

CAPITAL PROFILE REPORT

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PROFILE NAME: **UTILITIES INFRASTRUCTURE EQUIPMENT AND VEHICLES****FUNDED**PROFILE **CM-23-6131**PROFILE STAGE: **Approved**DEPARTMENT: **Financial Services & Utilities - Utilities**PROFILE TYPE: **Standalone**BRANCH: **Sanitary Utility**PROFILE MANAGER: **Chris Ward**

PROGRAM

LEAD BRANCH MANAGER:

LEAD BRANCH:

ESTIMATED START: **May, 2016**BUDGET CYCLE: **2015-2018**ESTIMATED COMPLETION: **December, 2018**Service Category: **Utilities**

Major Initiative:

GROWTH**RENEWAL****50****50**

PREVIOUSLY APPROVED:

16,392

BUDGET REQUEST:

8,481

TOTAL PROFILE BUDGET:

24,873

PROFILE DESCRIPTION

Purchases include: tunnel equipment, excavation equipment, lifting equipment, communication equipment, micro-tunnelling machine, drill rigs, generators, compressors, essential equipment parts, cranes, trucks and vans.

PROFILE BACKGROUND

Utilities Infrastructure has its own in-house construction crews and equipment to construct drainage infrastructure using tunneling and open-cut techniques. The construction activities are supported by in-house equipment maintenance and fabrication.

Specialized equipment is utilized to construct new drainage infrastructure, such as sewer tunnel, to support the City's growth, and to renew the existing drainage infrastructure as they age. In order to deliver the capital works and to ensure a safe work environment for the construction crews, new equipment must be purchased and aging equipment must be replaced.

Profile name was changed from Drainage Construction Equipment and Vehicle to Utilities Infrastructure Equipment and Vehicles during the 2017-2018 Drainage Utility Rate Filing.

PROFILE JUSTIFICATION

Utilities Infrastructure requires new equipment to deliver the Capital Programs such as Flood Mitigation Program, Neighborhood Renewal Program, Sanitary Servicing Strategy, High Priority Repairs Program and other council approved strategic programs for other City departments.

The new equipment will provide more cost effective, reliable and up to date technological enhancements to support the increasing workload, improve productivity and safety.

STRATEGIC ALIGNMENT

2016-2018 Drainage Services Business Plan, Drainage Master Plan, and the City's Capital Programs are all impacted by the need to replace existing equipment and to procure new growth equipment.

ALTERNATIVES CONSIDERED

The alternative of not purchasing new equipment or replacing aging equipment is not viable as this would result in a decrease in service level, an increase in the risk of workplace injuries, and the inability to keep up with the growth of the City and the delivery of the associated Strategic Programs.

An alternative of leasing construction equipment is not cost effective. Since the Capital program is growing and sustaining, longer term leasing or renting is generally more expensive than purchasing. For example, renting a generator is \$3,500 per month whereas purchase of a similar new generator is about \$50,000 plus \$6,000 of maintenance cost per year. Assuming the average life span of a generator is 10 years, this is equivalent to a monthly cost of \$920 per month. The break even point is about two and a half years.

Delaying equipment replacement will affect the construction project schedules as older equipment is not as reliable.

COST BENEFITS

The tangible benefits of purchasing new equipment will be increased construction productivity and reduced work stoppages resulting in lower unit cost and meeting project schedule. The intangible benefits include improved customer satisfaction, improved employee morale, and safer more efficient workplace due to new technology.

KEY RISKS & MITIGATING STRATEGY

The risks of not purchasing the proposed new equipment are increase service interruption, reduced productivity and impede development and growth of the City.

The risk of purchasing the new or replacement equipment is that the actual cost of equipment may be higher due to inflation. This risk could be mitigated by using appropriate inflation rates and by procuring the equipment in a timely manner.

RESOURCES

No additional FTE is required as the result of the procurement of equipment under this project profile.

CONCLUSIONS AND RECOMMENDATIONS

It is recommended to approve the budget for the purchase of the equipment as per the timeline laid out in the budget request. The responsibility for life cycle management and procurement will be with Utilities Infrastructure. The budget is a transfer/split of funding from the approved Drainage Operations' Vehicle and Construction Equipment profiles CM-23/31-6130 and has no impact to rates.

CHANGES TO APPROVED PROFILE

2016 Spring SCBA (CA#20): (2.1.9) Transfer/split of funding from Drainage Operations' equipment profile CM-23-6130 to the newly created profile CM-23-6131 for Drainage Construction Equipment.

2016 Fall SCBA (CA#40): (2.6) Transfer From CM-31-6131 Drainage Construction Equipment and Vehicles to CM-23-6131 Drainage Construction Equipment and Vehicles ; in order to combine Storm to Sanitary to become one Business Area.

CAPITAL PROFILE REPORT

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PROFILE NAME: **Utilities Infrastructure Equipment and Vehicles**

FUNDED

PROFILE NUMBER: **CM-23-6131**

PROFILE TYPE: **Standalone**

BRANCH: **Sanitary Utility**

CAPITAL BUDGET AND FUNDING SOURCES (000's)

		Prior Years	2017	2018	2019	2020	2021	2022	2023	2024	2025	Beyond 2025	Total
APPROVED BUDGET	Approved Budget												
	Original Budget Approved	-	-	-	-	-	-	-	-	-	-	-	-
	2016 Cap Council	5,141	2,601	8,650	-	-	-	-	-	-	-	-	16,392
	2016 Cap Carry Forward	7,225	-7,225	-	-	-	-	-	-	-	-	-	-
	Current Approved Budget	12,366	-4,624	8,650	-	-	-	-	-	-	-	-	16,392
	Approved Funding Sources												
	Drainage Retained Earnings	12,366	-4,624	8,650	-	-	-	-	-	-	-	-	16,392
	Current Approved Funding Sources	12,366	-4,624	8,650	-	-	-	-	-	-	-	-	16,392

BUDGET REQUEST	Budget Request	-	8,481	-	-	-	-	-	-	-	-	-	8,481
	Revised Funding Sources (if approved)												
	Drainage Retained Earnings	-	8,481	-	-	-	-	-	-	-	-	-	8,481
	Requested Funding Source	-	8,481	-	-	-	-	-	-	-	-	-	8,481

REVISED BUDGET (IF APPROVED)	Revised Budget (if Approved)	12,366	3,857	8,650	-	-	-	-	-	-	-	-	24,873
	Requested Funding Source												
	Drainage Retained Earnings	12,366	3,857	8,650	-	-	-	-	-	-	-	-	24,873
	Requested Funding Source	12,366	3,857	8,650	-	-	-	-	-	-	-	-	24,873

CAPITAL BUDGET BY ACTIVITY TYPE (000's)

	Activity Type	Prior Years	2017	2018	2019	2020	2021	2022	2023	2024	2025	Beyond 2025	Total
REVISED BUDGET (IF APPROVED)	Construction	7,225	1,256	-	-	-	-	-	-	-	-	-	8,481
	Design	5,141	2,601	8,650	-	-	-	-	-	-	-	-	16,392
	Total	12,366	3,857	8,650	-	-	-	-	-	-	-	-	24,873

OPERATING IMPACT OF CAPITAL

Type of Impact:

Branch:																
	Rev	Exp	Net	FTE	Rev	Exp	Net	FTE	Rev	Exp	Net	FTE	Rev	Exp	Net	FTE
Total Operating Impact	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-