



Report to: General Committee

Meeting Date: June 7, 2022

SUBJECT: Status of Capital Projects as of March 31, 2022
PREPARED BY: Jemima Lee – Senior Financial Analyst (Ext. 2963)
Germaine DSilva – Financial Analyst (Ext. 2964)

RECOMMENDATION:

- 1) That the report dated June 7, 2022 titled “Status of Capital Projects as of March 31, 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 \$4,320,002 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 \$347,100 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 \$138,398 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 \$33,525 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 \$380,217 to the approved amount of \$100,000; and,
- 7) That the Planning Capital Contingency Project be topped up from the Development Charges – City-Wide Soft Reserve by \$26,460 to the approved amount of \$50,000; and,
- 8) That the Waterworks Capital Contingency Project be topped up from the Waterworks Stabilization/Capital Reserve by \$4,128 to the approved amount of \$100,000; and,
- 9) That the Staff approved draws from Other Reserves as part of the Capital Contingency process in the amount of \$82,552 be received; and,
- 10) That the following new capital projects, initiated subsequent to the approval of the 2022 capital budget, be received:

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- 22339 – Engineering Studies – Peer Review – Budget of \$0 to be funded from External Revenues (Developer Funding)
- Project 22340 – Cornell CC Glycol Cooling Loop System – Budget of \$37,504 funded from the Non-DC Capital Contingency
- 11) That Staff be authorized and directed to do all things necessary to give effect to this resolution.
 - 12) That the report dated June 7, 2022 titled “Status of Capital Projects as of March 31, 2022” be received; and,
 - 13) 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 \$4,320,002 be transferred to the original sources of funding as identified on Exhibit B; and
 - 14) That the Projects Closed and Not or Partially Initiated, as identified on Exhibit C, be approved for closure and funds in the amount of \$347,100 be transferred to the original sources of funding as identified in Exhibit C; and
 - 15) That the Non-Development Charge Capital Contingency Project be topped up from the Life Cycle Replacement and Capital Reserve Fund by \$138,398 to the approved amount of \$250,000; and,
 - 16) That the Engineering Capital Contingency Project be topped up from the Development Charges - City-Wide Hard Reserve by \$33,525 to the approved amount of \$100,000; and,
 - 17) That the Design Capital Contingency Project be topped up from the Development Charges – Parks Development Reserve by \$380,217 to the approved amount of \$100,000; and,
 - 18) That the Planning Capital Contingency Project be topped up from the Development Charges – City-Wide Soft Reserve by \$26,460 to the approved amount of \$50,000; and,
 - 19) That the Waterworks Capital Contingency Project be topped up from the Waterworks Stabilization/Capital Reserve by \$4,128 to the approved amount of \$100,000; and,
 - 20) That the Staff approved draws from Other Reserves as part of the Capital Contingency process in the amount of \$82,552 be received; and,
 - 21) That the following new capital projects, initiated subsequent to the approval of the 2022 capital budget, be received:

22339 – Engineering Studies – Peer Review – Budget of \$0 to be funded from External Revenues (Developer Funding)

Project 22340 – Cornell CC Glycol Cooling Loop System – Budget of \$37,504 funded from the Non-DC Capital Contingency

- 22) 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. 93 capital projects are completed within scope with/without return of surplus funds. 70 of the 93 projects have surplus funds remaining in the amount of \$4,320,002 and the remaining 23 projects were fully spent.

Section II: Projects Closed and Not, or Partially Initiated

Exhibit C provides details of these projects. 3 capital projects are being closed and not, or partially initiated with a return of surplus funds in the amount of \$347,100.

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 \$138,398 is required from the Life Cycle Replacement & Capital Reserve Fund.
- Engineering DC Capital Contingency: Top up of \$33,525 is required from the City-Wide Hard DC Reserve.
- Design DC Capital Contingency: Top up of \$380,217 is required from the Parks Development DC Reserve.
- Planning Capital Contingency: Top up of \$26,460 is required from the City-Wide Soft DC Reserve.

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- Waterworks Capital Contingency: Top up of \$4,128 is required from the Waterworks Stabilization/Capital Reserve.
 - Draws from Other Reserves: Since the last report the Treasurer and/or CAO approved draws totaling \$82,552 from Other Reserves Contingencies.

