

**FINANCIAL MANAGEMENT COMMITTEE**

*HIS WORSHIP, THE MAYOR  
AND COUNCILLORS*

**SUBJECT: 2018 MARCH ENGINEERING CAPITAL INFRASTRUCTURE BYLAW  
FUNDING REQUEST – VEHICLES & EQUIPMENT**

**RECOMMENDATION:**

1. THAT Council authorize the City Solicitor to bring forward a Capital Reserve Fund Bylaw in the amount of \$2,990,800 to finance the procurement of Engineering vehicles and equipment, as outlined in this report.

**REPORT**

The Financial Management Committee, at its meeting held on 2018 March 14, received and adopted the *attached* report seeking a Capital Reserve Fund Bylaw to finance 2018 Engineering vehicles and equipment procurement projects.

Respectfully submitted,

Councillor D. Johnston  
Chair

Councillor C. Jordan  
Vice Chair

Copied to:	City Manager Director Engineering Director Finance City Solicitor Deputy Director Engineering Manager, Public Works
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**TO:** CHAIR AND MEMBERS FINANCIAL MANAGEMENT COMMITTEE      **DATE:** 2018 March 06

**FROM:** DIRECTOR ENGINEERING      **FILE:** 32000-05

**SUBJECT:** 2018 MARCH ENGINEERING CAPITAL INFRASTRUCTURE BYLAW FUNDING REQUEST – VEHICLES & EQUIPMENT

**PURPOSE:** To request a Capital Reserve Fund Bylaw to finance 2018 Engineering vehicles and equipment procurement projects.

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**RECOMMENDATION:**

1. **THAT** the Financial Management Committee recommend Council authorize the City Solicitor to bring forward a Capital Reserve Fund Bylaw in the amount of \$2,990,800 to finance the procurement of Engineering vehicles and equipment as outlined in this report.

**REPORT****INTRODUCTION**

In order to proceed with the award of contracts for the procurement of vehicles and equipment, funding approval is requested for the projects listed below.

**1.0 VEHICLES & EQUIPMENT****POLICY SECTION**

Procurement of the vehicles and equipment outlined below is aligned with the City of Burnaby's Corporate Strategic Plan by supporting the following goals and sub-goals of the Plan.

- A Safe Community – Make City streets, pathways, trails and sidewalks safer.
- A Dynamic Community – Build and maintain infrastructure that meets the needs of our growing community.
- A Thriving Organization – Protect the integrity and security of City Services and Assets.

**1.1 *Front Loader Refuse Packer, Container Truck*    ENZ.0056      *estimated \$400,000***

New Front Load Refuse Truck to fit the new 4 day work week and delivery schedule. Planned expenditures are anticipated to be in 2018.

**1.2 3- Recycle Trucks**

*estimated \$22,000*

Recycle Trucks purchased to accommodate changes to the delivery model within Solid Waste. The vehicles were ordered in 2017, and are being delivered in 2018. Funding for this purchase was raised in 2017 (\$616,000 on ENZ.0046; and \$280,000 on ENZ.0048) and this additional request to fully fund the actual cost of purchase is due to the contracted cost of the vehicle (\$604,000 for the two on ENZ.0046; and \$287,000 for the one on ENZ.0048) and the fluctuating exchange rate of USD to CAD. Planned expenditures are as follows:

<b>Project Mask</b>	<b>2018</b>
ENZ.0046 (2)	12,000
ENZ.0048 (1)	10,000
<b>Total</b>	<b>\$22,000</b>

**1.3 2- Jitneys**

*estimated \$101,000*

New Jitneys to be added to the fleet to work with the new Front Loaders to fit the new pick-up schedule. Funding for ENZ.0046 was raised in 2017 (\$90,000) and the vehicle was then ordered and delivered also in 2017. Additional funding on ENZ.0046 is to fully fund the actual cost of purchase including work by City Forces to custom build the Jitney. Project mask ENZ.0056 is a new request in 2018 for the purchase of the base vehicle and required customization for a city Jitney. Planned expenditures are as follows:

<b>Project Mask</b>	<b>2018</b>
ENZ.0046	11,000
ENZ.0056	90,000
<b>Total</b>	<b>\$101,000</b>

**1.4 Appliance Truck ENZ.0056**

*estimated \$75,000*

A new Appliance Truck is needed to manage the growth in service calls and will also be fitted with a plow and sander to plow lanes in the winter. Planned expenditures are anticipated to be in 2018.

