



Report to: General Committee

Meeting Date: November 29, 2021

SUBJECT: Status of Capital Projects as of September 30, 2021
PREPARED BY: Veronica Siu – Manager Budgets (Ext. 2232)
Jemima Lee – Senior Financial Analyst (Ext. 2963)
Germaine DSilva – Financial Analyst (Ext. 2964)

RECOMMENDATION:

- 1) That the report dated November 29, 2021 titled “Status of Capital Projects as of September 30, 2021” 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 \$1,914,897 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 \$856,389 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 \$486,404 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 \$224,966 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 \$33,634 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 \$54,020 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 \$339,967 be received; and,
- 9) That a new Theatre capital project titled, “Technical Audio Visual Equipment” be established with a budget of \$59,907, funded \$30,215 from the Ramp-Up Reserve and \$29,692 from an external grant; and
- 10) 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. 94 capital projects are completed within scope with/without return of surplus funds. 57 of the 94 projects have surplus funds remaining in the amount of \$1,914,897 and the remaining 37 projects were fully spent.

Section II: Projects Closed and Not, or Partially Initiated

Exhibit C provides details of these projects. 5 capital projects are being closed and not, or partially initiated with a return of surplus funds in the amount of \$856,389.

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 \$486,404 is required from the Life Cycle Replacement & Capital Reserve Fund.
- Engineering DC Capital Contingency: Top up of \$224,966 is required from the City-Wide Hard DC Reserve.
- Design DC Capital Contingency: Top up of \$33,634 is required from the Parks Development DC Reserve.
- Waterworks Capital Contingency: Top up of \$54,020 is required from the Waterworks Stabilization/Capital Reserve.
- Draws from Other Reserves: In the Q1 2021 Status of Capital Projects Report, Council provided the Treasurer and/or CAO with delegated authority to adjust the funding source of projects charged to the Contingency project when appropriate. Since the last report the Treasurer and/or CAO approved draws totaling \$339,967 from Other Reserves Contingencies.

Section IV: Request for New Project

- a) This section details 1 new project with a funding request in the amount of \$30,215.

Section V: Status of Open Projects

This section identifies that there are 479 open capital projects with a budget of \$594.8M (\$475.0M committed, \$119.8M uncommitted).

PURPOSE:

The purpose of this report is to provide an update on the status of capital projects as of September 30, 2021, 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, 2021.

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

94 capital projects completed within scope are listed in Exhibit B with/without return of surplus funds. 57 of the 94 projects have surplus funds remaining in the amount of \$1,914,897 and the remaining 37 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) Operations - Parks
Project 20203 – Cricket Pitch Outfield Screening Replacement at Yarl Cedarwood – Budget of \$82,400 with remaining funds of \$72,634 (88% of project budget). Based on condition assessment the cricket pitch was repaired instead of having the screening replaced.
- b) ES - Waterworks
Project 18294 – District Metering Area (DMA) Pilot – Budget of \$193,400 with remaining funds of \$153,815 (80% of project budget). Project costs lower than budgeted due to use of newer technology involving mobile DMA testing.