Section IV: Status of Open Projects

This section identifies that there are 646 open capital projects with a budget of \$670.3M (\$497.9M committed, \$172.4M uncommitted).

PURPOSE:

The purpose of this report is to provide an update on the status of capital projects as of March 31, 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 March 31, 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

93 capital projects completed within scope are listed in Exhibit B with/without return of surplus funds. 70 of the 93 projects have surplus funds remaining in the amount of \$4,320,002 and the remaining 23 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) ES – Waste Management

Project 21203 – MESF – 2021 Zero Waste Program at 10 Schools – Budget of \$25,000 with remaining funds of \$23,840 (95% of project budget). This is an annual project. Spend in 2021 was reduced as a result of COVID protocols at York Region schools.

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- b) Operations – Roads
Project 21202 – Oil Grit Separators - Cleaning – Budget of \$200,400 with remaining funds of \$183,610 (92% of project budget). Project costs lower than budgeted due to favourable pricing and fewer units required to be cleaned based on condition assessment.
 - c) Operations - Roads
Project 21107 – Don Mills Storm Channel – Budget of \$35,400 with remaining funds of \$27,208 (77% of project budget). Lower spend due to revised scope of work from debris and vegetation removal to debris removal only, resulting in favourable pricing
 - d) Engineering
Project 21178 - Traffic Operational Improvements – Annual – Budget of \$57,000 with remaining funds of \$37,871 (66% of project budget). Lower spend due to deferral of planned 2021 traffic safety measures which could not be carried out due to pandemic impact on normal travel patterns and traffic volume.
 - e) ES - Waterworks
Project 20259 – Curb Box Inspection and Replacement Program – Budget of \$606,776 with remaining funds of \$356,389 (59% of project budget). Lower spend as only 57% of curb boxes required replacement based on inspection.
 - f) Engineering
Project 19047 – Stormwater Thermal Cooling Pilot Project – budget of \$95,938 with remaining funds of \$52,462 (55% of project budget). Use of remaining budget was contingent on approval of grant funding in 2021 for construction of a pilot stormwater pond. Pilot project will be re-requested when/if grants are secured.
 - g) Recreation Services
Project 20131 – Markham Village CC Shower Tiles Replacement – Budget of \$39,900 with remaining funds of \$22,092 (55% of project budget). Lower spend due to favourable market conditions as a result of more competitive pricing.
 - h) ES - Waterworks
Project 19245 – CI Watermain Replacement – West Thornhill Phase 2D Construction – Budget of \$3,187,505 with remaining funds of \$696,004 (22% of project budget). Warranty period has ended. The use of contingency and some provisional items was lower than anticipated
 - i) ES - Waterworks
Project 20309 – John St Watermain Emergency Repair – Budget of \$2,429,011 with remaining funds of \$549,316 (6% of project budget). Warranty period has ended. The use of contingency and provisional items was lower than anticipated.

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- j) ES - Infrastructure
Project 19239 – West Thornhill Flood Control Implementation – Phase 2D Construction – Budget of \$6,101,968 with remaining funds of \$412,913 (7% of project budget). Warranty period has ended. The use of contingency and provisional items was lower than anticipated.
 - k) ES - Waterworks
Project 20261 – Sanitary Sewers - Rehabilitation – Budget of \$910,600 with remaining funds of \$288,780 (32% of project budget). The use of contingency and some provisional items was lower than anticipated.
 - l) ES - Waterworks
Project 18292 – CI Watermain Replacement – West Thornhill Phase 2C Construction – Budget of \$4,378,743 with remaining funds of \$194,439 (4% of project budget). The use of contingency and provisional items was lower than anticipated
 - m) Operations – Fleet
Project 19207 – Corporate Fleet Replacement – Non-Fire – Budget of \$2,807,812 with remaining funds of \$159,203 (6% of project budget). Three units not purchased due to unfavourable pricing affected by market conditions. The outstanding units were included in the 2021 Corporate Fleet Replacement capital project submission.
 - n) ES - Infrastructure
Project 19229 – Streetlights – Underground Cable Replacement – Budget of \$1,293,485 with remaining funds of \$151,846 (12% of project budget). Warranty period has ended. The use of contingency and provisional items was lower than anticipated.
 - o) SAM
Project 20065 – 8100 Warden Facility Repair and/or Replacement Projects – Budget of \$309,361 with remaining funds of \$117,810 (38% of project budget). Lower spend due to garbage room fire code compliance project simplified after confirmation with Fire Department on code requirements.

