



Report to: General Committee

Meeting Date: June 6, 2023

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**SUBJECT:** Status of Capital Projects as of March 31, 2023  
**PREPARED BY:** Jay Pak – Senior Manager, Financial Planning and Reporting (Ext. 2514)  
Jemima Lee – Senior Financial Analyst (Ext. 2963)  
Germaine DSilva – Financial Analyst (Ext. 2964)

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**RECOMMENDATION:**

- 1) That the report dated June 6, 2023 titled “Status of Capital Projects as of March 31, 2023 be received; and,
- 2) That the Projects Completed within Scope with Surplus Funds and the Projects Completed within Scope without Surplus Funds, as identified on Exhibit B, be approved for closure and funds in the amount of \$3,986,605 be transferred to the original sources of funding as identified on Exhibit B; and
- 3) That the Projects Closed, and Not/Partially Initiated, as identified on Exhibit C, be approved for closure and funds in the amount of \$128,329 be transferred to the original sources of funding as identified in Exhibit C; and
- 4) That the Non-Development Charge Capital Contingency Project be topped up from the Life Cycle Replacement and Capital Reserve Fund by \$758,809 to the approved amount of \$250,000; and,
- 5) That the Engineering Capital Contingency Project be topped up from the Development Charges - City-Wide Hard Reserve by \$156,827 to the approved amount of \$100,000; and,
- 6) That the Design Capital Contingency Project be topped up from the Development Charges – Parks Development Reserve by \$47,912 to the approved amount of \$100,000; and,
- 7) That the Waterworks Capital Contingency Project be topped up from the Waterworks Stabilization/Capital Reserve by \$148,680 to the approved amount of \$100,000; and,
- 8) That the Staff approved draws from Other Reserves as part of the Capital Contingency process in the amount of \$99,208 be received; and,
- 9) That the funding source for \$55,000 in Project 23155 - Low-Carbon Vehicle Policy Study and Strategy, originally to be funded by Federation of Canadian Municipalities (FCM) grant, be changed from FCM grant to Markham Energy Conversation Office (MECO) fund; and
- 10) That the following new capital projects, initiated subsequent to the approval of the 2023 capital budget, be received:

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Project 22354 – Emergency Repairs – Cornell Pool – Budget of \$50,000 to be funded from the Non-DC Capital Contingency.

Project 23300 – Development Fee and Building Bylaw Review – Budget of \$121,105 to be funded by Development Fees.

- 11) That Staff be authorized and directed to do all things necessary to give effect to this resolution.

### **EXECUTIVE SUMMARY:**

Capital projects are an integral part of the City's operations to ensure City assets are in a good state of repair by performing capital repairs, rehabilitation, replacements and preventive maintenance. Capital projects play an important role in meeting the goals and objectives of the City's Building Markham's Future Together Strategic Plan.

On a semi-annual basis, Finance consolidates information received from Departments and reports to Council through the Status of Capital Projects report, providing an update on projects and how they are progressing.

This Status of Capital Projects report is compiled based on a comprehensive analysis of all open capital projects and is split into the following categories:

#### Section I: Projects Completed Within Scope With/Without Surplus Funds

Exhibit B provides details of these projects. Details are provided for projects with surplus funds of more than 50% of the approved budget or in excess of \$100,000. 155 capital projects are completed within scope with/without return of surplus funds. 98 of the 155 projects have surplus funds remaining in the amount of \$3,986,605 and the remaining 57 projects were fully spent.

#### Section II: Projects Closed and Not/ Partially Initiated

Exhibit C provides details of these projects. 3 capital projects are being closed, and not/partially initiated with a return of surplus funds in the amount of \$128,329.

#### Section III: Capital Contingency Projects

- This section details the projects and rationale for the draws from the capital contingency projects.
- Non-DC Capital Contingency: Top-up of \$758,809 is required from the Life Cycle Replacement & Capital Reserve Fund.
- Engineering DC Capital Contingency: Top up of \$156,827 is required from the City-Wide Hard DC Reserve.
- Design DC Capital Contingency: Top up of \$47,912 is required from the Parks Development DC Reserve.
- Waterworks Capital Contingency: Top up of \$148,680 is required from the Waterworks Stabilization/Capital Reserve.