**1.5 High Reach Forklift ENZ.0052**

*estimated \$60,000*

A new high-reach narrow isle fork lift is required for indoor use to reach high warehouse racks in Central Stores. Planned expenditures are anticipated to be in 2018.

**1.6 SCADA High Roof Van ENZ.0052 estimated \$60,000**

The utility Supervisory Control and Data Acquisition (SCADA) system is in the midst of a maintenance cycle with the upgrade of the communications, controls and electrical systems. The change from mechanical components to an electrically controlled network of devices changes some of the maintenance requirements. The van would stock the critical components for emergency repair calls and will be utilized for instrumentation and controls upgrade projects. Planned expenditures are anticipated to be in 2018.

**1.7 2019 New Vehicles – Long lead times estimated \$1,450,000**

The following vehicles have been identified for purchase in 2019 in support of operations. Due to the long lead times for delivery, funding is being raised now to be able to order them on a timely basis for delivery in 2019. Planned expenditures are anticipated to be in 2019.

<b>Project Mask</b>	<b>2019</b>
2 Tandem Axle Dump Trucks	850,000
Mini Split Body Automated Refuse	300,000
Articulating Front End Loader (roads)	300,000
<b>Total</b>	<b>\$1,450,000</b>

**1.8 Waste Management Technology ENY.0016 estimated \$75,000**

Through installation of on-board technology and implementation of supporting back-office software for Automated Vehicle Location, the Sanitation department aims to improve their operations through:

- Actively managing routes throughout the day to ensure high service levels to residents and customers;
- Monitor the contamination of waste, providing feedback to residents/customers and avoiding penalties at transfer/dump stations; and
- Ensure residents have the appropriate bins; capturing revenue leakage from unauthorized bins and reducing unnecessary duplicate pick-ups.

The project was initiated in 2017 and \$750,000 of funding was previously approved by Council, the total project estimate is \$825,000. Planned expenditures are anticipated to be in 2018.

**1.9 Tools and Equipment – Electrical ENY.0016 estimated \$100,000**

Purchase of tools and equipment required by two new vehicles and staff in the Electrical Division (division was new in 2017). This will fund the initial up-fitting of the new vehicles to be fully geared for electrical work. Planned expenditures are anticipated to be in 2018.

**1.10 Fleet Optimization & Work Order Management System Improvements**  
**ENY.0018 estimated \$100,000**

Complete high priority improvement initiatives in the Fleet & Equipment Services Section of Public Works including: Garage Operations Management; Parts & Inventory Optimization; Financial Analysis and Lifecycle Planning; Asset Management/Work Order Management System Functionality. The Work Order Management System Improvements includes moving from Hansen 7 to Infor Public Sector for business process and business intelligence improvements as part of technical upgrade and improved functionality for garage management. The funding supports AVL & Telematics implementation and system integration with the fleet work order management system for scheduling vehicle maintenance and inspections in the garage. Planned expenditures are anticipated to be in 2018.

**1.11 2 Automated Arms – Sanitation Vehicles ENY.0018 estimated \$100,000**

Spare arms for Automated Refuse Trucks. This will ensure that repairs can be done efficiently to get the vehicle back in service quickly. Planned expenditures are anticipated to be in 2018.