SECTION II: PROJECTS CLOSED AND NOT, OR PARTIALLY INITIATED

The following section provides details of 3 capital projects that are closed and not, or partially initiated with a return of surplus funds in the amount of \$347,100 as listed in Exhibit C.

- a) Engineering
Project 20035 – Downstream Improvements Program (Design) – Budget of \$347,100 with remaining funds of \$347,100 (100% of project budget). Project cancelled due to location scope change after completion of Environmental Assessment. Project will be re-requested in 2023.

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- b) Engineering
Project 20052 – Transportation Study – Markville Secondary Plan – Budget of \$250,900 with remaining funds of \$0 (0% of project budget). Scope of work consolidated into project 19023 Secondary Plans.
 - c) Planning
Project 20043 – Servicing & Environmental Study – Markville Secondary Plan – Budget of \$483,700 with remaining funds of \$0 (0% of project budget). Scope of work consolidated into project 19023 Secondary Plans.

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 2021, \$546,541 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 5 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 balance of \$111,602. Thereby a top-up of \$138,398 is required from the Life Cycle Replacement & Capital Reserve Fund.

Of the \$138,398 drawn from the Non-DC Capital Contingency Project, 91% is related to the following projects:

- a) SAM
Project 21223 – Emergency FS 93 Heat Pump Replacement – \$76,574 – Funding required for the consultation, supply, delivery and replacement of failed geothermal system heat pump at Fire Station #93
- b) Recreation
Project 22340 – Cornell CC Glycol Cooling Loop System - \$37,504 – Funding required to address damage caused by glycol leak in the facility and to repair a defective clamp in the cooling system.
- c) Recreation
Project 22098 – Rouge River CC Pool Change Room Tile Replacement - \$12,211 – Additional funds required to complete tile replacement in facility change room due to unfavourable market conditions leading to higher material prices.

Of the remaining draws of 9% or \$12,109, all were for draws under \$5,000.

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 \$66,475 thereby requiring a top up of \$33,525 from the City-Wide Hard DC Reserve.

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

- a) Engineering
Project 18040 – Active Transportation Master Plan - \$33,525 – Additional funding required to extend consultant services in order to produce an updated report at Development Services Committee on the implementation and prioritization process of the 10-year City-Wide Active Transportation Master Plan.

Design DC Capital Contingency

The Design DC Capital Contingency Project was approved to a maximum of \$100,000. The project currently has a negative balance of \$280,217 thereby requiring a top up of \$380,217 from the Parks Development DC Reserve.

Of the \$380,217 drawn from the Design DC Capital Contingency Project, 94% is related to the following project:

- a) Design
Project 20025 – Cornell Community Park - Construction – \$357,937 – This represents 90% of the additional funding required to remove unsuitable topsoil from the site and import additional topsoil required for park development. Project is 90% DCA and 10% Parks Cash-in-Lieu; Remaining 10% draw from the Parks Cash-in-Lieu Reserve. Staff will endeavor to recover these funds from the developer as these deficits should have been resolved prior to parkland conveyance.

There were 2 additional draws totaling \$22,278.

Planning DC Capital Contingency

The Planning DC Capital Contingency Project was approved to a maximum of \$50,000. The project currently has a balance of \$23,540 therefore requiring a top up of \$26,460 from the Development Charges – City-Wide Soft Reserve.

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

- a) Planning
Project 19023 – Markham Road – Mount Joy Secondary Plan Study - \$22,797 – This represents 90% of the additional consultant services extended to facilitate the expanded scope of the Study to include additional Municipal Servicing modelling and analysis, additional presentations to the Development Services Committee, and to produce a draft demonstration plan. Project is 90% DCA and 10% Development Fees; Remaining 10% draw from the Development Fee Reserve.

There was 1 additional draw of \$3,663.

