



Report to: General Committee

Meeting Date: December 6, 2022

SUBJECT: Status of Capital Projects as of September 30, 2022
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)

RECOMMENDATION:

- 1) That the report dated December 6, 2022 titled “Status of Capital Projects as of September 30, 2022” 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 \$751,973 be transferred to the original sources of funding as identified on Exhibit B; and
- 3) That the Projects Closed and Not or Partially Initiated, as identified on Exhibit C, be approved for closure and funds in the amount of \$66,100 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 \$1,751,105 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 \$56,316 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 \$46,220 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 \$9,616 to the approved amount of \$100,000; and,
- 8) That the following new capital projects, initiated subsequent to the approval of the 2022 capital budget, be received:

Project 22343 – John Street Bridge Expansion Joint Replacement – Budget of \$50,371 to be funded from the Non-DC Capital Contingency.

Project 22345 – High Frequency Rail Project - Markham Station – Budget of \$87,396 to be funded 50% by DCA and 50% by York Region.

Project 22352 – Thornhill Fitness Spa Dectron Unit – Budget of \$66,000 to be funded from the Non-DC Capital Contingency.

Project 22353 – South Unionville Underground Storage Tank - Design – Budget of \$102,040 to be funded from Gas Tax.

- 9) 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 or 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. 53 capital projects are completed within scope with/without return of surplus funds. 29 of the 53 projects have surplus funds remaining in the amount of \$751,973 and the remaining 24 projects were fully spent.

Section II: Projects Closed and Not, or Partially Initiated

Exhibit C provides details of these projects. Two capital projects are being closed and not, or partially initiated with a return of surplus funds in the amount of \$66,100.

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 \$1,751,105 is required from the Life Cycle Replacement & Capital Reserve Fund.
- Engineering DC Capital Contingency: Top up of \$56,316 is required from the City-Wide Hard DC Reserve.
- Design DC Capital Contingency: Top up of \$46,220 is required from the Parks Development DC Reserve.
- Waterworks Capital Contingency: Top up of \$9,616 is required from the Waterworks Stabilization/Capital Reserve.

Section IV: Status of Open Projects

This section identifies that there are 617 open capital projects with a budget of \$869.2M (\$524.6M committed, \$344.6M uncommitted).

PURPOSE:

The purpose of this report is to provide an update on the status of capital projects as of September 30, 2022, 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 September 30, 2022.

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

53 capital projects completed within scope are listed in Exhibit B with/without return of surplus funds. 29 of the 53 projects have surplus funds remaining in the amount of \$751,973 and the remaining 24 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) Sustainability and Asset Management
Project 21053 – Library Facilities Repair and/or Replacement Projects – Budget of \$44,900 with remaining funds of \$25,883 (58% of project budget). The contract awarded was more favourable than originally budgeted, and the use of contingency and provisional items was lower than anticipated.

- b) Sustainability and Asset Management
Project 20069 – Civic Centre Repair and/or Replacement Projects – Budget of \$386,707 with remaining funds of \$110,292 (29% of project budget). Lower spend due to removal of exterior wayfinding signs from project scope.

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- c) Sustainability and Asset Management
Project 21050 – Cornell C.C. Parking Garage - Construction – Budget of \$1,614,780 with remaining funds of \$303,414 (19% of project budget). The use of contingency and provisional items was lower than anticipated.

SECTION II: PROJECTS CLOSED AND NOT, OR PARTIALLY INITIATED

The following section provides details of two capital projects that are closed and not, or partially initiated with a return of surplus funds in the amount of \$66,100 as listed in Exhibit C.

- a) Recreation
Project 22093 – Milliken Mills C.C. Divider Wall Replacement – Budget of \$66,100 with remaining funds of \$66,100 (100% of project budget). Project cancelled due to due to escalating material and labour costs. The project will be re-requested in 2024.
- b) Development Services
Project 22046 – (PXO) Implementation at Supervised School Crossings – Budget of \$0 with remaining funds of \$0 (0% of project budget). Scope of work consolidated into project 22047 New Traffic Signals Construction.

