



Report to: General Committee

Meeting Date: June 17, 2019

SUBJECT: Status of Capital Projects as of April 30, 2019
PREPARED BY: Sandra Skelcher, Senior Manager, Financial Planning and Reporting, ext. 3880
Jemima Lee, Senior Financial Analyst, ext. 2963

RECOMMENDATION:

- 1) That the report dated June 17, 2019 titled “Status of Capital Projects as of April 30, 2019” be received; and,
- 2) That the amount of \$7,794,731 from the closure of capital projects be transferred to the sources of funding as listed on Exhibit A; and,
- 3) That the closure of projects as outlined on Exhibit B and C be approved; and,
- 4) That the Non-Development Charge Capital Contingency Project be topped up from the Life Cycle Replacement and Capital Reserve Fund by \$444,488 to the approved amount of \$250,000; and,
- 5) That the Engineering Capital Contingency Project be topped up from the City-Wide Hard Development Charges Reserve by \$98,993 to the approved amount of \$100,000; and,
- 6) That the Design Capital Contingency Project be topped up from the Development Charges Reserve by \$55,057 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 \$5,522 to the approved amount of \$100,000; and,
- 8) That the estimated shortfall of \$350,000 in Capital Project 19264 – Asphalt Cement (AC) Index Premium Asphalt Resurfacing be funded from the Gas Tax Reserve, increasing the project budget from \$225,200 to \$575,200; and further,
- 9) That Staff be authorized and directed to do all things necessary to give effect to this resolution.

PURPOSE:

The purpose of this report is to provide a status update of capital projects as of April 30, 2019, and obtain Council approval for the transfer of funds to Reserves and Reserve Funds.

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 April 30, 2019. As a result, 169 projects are identified for closure, with a total budget remaining of \$7,794,731 to be returned to the original sources of funding.

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 funding from closed capital projects to be returned to funding sources as of April 30, 2019

Exhibit B – Details of capital projects to be closed with funding to be returned to funding sources as of April 30, 2019

Exhibit C – Summary of capital projects to be closed that are fully expended as of April 30, 2019

Details within Exhibit A include the following:

Life Cycle Replacement & Capital Reserve Fund

The closure of capital projects identifies funds in the amount of \$1,728,282 to be returned to the Life Cycle Replacement & Capital Reserve Fund. Below are highlights of the capital projects listed in Exhibit B with surplus funds of more than 50% of the approved budget as well as other projects that will be returned to the Life Cycle Replacement & Capital Reserve Fund.

a) Engineering

Project 16042 – Highway 7 Streetscaping – Budget of \$3,712,858 with remaining Life Cycle funds of \$416,158 (11% of project budget). This project is 90% funded through the Development Charges Reserve and 10% funded through the Life Cycle Replacement & Capital Reserve Fund. Refer to project status under Development Charges Reserves.

b) Engineering

Project 17043 – Main Street Markham – Road Restoration – Budget of \$360,839 with remaining Life Cycle funds of \$81,045 (22% of project budget). Use of contingency and provisional items were lower than anticipated.

c) Environmental Services – Infrastructure

Project 16224 – Streetlights – Underground Cable Replacement/Repair – Budget of \$1,870,389 with remaining funds of \$96,770 (5% of project budget). Use of contingency and provisional items were lower than anticipated.

d) Fire

Project 18110 – Air Monitor Devices – Budget of \$44,900 with remaining funds of \$28,095 (63% of budget). Calibration and docking stations for devices budgeted but not replaced based on condition assessment.

e) Operations – Parks

Project 18221 – Bleachers (Metal) Replacement at Featherstone Park – Budget of \$10,800 with remaining funds of \$6,468 (60% of project budget). Project award was lower than budget as installation costs included in budget were not required because installation was conducted by City staff.

f) Operations - Parks

Project 18229 – Goal Posts Replacement – Budget of \$12,900 with remaining funds of \$10,458 (81% of project budget). Goal Posts at Riseborough Park were not replaced due to being on school district property.