- Draws from Other Reserves: Since the last report the Treasurer and/or CAO approved draws totaling \$99,208 from Other Reserves Contingencies.

#### Section IV: Change of Funding Source for Low-Carbon Vehicle Policy Study and Strategy

This section details the recommendation to change the funding source in project 23155

#### Section V: Status of Open Projects

This section identifies that there are 806 open capital projects with a budget of \$933.3M (\$590.9M committed, \$342.4M uncommitted).

#### **PURPOSE:**

The purpose of this report is to provide an update on the status of capital projects as of March 31, 2023, and advise Council of the net transfer of funds to reserves.

#### **OPTIONS/ DISCUSSION:**

In an effort to promote timely closure of projects and the return of surplus funds, Staff conducted a status review of all open capital projects as of March 31, 2023.

A detailed listing of projects to be closed and the funding amounts to be transferred are included in the following exhibits:

Exhibit A – Summary of surplus funds from closed projects  
(Summarizes Sections I to II below)

Exhibit B – Projects closed and completed within scope with/without surplus funds  
(Refer to Section I below for details)

Exhibit C – Projects closed and deferred/not or partially initiated  
(Refer to Section II below for details)

#### **SECTION I: PROJECTS COMPLETED WITHIN SCOPE WITH/WITHOUT SURPLUS FUNDS**

155 capital projects completed within scope are listed in Exhibit B with/without return of surplus funds. 98 of the 155 projects have surplus funds remaining in the amount of \$3,986,605 and the remaining 57 projects were fully spent. The following section provides details of capital projects completed within scope with surplus funds of more than 50% of the approved budget or in excess of \$100,000 that will be returned to the applicable funding sources. The list is sorted by percentage of budget remaining.

##### a) Recreation

Project 21084 – Mount Joy CC Gas Monitor Replacement – Budget of \$5,200 with remaining funds of \$5,200 (100% of project budget). Staff were able to complete the project in-house with operating dollars.

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- b) ES - Infrastructure  
Project 22189 – Storm Sewer Pipes Emergency Repairs – Budget of \$57,200 with remaining funds of \$52,480 (92% of project budget). This is an annual project for repairs as needed; there were fewer repairs than anticipated in 2022.
  - c) Engineering  
Project 21025 – Cycling and Pedestrian Advisory Committee (CPAC) – Budget of \$27,900 with remaining funds of \$23,574 (84% of project budget). External funding received from school board.
  - d) SAM – Facility Assets  
Project 22089 – Tennis Clubhouse Repair and/or Replacement – Budget of \$14,625 with remaining funds of \$11,118 (76% of project budget). The contract awarded was more favourable than originally budgeted, and the use of contingency and provisional items was lower than anticipated.
  - e) Engineering  
Project 19042 – Miller Pond Site Preparation and Property – Budget of \$400,000 with remaining funds of \$292,859 (73% of project budget). Alternate outfall location for Rodick Road, Miller Avenue and the Miller Yard to be designed and a new project to be requested at a later date.
  - f) Operations - Roads  
Project 22143 – Citywide Ditching Program – Budget of \$138,400 with remaining funds of \$92,978 (67% of project budget). Contractor could not proceed. This is an annual program and works will continue through next year's project.
  - g) Operations - Roads  
Project 22144 – Don Mill Storm Channel – Budget of \$21,100 with remaining funds of \$12,744 (60% of project budget). Budget included both debris and vegetation removal, however, only debris removal was required.
  - h) Operations - Parks  
Project 22154 – Shade Structure Rehabilitation and/or Replacement – Budget of \$43,700 with remaining funds of \$24,795 (57% of project budget). The contract awarded was more favourable than originally budgeted, and the lower spend is due to the rehabilitation of the asset instead of full replacement.
  - i) Engineering  
Project 20031 – 404 North District Water Supply Environmental Assessment – Budget of \$391,931 with remaining funds of \$220,485 (56% of project budget). After initial consulting costs, York Region took over the project and will complete it.

