgrades	149,600			149,600			
18058 Transportation Studies Related to Secondary Plans	548,400			548,400			
18059 Victoria Square Boulevard - Detailed Design	743,800			743,800			
18060 2018 Engineering Salary Recovery	924,000			924,000			
18061 Yorktech Drive Extension (Design)	855,400			855,400			
TOTAL Engineering	10,043,800	537,980	474,870	8,507,000	-	523,950	=

# CITY OF MARKHAM 2018 CAPITAL AND OTHER PROGRAMS BUDGET

by Department

# Project Description	Total	Operating Non-Life Cycle	Operating Life Cycle	DC - Reserve	DC - Developer	Other	Description of Other Funding
TOTAL Development Services	16,785,700	887,780	1,309,670	13,443,950	-	1,144,300	
orporate Services							
ITS							
18070 Theatre - Ticketing System Replacement	57,000	57,000					
18071 Library - Web Based Discovery & eResource Mgmt Solution	57,800	57,800					
18072 Fire - Dispatch Upgrade	305,300	305,300					
18073 Operations - Road Occupancy Permit Mapping	25,400	25,400					
18075 Operations - Utility Billing Automation	25,400	25,400					
18077 Enterprise Asset Management Solution - Additional Funds	508,800	352,426				156,374	Waterworks Reserve
18078 Infrastructure Support Specialist	120,700		96,600			24,100	Dev Fees & WW \$12k each
18079 IT Life cycle Asset replacement	492,000		427,546			64,454	Dev Fees & WW \$12k each
18081 Finance - Budgeting Software (Additional Funding)	61,100	48,880				12,220	Dev. Fees \$5k, WW \$7k
TOTAL ITS	1,653,500	872,206	524,146	-	-	257,148	
Finance							
18080 Internal Project Management	960,600		5,800	954,800			
TOTAL Finance	960,600	-	5,800	954,800	-	-	
Sustainability Office							
18082 Alectra Embedded Energy Projects	102,800					102,800	MECO
18083 Angus Glen CC Combined Heat and Power (CHP) System	2,164,100		2,164,100				
18084 Corporate Building Automation System	117,000					117,000	MECO
TOTAL Sustainability Office	2,383,900	-	2,164,100	-	-	219,800	
Asset Management							
18085 8100 Warden Facility Improvements	71,400		71,400				
18086 Accessibility Retrofit Program	102,000		102,000				
18087 Building Condition Audit - FTE	141,100		141,100				
18088 Building Envelope/Structural Review	76,500		76,500				
18089 Civic Centre Improvements	214,600		214,600				
18090 Corporate Accommodations	170,000		170,000				
18091 Corporate Security Operations & System Upgrades	613,600	196,624	416,976				
18092 Designated Substances Management	123,400		123,400				
18093 Fire Facility Improvements	306,200	61,200	245,000				
18094 Library Facility Improvements	203,000		203,000				