g) Operations – Roads

Project 17132 – City Owned Entrance Feature Rehabilitation – Budget of \$32,400 with remaining funds of \$27,923 (86% of project budget). Work completed on entrance features requiring immediate repairs, but rehabilitation work on majority of entrance features deferred due to Operations undertaking a review of the entrance feature program including outreach to residents.

h) Operations – Roads

Project 18204 – Don Mills Storm Channel – Budget of \$19,000 with remaining funds of \$10,869 (57% of project budget). Emergency work and maintenance for the Storm Channel was less than anticipated based on condition assessment.

i) Operations - Roads

Project 18214 – Retaining Walls Program – Budget of \$10,200 with remaining funds of \$6,737 (66% of project budget). Repair work required was less than anticipated based on condition assessment.

j) Operations - Roads

Project 18216 – Stormwater Retention Pond Maintenance Program – Budget of \$26,500 with remaining funds of \$14,656 (55% of project budget). Maintenance work required was less than anticipated based on condition assessment.

k) Operations - Roads

Project 17302 – Operations Roads – Asset Management Plan – Budget of \$35,616 with remaining funds of \$24,045 (68% of project budget). Consultant fees anticipated were less than budget.

l) Recreation

Project 16097 – Camps and Programs Review – Budget of \$40,700 with remaining funds of \$38,258 (94% of project budget). Consultant hired left project, significant development work had been completed which was completed by City staff.

m) Recreation

Project 18138 – Crosby Community Centre Gas Monitors – Budget of \$12,000 with remaining funds of \$7,203 (60% of project budget). Project awarded was less than budget based on condition assessment and competitive process.

n) Recreation

Project 17123 – Unionville Train Station Door Replacement – Budget of \$13,800 with remaining funds of \$9,628 (70% of project budget). Change in project scope. Original project was to replace key lock entry door with a door containing a keypad system that would randomize passcodes for entry. Staff discovered that WiFi was not set up in the heritage building, and significant infrastructure and electrical work would be required, so door was replaced with existing traditional key lock door.

o) Recreation

Project 18140 – Crosby Community Centre West Overhead Doors – Budget of \$20,000 with remaining funds of \$13,586 (68% of project budget). Project awarded was less than budget as contractor initially expected to conduct structural work to relocate motors.

p) Recreation

Project 18190 – Unionville Train Station Refurbishments – Budget of \$11,000 with remaining funds of \$6,955 (63% of project budget). Change in project scope as eaves trough and down spouts replacement were removed from project due to condition assessment.

q) Sustainability Asset Management – Facility Assets

Project 16199 – Other Facility Improvements – Budget of \$125,800 with remaining funds of \$64,981 (52% of project budget). Projects savings realized through cost sharing with Museum Project 16197 – “Markham Little Theatre Structural Repairs”.

r) Sustainability Asset Management – Facility Assets

Project 18103 – Tennis Clubhouse Improvements – Budget of \$10,200 with remaining funds of \$10,200 (100% of project budget). Project deferred at request of Armadale Tennis Club.

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

Contract awards greater than \$25,000 with surplus funds are returned to the original funding source(s).

Since the last report on Status of Capital Projects tabled at General Committee in December 2019, \$168,134 has been returned to the Life Cycle Replacement & Capital Reserve Fund from contract awards.

Development Charges (DC) Reserves

The closure of capital projects identifies funds in the amount of \$2,927,824 to be returned to the Development Charges (DC) Reserve Fund. Below are highlights of the capital projects listed in Exhibit B with surplus funds of more than 50% of the approved budget as well as other projects that will be returned to the Development Charges (DC) Reserve Fund.

a) Design

Project 9085 – Design – Angus Glen Community Park – Construction Final Phase – Budget of \$4,544,406 with remaining funds of \$202,546 (5% of project budget). Use of contingency was lower than anticipated.

b) Design

Project 16030 – Leitchcroft Community Park Phase 2 of 2 - Construction – Budget of \$1,234,165 with remaining funds of \$444,252 (36% of project budget). Construction of maintenance building was removed from project.