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- j) SAM – Facility Assets  
Project 22063 – Approaching Net-Zero Energy Emissions (NZEE) Studies – Budget of \$357,481 with remaining funds of \$196,700 (55% of project budget). Infrastructure grant was applied for, and received, to partially fund this project.
- k) SAM – Facility Assets  
Project 21200 – 8100 Warden Facility Repair and/or Replacement – Budget of \$68,000 with remaining funds of \$36,928 (54% of project budget). The contract awarded was more favourable than budgeted. As well, a portion of the project was completed in-house.
- l) Engineering  
Project 19044 – North Markham Transportation Needs Assessment – Budget of \$173,866 with remaining funds of \$91,677 (53% of project budget). York Region carried out work in-house instead of retaining external consultant, reducing overall costs.
- m) ES - Waterworks  
Project 21173 – Sanitary Sewers - Rehabilitation – Budget of \$1,405,000 with remaining funds of \$492,394 (35% of project budget). The use of contingency and provisional items was lower than anticipated.
- n) SAM – Facility Assets  
Project 20076 – Operations Facilities Repair and/or Replacement – Budget of \$648,592 with remaining funds of \$161,738 (25% of project budget). The contract awarded was more favourable than budgeted due to bulk purchases of similar replacements at multiple locations (such as overhead doors). Savings were also realized due to some assets not requiring replacement based on condition assessment.
- o) ES - Waterworks  
Project 21175 – Water Meters – Replacement Program – Budget of \$1,013,200 with remaining funds of \$236,600 (23% of project budget). The use of contingency and provisional items was lower than anticipated.
- p) ES - Waterworks  
Project 21171 – Curb Box Inspection and Replacement Program – Budget of \$714,900 with remaining funds of \$106,935 (15% of project budget). The use of contingency and provisional items was lower than anticipated.
- q) SAM – Facility Assets  
Project 18083 – Angus Glen CC Combined Heat and Power (CHP) System – Budget of \$2,707,466 with remaining funds of \$291,105 (11% of project budget). The contract awarded was more favourable than budgeted, and the use of contingency and provisional items was lower than anticipated.

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r) SAM – Facility Assets

Pan Am Community Centre - Budget of \$83,228,645 with remaining funds of \$401,186 (0% of project budget). The use of contingency and provisional items was lower than anticipated.

**SECTION II: PROJECTS CLOSED AND NOT/PARTIALLY INITIATED**

The following section provides details of 3 capital projects that are closed, and not/partially initiated with a return of surplus funds in the amount of \$128,329 as listed in Exhibit C.

a) Engineering

Project 21041 – Various Walking and Cycling Initiatives – Budget of \$50,400 with remaining funds of \$50,392 (100% of project budget). Project no longer required as scope has been updated and captured in a 2023 capital project.

b) Engineering

Project 22029 – Cedar Avenue Reconstruction – Budget of \$50,000 with remaining funds of \$50,000 (100% of project budget). Project has been postponed by York Region. The project will be re-requested at a later date.

c) Arts Centre

Project 21007 – Gallery Lobby Maintenance – Budget of \$28,700 with remaining funds of \$27,937 (97% of project budget). Floor replacement cancelled due to escalating material and labour costs. The floor replacement was included as part of a 2023 project.

**Return of Funds to the Life Cycle Replacement & Capital Reserve Fund**

In addition to the above list, contract awards greater than \$25,000 with surplus funds are returned to the original funding source(s) at time of award.

Since the last Status of Capital Projects report tabled at General Committee in September 2022, \$656,293 has been returned to the Life Cycle Replacement & Capital Reserve Fund from contract awards.

**SECTION III. CAPITAL CONTINGENCY PROJECTS**

In accordance with the Capital Budget Control Policy, the capital contingency projects are topped up to the maximum approved funding amount through the semi-annual Status of Capital Projects Report to Council.

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**Non-DC Capital Contingency**

The Non-DC Capital Contingency Project was approved to a maximum of \$250,000. Currently, the project currently has a negative balance of \$508,809. Thereby a top-up of \$758,809 is required from the Life Cycle Replacement & Capital Reserve Fund.