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- c) Recreation Services
Project 20170 – Thornlea Pool Deck Drain Piping Replacement – Budget of \$39,700 with remaining funds of \$30,567 (77% of project budget). Lower spend due to favourable market conditions as a result of more competitive pricing.
 - d) Operations - Parks
Project 21133 – Shade Structure Rehabilitation and/or Replacement – Budget of \$111,700 with remaining funds of \$77,610 (69% of project budget). Based on condition assessment, more refurbishment work was done instead of replacement.
 - e) Recreation Services
Project 20101 – Armadale C.C. Fire Prevention System Replacement – Budget of \$229,400 with remaining funds of \$151,668 (66% of project budget). Lower spend due to consultant recommendation not to replace the entire sprinkler system piping based on condition assessment.
 - f) SAM – Facility Assets
Project 21061 – Satellite Community Centre Repair and/or Replacement – Budget of \$15,300 with remaining funds of \$9,194 (60% of project budget). Lower spend due to favourable market conditions as a result of more competitive pricing.
 - g) Recreation Services
Project 20122 – Crosby C.C. Millwork Replacement – Budget of \$47,600 with remaining funds of \$26,411 (55% of project budget). Lower spend due to favourable market conditions as a result of more competitive pricing.
 - h) Recreation Services
Project 20098 – Angus Glen C.C. Gym Curtain Replacement – Budget of \$34,600 with remaining funds of \$19,142 (55% of project budget). Lower spend due to favourable market conditions as a result of more competitive pricing.
 - i) Recreation Services
Project 20150 – Pan Am Heat Exchanger Reconstruction – Budget of \$28,000 with remaining funds of \$15,412 (55% of project budget). Lower spend due to project components (mechanical and chemical treatment system) awarded to 2 different contractors to avoid subcontracting costs.
 - j) Operations - Roads
Project 21105 – City Owned Fence Replacement Program – Budget of \$63,900 with remaining funds of \$34,389 (54% of project budget). Lower spend due to favourable market conditions, and a portion of repairs were done in house by Staff.
 - k) ES - Infrastructure
Project 19223 – Large Culverts Rehab (5 Structures) - Design & Construction – Budget of \$739,378 with remaining funds of \$168,433 (23% of project budget). The use of contingency and provisional items was lower than anticipated.

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- l) SAM – Facility Assets
Project 19085 – Roofing Repairs & Replacement Projects – Budget of \$1,026,794 with remaining funds of \$152,155 (15% of project budget). The use of contingency and provisional items was lower than anticipated.
 - m) ES - Waterworks
Project 20256 – CI Watermain Rehabilitation – Design – Budget of \$437,100 with remaining funds of \$143,504 (33% of project budget). Lower spend due to a portion of design work completed internally.
 - n) ES - Infrastructure
Project 20237 – Storm/Sanitary Sewer & Sanitary Laterals CCTV Inspection – Budget of \$1,585,200 with remaining funds of \$119,953 (8% of project budget). The use of contingency and provisional items was lower than anticipated.
 - o) Culture Services
Project 20002 – Culture Public Art Master Plan Implementation Phase 1 of 5 – Budget of \$249,300 with remaining funds of \$103,472 (42% of project budget). Lower spend due to COVID pandemic whereby in-person events planned for the 3-day summit were changed to virtual events.

SECTION II: PROJECTS CLOSED AND NOT, OR PARTIALLY INITIATED

The following section provides details of 5 capital projects that are closed and not, or partially initiated with a return of surplus funds in the amount of \$856,389 as listed in Exhibit C.

- a) Recreation Services
Project 20155 – Recreation Autonomous Floor Scrubbers – Budget of \$62,300 with remaining funds of \$62,300 (100% of project budget). Pilot project was proposed in 2020 but upon further investigation, associated maintenance costs made the project costs unfeasible at this time.
- b) Recreation Services
Project 20105 – Centennial C.C. HVAC Replacement – Budget of \$61,600 with remaining funds of \$48,982 (80% of project budget). Replacement deferred due to COVID related facility closures, and resubmitted as part of the 2022 Capital Budget under the NetZero funding initiative.
- c) ITS
Project 18072 – Fire – Dispatch Upgrade – Budget of \$290,332 with remaining funds of \$225,536 (78% of project budget). A portion of the project budget was used to perform some initial upgrades to the Computer Aided Dispatch (CAD) system prior to the decision to outsource dispatch starting in 2022.

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- d) Engineering
Project 14035 – Miller Ave- Woodbine to Rodick Reconstruction- Design – Budget of \$563,236 with remaining funds of \$419,219 (74% of project budget). Environmental assessment completed; however, the rest of the project has been deferred and timing to be reassessed and revisited as part of 10 year capital program.
- e) SAM – Facility Assets
Project 20066 – Accessibility Retrofit Program – Budget of \$137,700 with remaining funds of \$100,352 (73% of project budget). This is an annual project. Spend in 2020 has been cancelled as a result of COVID related facility closures.