c) Engineering

Project 10052 – Illumination Requests – Budget of \$1,340,000 with remaining funds of \$147,590 (17% of project budget). This project was created for City-wide illumination and was carried over each year. Since 2012, the process has been improved by utilizing annual budgets for illumination projects.

d) Engineering

Project 16042 – Highway 7 Streetscaping – Budget of \$3,712,858 with remaining funds of \$1,472,202 (40% of project budget). This project is 90% funded through the Development Charges Reserve and 10% funded through the Life Cycle Replacement & Capital Reserve Fund. Project budget was an estimate determined by Region of York based on anticipated capital works. Initial cost estimates from the contractor were over budget so City staff negotiated savings to be within budget. Prior to construction, City staff further reduced the scope of work as a cost savings initiative on the future operating maintenance of the streetscape work.

e) Engineering

Project 18052 –Standardizing Capital Works/Capital Specs for Projects – Budget of \$126,900 with remaining funds of \$126,900 (100% of project budget). Cancelled. Project to be requested in 2021 pending the outcome of the Regional review.

f) Engineering

Project 18053 – Streetlight Design Criteria & Standards Update – Budget of \$64,200 with remaining funds of \$64,200 (100% of project budget). Cancelled. Project to be requested in 2021 pending the outcome of the Regional review.

Waterworks Stabilization/Capital Reserve

Funds in the amount of \$1,337,161 will be returned to the Waterworks Stabilization/Capital Reserve resulting from the closure of capital projects. Below are highlights of the capital

projects listed in Exhibit B with surplus funds of more than 50% of the approved budget as well as other projects that will be returned to the Waterworks Stabilization/Capital Reserve.

a) Environmental Services - Stormwater

Project 16246 – Watermain Construction and Replacement Program – Budget of \$4,201,822 with remaining funds of \$943,064 (22% of project budget). Use of contingency and provisional items were lower than anticipated.

b) Environmental Services - Stormwater

Project 14479 – Watermain Detailed Design – Phase 1C & Phase 2 – Budget of \$175,238 with remaining funds of \$108,125 (62% of project budget). Expenditures that were grant eligible under the West Thornhill Flood Control project were transferred to the grant funded project.

Other Reserves and Reserve Funds

Funds in the amount of \$1,801,464 will be returned to other Reserves and Reserve Funds resulting from the closure of capital projects. Below are highlights of the capital projects listed in Exhibit B with surplus funds of more than 50% of the approved budget as well as other projects that will be returned to Reserve Funds.

a) Environmental Services - Stormwater

Project 15014 – West Thornhill Phase 1B& 1C – Flood Control – Budget of \$7,442,216 with remaining funds of \$770,539 (10% of project budget). Use of contingency was lower than anticipated.

b) Environmental Services - Stormwater

Project 16210 – West Thornhill Phase 2A – Flood Control Construction – Budget of \$4,904,187 with remaining funds of \$774,932 (16% of project budget). Use of contingency and provisional items were lower than anticipated.

CAPITAL CONTINGENCY PROJECTS

In accordance with the Capital Budget Control Policy, the five (5) Capital Contingency Projects are topped up to the maximum approved funding amount through the semi-annual Status of Capital Projects Report to Council.

1. 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 (\$194,488). Therefore a top-up of \$444,488 is required from the Life Cycle Replacement & Capital Reserve Fund.

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

a) Engineering

Project 18043 – Downstream Improvement Work Program - \$41,043 – Excavation and removal of contaminated material from Markham Greens Golf Course during

erosion restoration work. This project is 35% funded through the Non-DC Capital Contingency, and 65% funded through the Engineering Capital Contingency and \$76,223 was drawn from the Engineering Capital Contingency.

b) Environmental Services - Infrastructure

Project 18266 – Culverts Rehabilitation (2 Structures) – Design and Construction – \$74,863– Increase in project scope requiring detailed design work for the replacement of Huntington Park Twin Culvert with Pedestrian Bridge per lease amending agreement with Infrastructure Ontario.

c) Sustainability Asset Management – Facility Assets

Project 17182 – Library Facility Improvements - \$16,919 – Design proposed for Library improvements did not initially include catch basins to buffer flow of storm water into storm water system.