For this period, the City experienced increased costs due to the effects of inflation and supply chain pressures on labour and materials. Of the \$758,809 drawn from the Non-DC Capital Contingency Project, \$493,823 (65%) was related to extraordinary economic pressures:

- a) Operations - Fleet  
Project 22170 – Corporate Fleet Replacement – Non-Fire – \$300,268 (11% of project budget) – Additional funds required for the supply and delivery of pick-up trucks, low roof cargo vans, Bylaw enforcement vehicles, mowers, and agricultural tractors as part of 2022 capital replacements due to vehicle cost increases and supply chain challenges.
- b) Operations - Fleet  
Project 22169 – Corporate Fleet Replacement - Fire - \$96,861 (5% of project budget) – Additional funds required for the supply and delivery of Markham Fire and Emergency Services vehicles due to cost increases and supply chain challenges.
- a) Operations – Roads  
Project 22221 – Asphalt Resurfacing – AC Premium - \$39,518 (6% of project budget) – Additional funds required due to increases related to crude oil prices.
- c) Operations - Fleet  
Project 21140 – Corporate Fleet Replacement – Non-Fire – \$37,664 (2% of project budget) – Additional funds required for the supply and delivery of service body sign truck and pick-up trucks as part of 2021 capital replacements due to vehicle cost increases and supply chain challenges.
- d) Recreation  
Project 22099 – Thornhill CC Changeroom Door Replacement - \$19,512 (37% of project budget) – Additional funds required due to cost increases in labour and materials.

The remaining draw of \$264,986 (35%) the Non-DC Capital Contingency Project was necessitated by the following projects:

- b) Recreation  
Project 20144 – Mount Joy CC Low Emissivity Ceiling Replacement - \$61,532 (179% of project budget) – Additional funds required due to change in ceiling material originally budgeted for. The original replacement budget was based on the Crosby CC Low Emissivity Ceiling Replacement; however, Mount Joy's replacement required a more robust material due to a significantly higher number of hockey events.

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c) Recreation

Project 22354– Emergency Repairs – Cornell Pool - \$50,000 (100% of project budget) – Funding required to investigate and repair broken pipe in one of the underground backwash lines at Cornell Pool.

d) SAM – Facility Assets

Project 22084 – Parking Lot Light Pole Replacement - \$46,689 (71% of project budget) – Additional funding required for the unbudgeted replacement of five light poles and fixture heads in the Unionville Presbyterian Church Centre parking lot

The remaining draws of 16% or \$106,765, were each under \$16,000.

**Engineering DC Capital Contingency**

The Engineering DC Capital Contingency Project was approved to a maximum of \$100,000. The project currently has a negative balance of \$56,827 thereby requiring a top up of \$156,827 from the City-Wide Hard DC Reserve.

Of the \$156,827 drawn from the Engineering DC Capital Contingency Project, 97% is related to the following projects:

a) Engineering

Project 20045 – Construction of Pedestrian Crossovers (PXOs) on Copper Creek Drive - \$70,288 (35% of project budget) – Additional funds required due to change in project scope to remove existing subgrade, requiring excavation which necessitated the replacement of curbs, sidewalks and traffic components.

b) Engineering

Project 19036 – Intersection Improvements (Construction) - \$53,420 (3% of project budget) – Additional funds required due to unfavourable market conditions leading to higher prices.

c) Engineering

Project 19033 – Elgin Mills Road Environmental Conditions Study - \$28,819 (4% of project budget) – Additional funds required due to scope change to extend the study area east from Kennedy Road to McCowan Road.

There was 1 additional draw of \$4,300.

**Design DC Capital Contingency**

The Design DC Capital Contingency Project was approved to a maximum of \$100,000. The project currently has a balance of \$56,111 thereby requiring a top up of \$47,912 from the Parks Development DC Reserve.