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 2021, \$2,189,158 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 account has a negative balance of \$236,404. Thereby a top-up of \$486,404 is required from the Life Cycle Replacement & Capital Reserve Fund.

Of the \$486,404 drawn from the Non-DC Capital Contingency Project 84% is related to the following projects:

- a) SAM – Facility Assets
Project 20074 - Library Facilities Repair and/or Replacement Projects – Markham Village Library - \$150,000 – Additional funding required to repair the unforeseen erosion of the metal sections under ramp decks at discovered after foam insulation was removed. The original budget was only for the cleaning and recoating of the steel support ramp at the Library entrance.
- a) SAM – Facility Assets
Project 20084 – Satellite Community Centre Repair and/or Replacement, and 21201 – Accessibility Retrofit Program - \$76,866 - Contract awarded for interior and exterior renovations at Box Grove community centre higher than budget based on market prices.

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- b) Operations – Fleet
Project 21140 – Corporate Fleet Replacement – Non-Fire - \$45,756 – Contract awarded higher than budget based on market prices.
 - c) Engineering
Project 19260 – Whistle Cessation for 3 Rural Crossings - \$37,845 – Contract awarded for 3rd party peer review, contract admin, and flagging costs at Elgin Mills and 9th Line crossings higher than budget based on market prices.
 - d) ES Infrastructure
Project 20245 – Structures Rehabilitation (5 Structures) – Design & Construction - \$36,890 – Additional funding required to repair the unforeseen rot in timber beams and posts not visible at time of visual inspection.
 - e) Operations - Fleet
Project 19206 – Corporate Fleet Replacement – Fire - \$24,613 – Contract awarded higher than budget based on market prices.
 - f) ES - Infrastructure
Project 22218 – Sixpenny Court Pedestrian Bridge (P051) Rehabilitation – Design - \$22,722 – Emergency funds required to redesign the rotted permanent abutment support prior to construction of the bridge as part of the 2022 Capital Budget pre-approval.
 - g) SAM – Facility Assets
Project 21057 – Other Facilities Repair and/or Replacement Projects - \$22,367 - Contract awarded higher than budget based on market prices.

Of the remaining draws of 14% or \$69,345, all were for draws under \$20,000.

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 \$124,966 thereby requiring a top up of \$224,966 from the City-Wide Hard DC Reserve.

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

- a) Legal
Project 19021 – LPAT - Growth Related Hearings- \$194,425 – The additional funds were required for external legal consulting costs for development areas based on higher than anticipated work.
- b) Engineering
Project 19041 – Markham Centre Trails EA for Areas 1, 2, and 4 - \$30,541 – Contract awarded higher than budget based on market prices.

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 \$66,366 thereby requiring a top up of \$33,634 from the Parks Development DC Reserve.

Of the \$33,634 drawn from the Waterworks Capital Contingency Project 91% is related to the following project:

- a) Design
Project 19026 – Cornell Centre NP and Woodlot - Construction – \$30,676 – Additional funding required to increase the thickness of existing mulch within the dog park.

There was 1 additional draw of \$2,958.

Planning DC Capital Contingency

The Planning DC Capital Contingency Project was approved to a maximum of \$50,000. It is currently at the maximum balance and as such, no top up is required at this time.

Waterworks Capital Contingency

The Waterworks Capital Contingency Project was approved to a maximum of \$100,000. The project currently has a balance of \$45,980 therefore requiring a top up of \$54,020 from the Waterworks Stabilization/Capital Reserve.

Of the \$54,020 drawn from the Waterworks Capital Contingency Project 91% is related to the following project:

- a) ES Waterworks
Project 15292 – Sanitary Sewer Design (Village Parkway) - \$50,628 – Additional funds are required for external legal consulting cost.

There was 1 additional draw of \$3,392.

Draws from Other Reserves

In the last Status of Capital Projects report, Council approved delegated authority to the Treasurer and/or CAO to adjust the funding source(s) for projects charged to the contingency project when appropriate. Since the last report, 4 draws from Other Reserves were approved related to the following projects:

- a) Recreation Services
Project 20137 – Milliken Mills C.C. Lobby Enhancement – \$173,720 from the Ramp-Up Reserve – Award for construction higher than budget based on market prices and unforeseen additional design and architectural work required.
- b) SAM – Facility Assets
Project 21211 – Implementation of Touchless Technology and Enhancing Indoor Air Quality - \$92,456 from the Ramp-Up Reserve – Funds required for the HST impact of the award, which is ineligible for ICIP grant reimbursement.