d) Sustainability Asset Management – Facility Assets

Project 18093 – Fire Facility Improvements – \$56,388 - Additional concrete removal and investigation around live electrical conduits required during replacement of trench drains at fire station 92 (\$45,953) and furnace repair to address Carbon Monoxide leak into mechanical room at fire station 94 (\$10,435).

e) Sustainability Asset Management – Facility Assets

Project 18101 – Roofing Replacement Projects - \$143,433 - Additional structural repairs required to address bowing masonry wall in the library clerestory during Milliken Mills Community Centre skylight replacement (\$96,076) and project award was higher than budget due to higher than estimated market prices for framing and remediation materials (wood, concrete and steel) (\$47,357).

f) Recreation

Project 18169 – Recreation Program Equipment - \$20,764 – Recreation Program Equipment budget is based on 3-year historical average but replacement of equipment depends on condition assessment. Project awarded was higher than budget due to purchase of PanAm event barriers (300 barriers) and higher volume of specialized floor safety mat replacements (720 Hatashita mats) used for programs.

g) Recreation

Project 18186 – Thornlea Gymnasium HVAC - \$20,623 – Additional funds required to remove asbestos found during HVAC replacement.

The remaining draws totaling \$70,455 were each under \$15,000.

2. 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 \$1,007, therefore requiring a top up of \$98,993 from the City-Wide Hard DC Reserve.

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

a) Engineering

Project 18043 – Downstream Improvement Work Program - \$76,223 – Excavation and removal of contaminated material from Markham Greens Golf Course during erosion restoration work. This project is 65% funded through the Engineering Capital Contingency, and 35% funded through the Non-DC Capital Contingency and \$41,043 was drawn from the Non-DC Capital Contingency.

b) Engineering

Project 18045 – John Street MUP Design - \$22,770 – Change of scope. Allowance added to project for subsurface utility engineering for investigations on ten locations.

3. 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 \$44,943 therefore requiring a top up of \$55,057 from the Admin Capital Growth Studies DC Reserve.

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

a) Design

Project 17001 – Boxgrove Community Centre Park Phase 2 of 2 Construction - \$26,963 – Increase in scope from addition of accessibility ramp railing to original design.

b) Design

Project 18035 – Parking Lot Adjacent Yarl Cedarwood Park – Design and Construction - \$24,344 – Project awarded was higher than budgeted to meet environmental protection regulations during construction.

The remaining draw was under \$4,000.

4. 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.

5. Waterworks Capital Contingency

The Waterworks Capital Contingency Project was approved to a maximum of \$100,000. The project currently has a balance of \$94,478 therefore requiring a top-up of \$5,522 from the Waterworks Stabilization/Capital Reserve.

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

a) Environmental Services – Waterworks

Project 18301 – Sanitary Sewers – Syphons Structural Lining - \$5,522 – Increase in project scope from repairing the structural lining of three syphon pipes on

Woodbine Avenue without excavation, to replacement of all three pipes due to ground water infiltrating the syphon.

ADDITIONAL FUNDING FOR ASPHALT CEMENT (AC) INDEX PREMIUM

Capital Project 19264 “Asphalt Cement (AC) Index Premium” – Additional funding of \$350,000 to increase budget from \$225,200 to \$575,200.

The Ministry of Transportation Ontario publishes Asphalt Cement (AC) index rates on a monthly basis, which are then used to calculate the amount of payment adjustment per tonne of new asphalt cement supplied by the asphalt rehabilitation contractor. A payment adjustment per tonne of asphalt cement is calculated for each month where the price index for the month differs by more than \$15/tonne from the base AC price index (as set at the time of the contract award).

Additional funds of \$350,000 are estimated in order to meet the 2019 service level. Higher prices are due to higher AC index rates resulting from higher crude oil prices and higher demand within the oil refining industry.