The use of the contingency account was necessitated by the following projects:



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a) Design

Project 20231 – Supply and Installation of Basketball Court at Grand Cornell Park – \$32,182 (48% of project budget) – Additional funds required due to unfavourable market conditions leading to higher prices.

b) Design

Project 16033 – Markham Centre Rouge Valley Drive West Neighbourhood Park – Design – \$15,730 (13% of project budget) – Additional funds required for additional consultant work associated with unforeseen site conditions.

**Waterworks Capital Contingency**

The Waterworks Capital Contingency Project was approved to a maximum of \$100,000. The project currently has a negative balance of \$48,680 therefore requiring a top up of \$148,680 from the Waterworks Stabilization/Capital Reserve.

Of the \$148,680 drawn from the Waterworks Capital Contingency Project, 82% is related to the following projects:

a) Operations - Fleet

Project 22171 – Corporate Fleet Replacement - Waterworks - \$72,969 (10% of project budget) – Additional funds required for the supply and delivery of Waterworks vehicles as part of 2022 capital replacements due to vehicle cost increases and supply chain challenges.

b) ES – Stormwater

Project 22211 – Wastewater Flow Monitoring - \$48,656 (39% of project budget) – Additional funds required to install six supplementary flow monitors to assess flow conditions to support the Swan Lake Water Quality Program.

There was 1 additional draw of \$27,055.

**Draws from Other Reserves**

Since the last report, 1 draw from Other Reserves was approved related to the following projects:

a) Engineering

Project 19036 – Intersection Improvements (Construction) – \$99,209 from the Non-DC Growth Reserve – This represent 65% of the additional funding required due to unfavourable market conditions leading to higher prices. Project is 65% Non-DC Growth and 35% Development Charges; Remaining 35% draw from the Engineering Capital Contingency.

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**SECTION IV: CHANGE OF FUNDING SOURCE FOR LOW-CARBON VEHICLE POLICY STUDY AND STRATEGY**

As part of the 2023 Budget, Council approved Project 23155 - Low-Carbon Vehicle Policy Study and Strategy in the amount of \$223,900. This project will inform cost-effective deployment of low-carbon municipal fleet vehicles and charging infrastructure to achieve significant emission reductions in alignment with the Municipal Energy Plan goal of net zero emissions 2050, the Provincially required Corporate Energy Management Plan, and Life Cycle planning. Staff had identified in the budget request that there was potential for a Federation of Canadian Municipalities (FCM) grant of up to \$55,000 to partially fund the Corporate Study and Strategy for City-owned fleet vehicles, while the balance of \$168,900 would be funded by: carry over funding from project 17055 in the amount of \$86,952, and the Markham Energy Conservation Office (MECO) fund in the amount of 57,000.

The capital request indicated that if the City was unsuccessful in obtaining the grant, the project would not proceed. Staff were recently informed by FCM that our application was not successful. Staff are seeking feedback and will take the opportunity to reapply but do not expect a response from FCM for six to eight months. Staff believe that this project is worthwhile to undertake, as it will inform the City's approach to investment in EV charging infrastructure, and the City's fleet strategy in the short, medium and longer term. In order to proceed in a more timely way, Staff recommend that this project proceed and that MECO be used to fund the \$55,000 originally to be funded by the FCM grant.

The MECO account is a revolving fund that collects the City's annual solar roof top revenues of about \$300,000 per year and is then utilized through the budget process to fund the City's investments in energy efficiency and renewable energy projects that help reduce our energy costs and emissions. The current MECO account balance is in a good position. This initiative aligns well with MECO objectives and can be accommodated within the account. If the City is successful in obtaining the FCM grant in the next round, funding will be returned to MECO for future use.

**SECTION V: STATUS OF OPEN PROJECTS**

After the closure of 158 projects, there are 806 open capital projects consisting of 747 active projects and 59 projects in warranty with a total budget of \$933.3M as of March 31, 2023. For comparative purposes, the 2023 capital projects approved on April 5, 2023 have been included in the open capital projects count. The term "open" refers to approved projects that have not started, or are at various stages of project completion.

In comparison, the March 2022 status update reported 646 open projects with a total budget of \$670.3M.