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- c) Engineering
Project 20037 – Main Street Unionville Road Design - \$72,031 from the Canada Community Benefit Fund Reserve (Previously named Gas Tax Reserve) – Additional funds required due to unanticipated complexities and infrastructure upgrades encountered during the detailed design and tender preparation.
- d) Fire
Project 21212 – Enhancements to Emergency Operation Centre - \$1,760 from the Ramp-Up Reserve – Funds required for the HST impact of the award, which is ineligible for ICIP grant reimbursement.

SECTION IV: REQUEST FOR NEW PROJECT

Staff are seeking Council approval for the following new project:

- a) Theatre
Technical Audio Visual Equipment – Budget of \$59,907, funded \$29,962 from the Department of Canadian Heritage grant and \$30,215 from the Ramp-Up Reserve. The new project will be used to purchase specialized technical audio-visual/streaming equipment for the Theatre in order to be able to present virtual and hybrid programs offered starting in early 2022 featuring professional arts and cultural performance from a variety of disciplines, artistic, and diverse perspectives.

SECTION V: STATUS OF OPEN PROJECTS

After the closure of 99 projects, there are 479 open capital projects consisting of 429 active projects and 50 projects in warranty with a total budget of \$594.8M as of September 30, 2021. The term “open” refers to approved projects that have not started, or are at various stages of project completion.

In comparison, the September 2020 status update, reported 566 open projects with a total budget of \$573.0M.

Of the 479 open capital projects as at September 30, 2021, 73% of the projects were approved in 2019 to 2021. **(Refer to Table A).**

TABLE A

Project approval year	# of open projects	% of open projects	Unencumbered \$ in M	% of Unencumbered \$
2021	196	41%	\$61.7	52%
2020	104	22%	\$8.6	7%
2019	48	10%	\$30.0	25%
2018	29	6%	\$5.1	4%
2017 and prior	52	11%	\$13.1	11%
Total Active	429	90%	\$118.5	99%
Warranty	50	10%	\$1.3	1%
Total Open	479	100%	\$119.8	100%

The following summarizes the status of open capital projects:

TABLE B

(in millions)	Q3 2021		Q3 2020	
Encumbered/Committed	\$ 475.0	80%	\$ 466.7	81%
Unencumbered/Uncommitted	\$ 119.8	20%	\$ 106.3	19%
Total Open Capital	\$ 594.8		\$ 573.0	

Encumbered/Committed

The total 2021 encumbered amount of \$475.0M includes expenditures of \$382.0M (80%) and commitments of \$93.0M (20%). 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 \$84.5M (71% of \$119.8M) 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
- Markham Centre: Trails Design and Construction, Riverwalk Urban Park
- Official Plan and Secondary Plan studies
- Corporate Fleet Replacement
- Intersection, Streetlights and Illumination Design and Construction
- Roads Design and Construction, including Hwy 404 related improvements
- Corporate Wide ITS Initiatives
- East Works Yard

FINANCIAL CONSIDERATIONS

The net amount of \$1,632,295 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	Contingency Projects Top up from Reserves	Net Change to Reserves
	(A)	(B)	(C) = (A) + (B)
Life Cycle Replacement & Capital Reserve	\$1,658,173	(\$486,404)	\$1,171,769
Development Charge Reserves	\$465,868	(\$258,600)	\$207,268
Waterworks Stabilization / Capital Reserve	\$551,209	(\$54,020)	\$497,189
Other Reserves	\$96,036	(\$339,967)	(\$243,931)
Net Change to Reserves & Reserve Funds	\$2,771,286	(\$1,138,991)	\$1,632,295

Since the last report on Status of Capital Projects tabled at General Committee in March 2021, \$2,189,158 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