# Project Description	Total	Operating Non-Life Cycle	Operating Life Cycle	DC - Reserve	DC - Developer	Other	Description of Other Funding
18096 Operations Facilities Improvements	230,100		230,100				
18097 Facility Improvements	348,600		348,600				
18098 Parking Lot Light Replacement	91,800		91,800				
18099 Recycling Depot Improvements	76,500		76,500				
18100 Roofing Maintenance and Repair	61,200		61,200				
18101 Roofing Replacement Projects	1,128,100		1,128,100				
18102 Satellite Community Centre Improvements	127,900		127,900				
18103 Tennis Clubhouse Improvements	10,200		5,100			5,100	Tennis Club
18104 Crosby Arena Canopy Installation	20,400	20,400					
TOTAL Asset Management	4,137,000	278,224	3,853,676	-	-	5,100	=
TOTAL Corporate Services	9,135,000	1,150,430	6,547,722	954,800	-	482,048	-
mmunity & Fire Services							
Fire & Emergency Services							
18110 Air Monitor Devices	44,900		44,900				
18111 Bunker Gear Life Cycle Replacement	154,900		154,900				
18112 Firefighting Tools & Equipment Replacement	96,700		96,700				
18115 Replacement of Equipment due to Staff Retirements	84,000		84,000				
18116 Rescue Equipment	97,800		97,800				
<b>TOTAL Fire &amp; Emergency Services</b>	478,300	-	478,300	-	-	-	-
Recreation Services							
18120 Angus Glen C.C. Building Automation System	399,900		399,900				
18121 Angus Glen C.C. Drinking Fountains	10,500		10,500				
18122 Angus Glen C.C. Duct Insulation	59,000		59,000				
18123 Angus Glen C.C. Pool Change Room Lockers	174,900		174,900				
18124 Angus Glen C.C. Pool Deck Drain Pipes	53,500		53,500				
18125 Angus Glen C.C. Ride On Floor Scrubber	20,100		20,100				
18126 Armadale C.C. Boiler Pump Replacement	8,200		8,200				
18127 Armadale C.C. Kitchen Equipment Replacement	17,200		17,200				
18128 Armadale C.C. Lobby Furniture and Lighting Retrofit	17,500		17,500				
18129 Armadale C.C. Public Paging & Audio Equipment	10,200		10,200				
18130 Camp Chimo Site Improvements	26,900		26,900				
18131 Centennial C.C. Arena Board Frame & Plastic Replacement	163,600		163,600				
18132 Clatworthy Arena Compressors	120,000		120,000				
18133 Clatworthy Arena Doors	47,000		47,000				
18134 Clatworthy Arena Painting	18,000		18,000				

# Project Description	Total	Operating Non-Life Cycle	<i>Operating</i> Life Cycle	DC - Reserve	DC - Developer	Other	Description of Other Funding
18135 Clatworthy Arena Spectator Benches	5,500		5,500				
18136 Crosby C.C. Exterior Masonry Repairs	55,800		55,800				
18137 Crosby C.C. Painting Exterior Metal Siding	30,000		30,000				
18138 Crosby C.C. Gas Monitors	12,000		12,000				
18139 Crosby C.C. Hot Water Storage Tank	8,000		8,000				
18140 Crosby C.C. West Overhead Doors	20,000		20,000				
18141 Markham Village Arena Heater Replacement	27,300		27,300				
18142 Markham Village Arena Score Clock	13,500		13,500				
18143 Markham Village Emergency Lighting	6,600		6,600				
18145 Milliken Mills C.C Pool Chemical Controller Replacement	12,300		12,300				
18146 Milliken Mills C.C. Pool Dehumidifier	94,500		94,500				
18147 Milliken Mills CC Arena Dehumidifiers	74,600		74,600				
18148 Milliken Mills CC Library Lighting Replacement	36,600		36,600				
18149 Milliken Mills CC Soccer Clubhouse Lighting Replacement	16,000		16,000				
8150 Milliken Mills C.C. Visual Equipment Replacement	12,200		12,200				
8151 Milliken Mills CC Universal Change Room Design Ph 1 of 2	101,800	36,500	65,300				
8152 Morgan Pool Revitalization Project Design-Phase 1 of 2	254,100		254,100				
8154 Mt Joy Condenser	81,400		81,400				
8155 Mt Joy Heated Glycol Pump	8,100		8,100				
8157 Mt Joy Plate & Frame Heat Exchanger	11,200		11,200				
8158 Old Unionville Library Refurbishments	82,000		82,000				
18161 Pan Am Centre Gymnasium Floor Refinishing	25,300		25,300				
8164 Pingle House Exterior Refurbishment	10,400		10,400				
8165 Recreation AED Program	11,100		11,100				
8166 Recreation Aquatic Equipment	85,000		85,000				
8167 Recreation Fitness Equipment	144,000		144,000				
8168 Recreation Pool Grouting	50,000		50,000				
8169 Recreation Program Equipment	97,000		97,000				
8170 Recreation Table and Chairs Replacement	53,700		53,700				
8171 Rouge River C.C. Audio Equipment	8,600		8,600				
8172 Rouge River C.C. Facility Painting	34,900		34,900				
8173 Rouge River C.C. Golf Course Kitchen Equipment	13,500		13,500				
8174 Rouge River C.C. Wood Floor Refurbishment	18,600		18,600				
8175 Thornhill C.C Gymnasium Hardwood Floor Refinishing	13,200		13,200				
18176 Thornhill C.C Lighting Retrofit To LED	76,300		76,300				
8177 Thornhill C.C Painting	7,100		7,100				
8178 Thornhill C.C Washroom Renovation	116,300		116,300				
18179 Thornhill C.C. Arena Changeroom Refurbishments	100,100		100,100				