Of the 806 open capital projects as at March 31, 2023, 73% of the projects were approved in 2021 to 2023. **(Refer to Table A).**

**TABLE A**

<b>Project approval</b>			<b>Unencumbered</b>
<b>year</b>	<b># of open projects</b>	<b>% of open projects</b>	<b>\$ in M</b>
2023	290	36%	\$163.3
2022	210	26%	\$146.2
2021	87	11%	\$14.4
2020	62	8%	\$2.4
2019 and prior	98	12%	\$13.0
<b>Total Active</b>	<b>747</b>	<b>93%</b>	<b>\$339.3</b>
Warranty	59	7%	\$3.1
<b>Total Open</b>	<b>806</b>	<b>100%</b>	<b>\$342.4</b>

The following summarizes the status of open capital projects:

**TABLE B**

(in millions)	<b>Q1 2023</b>		<b>Q1 2022</b>	
Encumbered/Committed	\$ 590.9	63%	\$ 499.8	74%
Unencumbered/Uncommitted	\$ 342.4	37%	\$ 172.4	26%
<b>Total Open Capital</b>	<b>\$ 933.3</b>		<b>\$ 672.2</b>	

**Encumbered/Committed**

The total 2023 encumbered amount of \$590.9M includes expenditures of \$481.5 (81%) and commitments of \$109.4M (19%). Expenditures refer to payments issued for goods/services received and commitments refer to purchase orders on file with the Procurement Department.

**Unencumbered/Uncommitted**

Major projects, defined as multi-year, one-time projects account for \$335.6M (98% of \$342.4M) of the total unencumbered amount which includes the following projects:

- Roads Design and Construction, including Hwy 404 Midblock Crossing North of 16<sup>th</sup> Avenue and other Hwy 404 related improvements
- Victoria Square Boulevard Phase 1 Construction
- Markham Centre-Rougeside Promenade Park, York Downs Park, Victoria Square West Village Park Design and Construction
- Main Street Unionville Reconstruction
- Secondary Plan and Engineering studies
- Markham Centre: Trails Design and Construction
- Watermain Design and Construction
- West Thornhill Stormwater Management
- Don Mills Channel Flood Control Program

- Corporate Fleet Replacement
- Intersection, Streetlights and Illumination Design and Construction
- Corporate Wide ITS Initiatives

### FINANCIAL CONSIDERATIONS

The net amount of \$2,903,498 as summarized in the following table, will be transferred from Reserves and Reserve Funds as a result of closing capital projects, return of surplus funds from open projects, top-up of capital contingency projects and funding for existing and new projects.

	<b>Funding Returns from Closed Projects</b>	<b>Contingency Projects Top up from Reserves</b>	<b>Net Change to Reserves</b>
	<b>(A)</b>	<b>(B)</b>	<b>(C) = (A) + (B)</b>
Life Cycle Replacement & Capital Reserve	\$1,557,976	(\$758,809)	\$799,167
Development Charge Reserves	\$1,187,553	(\$204,739)	\$982,814
Waterworks Stabilization / Capital Reserve	\$963,084	(\$148,680)	\$814,404
Other Reserves	\$406,320	(\$99,208)	\$307,112
<b>Net Change to Reserves &amp; Reserve Funds</b>	<b>\$4,114,934</b>	<b>(\$1,211,436)</b>	<b>\$2,903,498</b>

Since the last report on Status of Capital Projects tabled at General Committee in September 2023, \$656,293 has been returned to the Life Cycle Replacement & Capital Reserve Fund from contract awards.

### HUMAN RESOURCES CONSIDERATIONS

Not applicable

### ALIGNMENT WITH STRATEGIC PRIORITIES:

Not applicable

### BUSINESS UNITS CONSULTED AND AFFECTED:

All business units managing capital projects have been consulted in the development of this report.

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**RECOMMENDED BY:**

Mark Visser  
Acting Treasurer

Trinela Cane  
Commissioner, Corporate Services

**ATTACHMENTS:**

Exhibit A – Summary of surplus funds from open and closed projects

Exhibit B – Projects closed and completed within scope with/without surplus funds

Exhibit C – Projects closed and not/partially initiated