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 March 2022, \$340,342 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 four capital contingency projects are topped up to the maximum approved funding amount through the semi-annual Status of Capital Projects Report to Council.

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 \$1,501,105. Thereby a top-up of \$1,751,105 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 \$1,751,105 drawn from the Non-DC Capital Contingency Project, \$912,025 (52%) was related to extraordinary economic pressures:

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- a) Operations - Roads
Project 22221 – AC Index – \$451,850 (255% of project budget) – Additional funds required due to increases related to crude oil prices.
 - b) Operations - Parks
Project 22153 – Playstructure & Rubberized Surface Replacement - \$194,226 (22% of project budget) – Additional funds required due to cost increases in labour and materials.
 - c) Recreation
Project 22095 – Armadale CC Washroom and Changeroom Refurbishment - \$74,668 (9% of project budget) – Additional funds required due to unfavourable market conditions leading to higher prices.
 - d) Recreation
Project 22117 – Cornell Lighting - \$43,606 (64% of project budget) – Contract awarded higher than budget based on market prices.
 - e) Recreation
Project 22113 – Milliken Mechanical Replacement - \$41,461 (36% of project budget) – Additional funds required due to unfavourable market conditions leading to higher prices.
 - f) Sustainability and Asset Management
Project 20083 – Roofing Replacement Projects - \$36,885 (9% of project budget) – Additional funds required due to unfavourable market conditions leading to higher prices.
 - g) Operations - Roads
Project 22146 – Emergency Repairs - \$34,922 (21% of project budget) – Additional funds required for road repairs due to cost increases in labour and materials.
 - h) Operations - Roads
Project 22141 – Guiderail Install/Repairs - \$34,407 (22% of project budget) – Additional funds required due to cost increases in labour and materials.

The remaining draw of \$839,080 (48%) the Non-DC Capital Contingency Project was necessitated by the following projects:

- a) ITS
Project 19274 – ITS – Computer Replacement phase 2 - \$178,080 (81% of project budget) – Funding required to replace failing hardware and peripherals not included in the original budget.

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- b) Recreation
Project 20139 – Milliken Mills Lobby Enhancement - \$97,540 (11% of project budget) – Additional funds required due to unplanned works related to change in scope to handrails to meet code requirements, change in size of underground piping discovered at demolition, and unanticipated demolition of concrete where conduits were buried.
- c) Recreation
Project 22352 – Thornhill Fitness Spa Dectron Unit - \$66,000 (0% of project budget) – Funding required to repair Dectron unit compressor components, damaged from refrigerant leak.
- d) ES - Infrastructure
Project 22343 – John Street Bridge Expansion Joint Replacement - \$50,371 (0% of project budget) – Funding required to repair existing expansion joint which heaved during February’s windstorm and was further damaged from plowing.
- e) Operations - Roads
Project 22138 – City Owned Entrance Feature Rehabilitation/Replacement - \$45,377 (29% of project budget) – Additional funds required to repair and reinforce extreme foundation deterioration at two planned rehabilitation sites.
- f) Sustainability and Asset Management
Project 20084 – Satellite Community Centre Repair and/or Replacement &
Project 21201 – Facility Accessibility Retrofits - \$40,553 (15% of project budget) – Funding required to address unforeseen scope changes related to: waterproofing a section of the foundation wall, rewiring faulty baseboard heaters, and redesigning ramp slope to comply with Accessibility Design Guidelines.
- g) Recreation
Project 20156 – Recreation Building Automation Replacement - \$35,987 (16% of project budget) – Additional funds required to address deficiencies discovered on pipework and mechanical service accessories at time of repair.

The remaining draws of 19% or \$325,172, were each under \$30,000.

Engineering DC Capital Contingency

The Engineering DC Capital Contingency Project was approved to a maximum of \$100,000. The project currently has a balance of \$43,684 thereby requiring a top up of \$56,316 from the City-Wide Hard DC Reserve.

Of the \$56,316 drawn from the Engineering DC Capital Contingency Project, 82% is related to the following projects:

- a) Engineering
Project 22036 – Markham Road MUP Cross-rides (Construction) - \$33,239 (15% of project budget) – Additional funds required due to unfavourable market conditions leading to higher prices.