# Project Description	Total	Operating Non-Life Cycle	Operating Life Cycle	DC - Reserve	DC - Developer	Other	Description of Other Funding
18180 Thornhill C.C. Compressor Replacement	244,200		244,200				
18181 Thornhill C.C. Door Replacement	56,900		56,900				
18182 Thornhill C.C. Duct Insulation	24,900		24,900				
18183 Thornhill C.C. Equipment Replacement	32,400		32,400				
18184 Thornhill C.C. Fitness Changeroom Floor Replacement	22,400		22,400				
18185 Thornhill Fitness Centre Dectron Replacement	25,200		25,200				
18186 Thornlea Gymnasium HVAC	244,000		244,000				
18187 Thornlea Gymnasium Refurbishments	43,500		43,500				
18188 Thornlea Pool Doors	24,500		24,500				
18189 Unionville Train Station Light Fixtures & Panel	13,000		13,000				
18190 Unionville Train Station Refurbishments	11,000		11,000				
18191 Water Street Senior Centre - Painting	33,200		33,200				
TOTAL Recreation Services	3,750,300	36,500	3,713,800	-	-	-	=
Aarkham Public Library							
18195 Customer Service Improvement (E-Resources) -Phase 4 of 5	52,800	52,800					
18196 Library Collections	2,659,400		2,659,400				
18197 Library Furniture, Equipment & Shelving (Phase 3 of 3)	138,200		138,200				
TOTAL Markham Public Library	2,850,400	52,800	2,797,600	-	-	-	=
perations - Roads							
18200 Asphalt Resurfacing	5,933,400		-			5,933,400	) Gas Tax
18201 Boulevard Repairs	55,100		55,100				
18202 Bridge Structure Preventative Maintenance - Roads	24,300		24,300				
18203 City Owned Fence Replacement Program	105,500		105,500				
18204 Don Mills Storm Channel	19,000		19,000				
18205 Emergency Repairs	110,100		110,100				
18207 City Owned Entrance Feature Repairs	33,100		33,100				
18208 Guiderail- Install/Repair/Upgrade	190,400		190,400				
18209 Localized Repairs - Curb & Sidewalk	758,100		758,100				
18211 Parking Lots - Localized Repairs	112,300		112,300				
18212 Parking Lots- Rehabilitation	383,500		383,500				
18213 Railway Crossing Improvements	198,000		135,500			62,500	) Transport Canada grant
18214 Retaining Walls Program	10,200		10,200				
18215 Storm Sewer Inspection	105,800		105,800				
18216 Storm Water Retention Pond Maintenance Program	26,500		26,500				
18217 Winter Maintenance Vehicles	350,000			350,000			
<b>TOTAL Operations - Roads</b>	8,415,300	-	2,069,400	350,000	-	5,995,90	<u>)</u>