Waterworks Capital Contingency

The Waterworks Capital Contingency Project was approved to a maximum of \$100,000. The project currently has a balance of \$95,872 therefore requiring a top up of \$4,128 from the Waterworks Stabilization/Capital Reserve.

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

- a) Operations - Fleet
Project 22171 – Corporate Fleet Replacement - Waterworks - \$4,128 – Additional funds required due to unfavourable market conditions leading to higher prices.

Draws from Other Reserves

Since the last report, 4 draws from Other Reserves were approved related to the following projects:

- a) Design
Project 20025 – Cornell Community Park – Construction – \$39,771 from the Parks Cash-in-Lieu Reserve – This represent 10% of the additional funding required to remove unsuitable topsoil from the site and import additional topsoil required for park development. Project is 90% DCA and 10% Parks Cash-in-Lieu; Remaining 90% draw from the Design Capital Contingency. Staff will endeavor to recover these funds from the developer as these deficits should have been resolved prior to parkland conveyance.
- b) Design
Project 18033 – Markham Centre Riverwalk Urban Park – Design & Construction
Debbie Wilkes Park - \$27,017 from the Parks Cash-in-Lieu Reserve – This represents 10% of the additional funding required to remove contaminated soil offsite, and to address unforeseen electrical service and water chamber adjustments. Project is 90% DCA and 10% Parks Cash-in-Lieu; Remaining 90% draw from the Design Capital Contingency. Staff will endeavor to recover these funds from the developer as these deficits should have been resolved prior to parkland conveyance.
- c) Fire
Project 22054 – Fire Boots Replacement - \$13,231 from the Life Cycle Replacement & Capital Reserve Fund – Contract awarded higher than budget based on highest scoring boot model in firefighting boot evaluation conducted with Procurement.
- d) Planning
Project 19023 – Markham Road – Mount Joy Secondary Plan Study - \$2,533 from the Development Fee Reserve – This represents 10% of the additional consultant services extended to facilitate the expanded scope of the Study to include additional Municipal Servicing modelling and analysis, additional presentations to the Development Services Committee, and to produce a draft demonstration plan. Project is 90% DCA and 10% Development Fees; Remaining 90% draw from the Planning Capital Contingency.

SECTION IV: STATUS OF OPEN PROJECTS

After the closure of 96 projects, there are 646 open capital projects consisting of 595 active projects and 51 projects in warranty with a total budget of \$670.3M as of March 31, 2022. The term “open” refers to approved projects that have not started, or are at various stages of project completion.

In comparison, the March 2021 status update, reported 564 open projects with a total budget of \$591.1M.

Of the 646 open capital projects as at March 31, 2022, 74% 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	257	40%	\$91.3	53%
2021	144	22%	\$37.8	22%
2020	79	12%	\$5.4	3%
2019	38	6%	\$23.9	14%
2018 and prior	77	12%	\$12.8	7%
Total Active	595	92%	\$171.2	99%
Warranty	51	8%	\$1.1	1%
Total Open	646	100%	\$172.3	100%

The following summarizes the status of open capital projects:

TABLE B

(in millions)	Q1 2022		Q1 2021	
Encumbered/Committed	\$ 497.9	74%	\$ 404.5	68%
Unencumbered/Uncommitted	\$ 172.4	26%	\$ 186.6	32%
Total Open Capital	\$ 670.3		\$ 591.1	

Encumbered/Committed

The total 2022 encumbered amount of \$497.9M includes expenditures of \$424.4 (85%) and commitments of \$73.5M (15%). 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 \$126.4M (73% of \$172.4M) of the total unencumbered amount which includes the following projects:

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- 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 \$4,001,822 as summarized in the following table, will be transferred to 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	\$1,438,250	(\$138,398)	\$1,299,852
Development Charge Reserves	\$545,305	(\$440,202)	\$105,103
Waterworks Stabilization / Capital Reserve	\$2,173,427	(\$4,128)	\$2,169,299
Other Reserves	\$510,120	(\$82,552)	\$427,568
Net Change to Reserves & Reserve Funds	\$4,667,102	(\$665,280)	\$4,001,822

Since the last report on Status of Capital Projects tabled at General Committee in September 2021, \$546,541 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:

Joel Lustig
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