**1.12 4 Slide Brine Tanks ENY.0018 estimated \$100,000**

As part of the Snow Response Plan, the City will purchase four (4) slide-in truck tanks for the application of brine solution for anti-icing of roads during winter operations. Planned expenditures are anticipated to be in 2018.

**1.13 Still Creek Signage System ENY.0018 estimated \$50,000**

The Still Creek Works Yard requires new digital signage to meet operational needs. It will replace the single use manual board that is currently being used to display vehicle routing and service programs. This includes visual fire and security alarms, status updates and regular communications. The signage will also meet the requirements of enhanced vehicle routing and service programs currently underway. Planned expenditures are anticipated to be in 2018.

**1.14 2 - Snow Plough & Sanders on Solid Waste Vehicles ENY.0016 estimated \$65,000**

As part of the Snow Response Plan, new snow equipment is required to allow Solid Waste vehicles to independently clear lanes in order to facilitate garbage pick-up, thereby increasing the utility of these vehicles. Planned expenditures are anticipated to be in 2018.

To: Chair and Members Financial Management Committee  
From: Director Engineering  
Re: 2018 MARCH ENGINEERING CAPITAL INFRASTRUCTURE  
BYLAW FUNDING REQUEST – VEHICLES & EQUIPMENT  
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**1.15 2 - Sanders on Tandem Axle Dump Trucks ENY.0016 estimated \$64,700**

When tandem axle dump trucks #1253 and #1270 were purchased, the accompanying sanders were not purchased at the same time. New sanders are required for the upcoming winter season. Planned expenditures are anticipated to be in 2018.

**1.16 4 - Mobile Vehicle Lifts/ Hoists ENY.0018 estimated \$90,000**

4 mobile truck hoist stands for extra capacity repairs in the fleet shop. These units can be moved around the shop as needed. They will also be moved to the new Laurel Street Fleet Garage when it is completed. Planned expenditures are anticipated to be in 2018.

**1.17 Enclosed Cargo Trailer (sewers) ENY.0018 estimated \$15,000**

The trailer will transport all necessary materials to various sites within the City to perform trenchless maintenance and rehabilitation on the City's sanitary and storm systems. It will carry various sized bladders, rods, power auger, compressors, pipe patch kits, power reel, CCTV equipment, confined space equipment, a lateral launcher for cleaning laterals, pressure washer, and all other materials needed in completing the work. Planned expenditures are anticipated to be in 2018.

**1.18 9 - New Security Cameras - Still Creek Works Yard ENY.0016 estimated \$3,100**

To replace existing cameras because of poor quality images which are too grainy for verification. This is the finalization of this project started in 2017 and all planned expenditures are anticipated to be in 2018. This project received funding in 2017 in the amount of \$26,900 and with this funding will be completed in 2018.

**1.19 Survey Equipment ENY.0018 estimated \$60,000**

This is the capital replacement program for small survey equipment that has reached end of life. 2018 capital replacement will consist of 1 conventional surveying field station and 1 GPS surveying system. Planned expenditures are anticipated to be in 2018.

To: *Chair and Members Financial Management Committee*  
From: *Director Engineering*  
Re: *2018 MARCH ENGINEERING CAPITAL INFRASTRUCTURE*  
*BYLAW FUNDING REQUEST – VEHICLES & EQUIPMENT*  
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These expenditures are included in the 2018 – 2022 Provisional Financial Plan and sufficient Capital Reserve Funds are available to finance the capital projects outlined in this report.

**RECOMMENDATION**

It is recommended that the Financial Management Committee recommend Council authorize the City Solicitor to bring forward a Capital Reserve Fund Bylaw in the amount of \$2,990,800 to finance the procurement of Engineering vehicles and equipment as outlined in this report.



Leon A. Gous, P.Eng., MBA  
DIRECTOR ENGINEERING

FV/ac

Copied to: City Manager  
Director Finance  
City Solicitor  
Deputy Director, Engineering  
Manager, Public Works