# Project Description	Total	Operating Non-Life Cycle	Operating Life Cycle	DC - Reserve	DC - Developer	Other	Description of Other Funding
Operations - Parks							
18220 Artificial Turf- Bill Crothers S.S.	814,100		814,100				
18221 Bleachers (Metal) Replacement at Featherstone Park	10,800		10,800				
18222 Bridge Structure Preventative Maintenance-Parks	24,300		24,300				
18223 City Park Furniture / Amenities	164,900		164,900				
18224 Court Resurfacing/Reconstruction	333,800		232,500			101,30	00 Tennis Clubs
18225 Fence (Backstop and Outfield) Replacement	37,800		37,800				
18226 Fence (Tennis Courts)	31,200		31,200				
18227 Floodlights, Poles & Cross Arms Replacement	65,800		65,800				
18228 Gazebo Refurbishment	43,300		43,300				
18229 Goal Posts Replacement	12,900		12,900				
18230 Markham Trees for Tomorrow	122,100	56,065				66,03	35 Trees for Tomorrow Reserve
18231 Parks Signage Implementation- Phase 3 of 3	158,200		158,200				
18232 Pathways Resurfacing	134,400		134,400				
18233 Planter Replacement	236,800		236,800				
18234 Playstructure Replacement	1,254,300		1,254,300				
18235 Playstructure Rubberized Surface Replacement	52,900		52,900				
18237 Relamping & Fixtures Refurbishment	37,800		37,800				
18238 Replacement of Recycling Containers	80,400		80,400				
18239 Replacement of Boulevard/Park Trees	203,100		203,100				
18240 Sportsfield Maintenance & Reconstruction	132,200		132,200				
18241 Stairways and Retaining Wall Repairs	220,300		220,300				
18242 Morgan Park Ball Diamond	313,600	153,664	159,936				
18243 Rejuvenation of Community Centres Landscapes - Yr 1 of 3	60,000		60,000				
TOTAL Operations - Parks	4,545,000	209,729	4,167,936	-	-	167,33	35
Operations - Fleet							
18245 Corporate Fleet Refurbishing	37,100		37,100				
18246 Corporate Fleet Replacement - Fire	998,700		998,700				
18247 Corporate Fleet Replacement - Non-Fire	1,142,600		1,142,600				
18248 Ice Resurfacing Machine Replacement	194,300		194,300				
18250 New Fleet-Waterworks	50,900					50,90	00 Waterworks Reserve
18251 Waterworks Fleet Replacement	637,600					637,60	00 Waterworks
18252 New Fleet-Parks	27,800			27,800			
18253 Corporate Fleet Growth - Non Fleet	10,200			10,200			
TOTAL Operations - Fleet	3,099,200	-	2,372,700	38,000	-	688,50	00

# Project Description	Total	Operating Non-Life Cycle	Operating Life Cycle	DC - Reserve	DC - Developer	Other	Description of Other Funding
Operations - Utility Inspection & Survey		-	-	-	-	-	
18255 German Mills Meadow - Northern Header Upgrade (Const)	315,500		315,500				
18256 German Mills Meadow-Equipment Maintenance	122,100		122,100				
18257 Survey Monument Replacement	28,100		28,100				_
TOTAL Operations - Utility Inspection & Survey	465,700	-	465,700	-	-	-	-
Dperations - Business & Technical Services							
18261 Public Realm-Markham's Shared Places Our Spaces - Sec.37	111,900					111,900	Section 37
18262 Public Realm-Markham's Shared Places Our Spaces	31,400	31,400					
<b>TOTAL Operations - Business &amp; Technical Services</b>	143,300	31,400	-	-	-	111,900	
Environmental Services - ROW Assets							
18265 Bridges and Culverts - Condition Inspection	30,300		30,300				
18266 Culverts Rehabilitation (2 Structures) - Design & Const.	339,100		339,100				
18267 Culverts Replacement (11 Structures) - Construction	237,600		237,600				
18268 MNRF Monitoring for Capital Projects at Water Crossings	15,900		15,900				
18269 ROW Assets - Structures Program-FTE	136,900		136,900				
18270 Storm Sewer Culvert Inspection	17,200		17,200				
18271 Streetlights - Miscellaneous Requests	152,600	152,600					
18272 Streetlights - Poles Replacement Program	119,400		119,400				_
TOTAL Environmental Services - ROW Assets	1,049,000	152,600	896,400	-	-	-	_
Environmental Services - Environmental Assets							
18275 City-wide Erosion Master Study - Update	160,000		160,000				
18276 Storm Sewer Pipes - Rehabilitation	529,400		-			529,400	Gas Tax
18277 SWM Pond Cleaning - Ponds ID#9 & ID#49	1,136,700		-			1,136,700	Gas Tax
18278 Water Quality Improvements and Geese Control	26,500		26,500				
18279 West Thornhill Flood Control Implementation - Ph2C Constr.	11,900,700					11,900,700	Stormwater \$9.2M, Gas tax \$2M
18280 West Thornhill Flood Control Implementation - Ph4 Design	915,800					915,800	Stormwater \$814k, WW \$102k
<b>TOTAL Environmental Services - Environmental Assets</b>	14,669,100	-	186,500	-	-	14,482,600	T
Environmental Services - Waste							
18286 Textile Recycling - Smart Bins (3)	32,100	32,100					
<b>TOTAL Environmental Services - Waste</b>	32,100	32,100	-	-	-	-	=
Environmental Services - Waterworks							