Staff recommend that additional funds of \$350,000 be funded from the Gas Tax Reserve Fund which is consistent with the original funding source for Project 19264 “Asphalt Cement (AC) Index Premium”. Actual costs will be based on AC index for the months of May to November 2019 as well as tonnage of new AC used in each of those months. Any discrepancy between actual AC index premium and estimated amount will be addressed in the Q4 Status of Capital Project Update to Council.

The 2020 budget will reflect an accurate estimate for the AC index premium.

STATUS OF OPEN CAPITAL PROJECTS

After the closure of 169 projects, there are 650 open capital projects/project groups with a total budget of \$615.0M as of April 30, 2019. The term “open” refers to approved projects that have not started, or are at various stages of project completion.

In comparison to the April 2018 status update, there were 647 open projects with a total budget of \$719.0M.

Of the 650 open capital projects as at April 30, 2019, 78% of the projects were approved in 2017 to 2019. (Refer to **TABLE A**).

TABLE A

Project approval year	# of open projects	% of open projects	Unencumbered \$ in M	% of Unencumbered \$
2019	263	40%	\$97.4	53%
2018	166	26%	\$24.9	14%
2017	78	12%	\$20.2	11%
2016	53	8%	\$9.7	5%
2015 and prior	90	14%	\$31.9	17%
	650	100%	\$184.1	100%

The following summarizes the status of open capital projects:

TABLE B

(in millions)	Q1 2019		Q1 2018	
Encumbered/Committed	\$ 430.8	70%	\$ 495.1	69%
Unencumbered/Uncommitted	\$ 184.1	30%	\$ 223.9	31%
Total Open Capital	\$ 615.0		\$ 719.0	

Encumbered/Committed

The total 2019 encumbered amount of \$430.8M includes expenditures of \$344.4M (80%) and commitments of \$86.5M (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 a multi-year one time projects account for \$115.4M (63% of \$184.1M) of the total unencumbered amount which includes the following projects:

- Rodick Road Reconstruction and Extension – Miller to 14th Avenue
- Storm sewer, sanitary sewer and watermain construction and replacement
- Whistling Cessation Program
- Official Plan and Secondary Plan engineering studies
- Hwy 404 mid-block crossing, North of Hwy 7
- West Thornhill flood control implementation
- Enterprise Asset Management and Digital Markham Strategic implementation
- Box Grove Community, Kirkham Drive, and Wismer Community park construction
- Sidewalk program, multi-use pathways and intersection improvements

FINANCIAL CONSIDERATIONS

The net amount of \$7,190,671 as summarized in the following table will be transferred to/(draw from) Reserves and Reserve Funds as a result of closing capital projects, return of surplus funds from open projects and top-up of capital contingency projects.

	Return to Reserves / Reserve Funds from Closed Projects (A)	Top up Contingency Projects from Reserves / Reserve Funds (B)	Net Change to Reserves / Reserve Funds (C)=(A)+(B)
Life Cycle Replacement & Capital Reserve	\$1,728,282	(\$444,488)	\$1,283,794
Development Charge Reserves	\$2,927,824	(\$154,050)	\$2,773,774
Waterworks Stabilization / Capital Reserve	\$1,337,161	(\$5,522)	\$1,331,639
Other Reserves & Reserve Funds	\$1,801,464	-	\$1,801,464
Net Change to Reserves & Reserve Funds	\$7,794,731	(\$604,060)	\$7,190,671

Since the last report on Status of Capital Projects tabled at General Committee in December 2019, \$168,134 has been returned to the Life Cycle Replacement & Capital Reserve Fund from contract awards.

BUSINESS UNITS CONSULTED AND AFFECTED:

All business units managing capital projects have been consulted in the development of the capital status update.

RECOMMENDED BY:

Joel Lustig
Treasurer

Trinela Cane
Commissioner, Corporate Services

ATTACHMENTS:

Exhibit A – Summary of funding from closed capital projects to be returned to original funding sources as of **Error! Reference source not found.**⁹

Exhibit B – Details of projects to be closed with funding to be returned to original funding sources as of **Error! Reference source not found.**⁹

Exhibit C – Summary of capital projects to be closed that are fully expended as of **Error! Reference source not found.**⁹