- b) Engineering
Project 20045 – Sidewalk Program (Design) - \$12,822 (3% of project budget) – Additional funds required to relocate existing curb to accommodate new sidewalk design.

There was 1 additional draw of \$10,255.

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 \$53,780 thereby requiring a top up of \$46,220 from the Parks Development DC Reserve.

Of the \$46,220 drawn from the Design DC Capital Contingency Project, 91% is related to the following project:

- a) Design
Project 19027 – Cornell Maintenance Building – \$42,197 (0% of project budget) – Additional funds required due to unforeseen revisions to expand parking lot entrance design and obtain corresponding permits.

There was one additional draw of \$4,023.

Waterworks Capital Contingency

The Waterworks Capital Contingency Project was approved to a maximum of \$100,000. The project currently has a balance of \$90,384 therefore requiring a top up of \$9,616 from the Waterworks Stabilization/Capital Reserve.

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

- a) ES - Infrastructure
Project 22210 – Sanitary Sewer Pipes - Rehabilitation - \$9,616 (1% of project budget) – Additional funds required for contract administration and site inspection related to the repairs, which were not included in the original budget.

Draws from Other Reserves

There were no draws from Other Reserves.

SECTION IV: STATUS OF OPEN PROJECTS

After the closure of 55 projects, there are 617 open capital projects consisting of 567 active projects and 50 projects in warranty with a total budget of \$869.2M as of September 30, 2022. The term “open” refers to approved projects that have not started, or are at various stages of project completion.

In comparison, the September 2021 status update, reported 479 open projects with a total budget of \$594.8M.

Of the 617 open capital projects as at September 30, 2022, 75% of the projects were approved in 2020 to 2022. (Refer to Table A).

TABLE A

Project approval year	# of open projects	% of open projects	Unencumbered \$ in M	% of Unencumbered \$
2022	273	44%	\$280.1	81%
2021	121	20%	\$27.8	8%
2020	71	12%	\$3.8	1%
2019	33	5%	\$19.0	6%
2018 and prior	69	11%	\$12.5	4%
Total Active	567	92%	\$343.2	100%
Warranty	50	8%	\$1.3	0%
Total Open	617	100%	\$344.5	100%

The following summarizes the status of open capital projects:

TABLE B

(in millions)	Q3 2022		Q3 2021	
Encumbered/Committed	\$ 524.6	60%	\$ 475.0	80%
Unencumbered/Uncommitted	\$ 344.6	40%	\$ 119.8	20%
Total Open Capital	\$ 869.2		\$ 594.8	

Encumbered/Committed

The total 2022 encumbered amount of \$524.6M includes expenditures of \$431.4M (82%) and commitments of \$93.2M (18%). 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 \$334.5M (97% of \$344.6M) of the total unencumbered amount which includes the following projects:

- Miller Pond Site Preparation and Miller Pond and Miller Ave Property
- Celebration Park, Wismer Community Park and Blowden Davis Park construction Watermain Design and Construction
- Markham Centre: Trails Design and Construction, Riverwalk Urban Park
- Official Plan and Secondary Plan studies
- West Thornhill Stormwater Management
- Corporate Fleet Replacement
- Intersection, Streetlights and Illumination Design and Construction
- Roads Design and Construction, including Hwy 404 related improvements
- Corporate Wide ITS Initiatives

FINANCIAL CONSIDERATIONS

The net amount of \$1,079,571 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.

	Funding Returns from Closed Projects (A)	Contingency Projects Top up from Reserves (B)	Net Change to Reserves (C) = (A) + (B)
Life Cycle Replacement & Capital Reserve	\$574,719	(\$1,751,105)	(\$1,176,386)
Development Charge Reserves	\$118,076	(\$102,536)	\$15,540
Waterworks Stabilization / Capital Reserve	\$90,891	(\$9,616)	\$81,275
Net Change to Reserves & Reserve Funds	\$783,686	(\$1,863,257)	(\$1,079,571)

Since the last report on Status of Capital Projects tabled at General Committee in March 2022, \$340,342 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.

RECOMMENDED BY:

Mark Visser
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 deferred/not or partially initiated