18291 Cathodic Protection of Ductile Iron Watermains

# Project Description	Total	Operating Non-Life Cycle	<i>Operating</i> Life Cycle	DC - Reserve	DC - Developer	Other	Description of Other Funding
18292 CI Watermain Replacement - West Thornhill Ph 2C Const.	4,519,900					4,519,900	Waterworks Reserve
18293 Curb Box Inspection and Replacement Program	421,400					421,400	Waterworks Reserve
18294 District Metering Area (DMA) Pilot	175,800					175,800	Waterworks Reserve
18296 Online Chlorine Analyzers (2)	50,900					50,900	Waterworks Reserve
18297 Sanitary Sewage Pumping Stations - Condition Inspection	61,100					61,100	Waterworks Reserve
18298 Sanitary Sewage Pumping Stations - Improvements	50,900					50,900	Waterworks Reserve
18299 Sanitary Sewers - Laterals Inspection	142,000					142,000	Waterworks Reserve
18300 Sanitary Sewers - Rehabilitation	1,011,000					1,011,000	Waterworks Reserve
18301 Sanitary Sewers - Syphons Structural Lining	732,700					732,700	Waterworks Reserve
18302 Wastewater Flow Monitoring - Annual Program	152,600					152,600	Waterworks Reserve
18303 Water Meters - Replacement Program	691,000					691,000	Waterworks Reserve
18304 Water System Model Calibration	152,600					152,600	Waterworks Reserve
<b>TOTAL Environmental Services - Waterworks</b>	8,680,000	-	-	-	-	8,680,000	=
TOTAL Community & Fire Services	48,177,700	515,129	17,148,336	388,000	-	30,126,235	-
Corporate Wide	2 1 4 2 9 2 2	104.464	521.021	1 100 475		226.040	
18305 Corporate Capital Contingency	2,143,800	104,464	521,921	1,180,475	-	336,940	Waterworks Reserve \$258K, Gas Tax \$45K Building Reserve \$33K
TOTAL Corporate Wide	2,143,800	104,464	521,921	1,180,475	-	336,940	e e
<b>TOTAL Projects Under Consideration</b>	76,242,200	2,657,803	25,527,649	15,967,225	-	32,089,523	-
-Approved Projects							
Environmental Services -Environmental Assets							
18273 Flood Control Remediation - Study	1,274,000					1,274,000	Stormwater \$1.1M, WW \$165k
18281 Sanitary System Downspout Disconnection Prog - Ph 6	250,000						Stormwater Fee Reserve
<b>TOTAL Environmental Services - Environmental Assets</b>	1,524,000	-	-	-	-	1,524,000	-
TOTAL Pre-Approved Projects	1,524,000	-	-	-	-	1,524,000	-