

## 2020 Capital Project Detail Report

**Project Title:** Apparatus Replacement-Technical Rescue Truck

**Project Number:** 000643

**Department:** Barrie Fire & Emergency Services

**Summary:** Replacement of 1991 Technical Rescue Apparatus

**Rationale:** This apparatus is a replacement for the present Technical Rescue truck which is currently 26 years old. This vehicle would be at least 28 years old when replaced provided procurement started in 2018. This asset is a replacement for 91-413 of which was a used vehicle when the City obtained it in the mid 90's. There is a large quantity of equipment in this vehicle that is used at the scene of a technical rescue, such as high and low angle rope rescue, confined space and ice/water rescues.

This vehicle was purchased for \$91,500.00 and to date approx. \$109,000.00 has been spent on maintaining it. It will cost over \$50,000.00 to refurbish it to better store equipment, and another \$25,000.00 for body work. Due to it's age parts availability are becoming a concern and if it breaks down, there is no redundancy available to put in it's place. On many occasions a rented or borrowed cube van has been placed in service to cover for this vehicle when it has been OOS, and the van does not have any emergency warning lights or a radio on it. Therefore it will respond non-emergency mode to an emergency which will result in a prolonged response time.

### **PROJECT EXPENDITURE AND FUNDING**

#### **Expenditure (in 000's):**

	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Capital Purchase - Request</b>	<b>\$0</b>	<b>\$375</b>	<b>\$375</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$750</b>
<b>Total</b>	<b>\$0</b>	<b>\$375</b>	<b>\$375</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$750</b>

#### **Funding (in 000's):**

	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Contribution from Reserves</b>	<b>\$0</b>	<b>\$375</b>	<b>\$375</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$750</b>
<b>Total</b>	<b>\$0</b>	<b>\$375</b>	<b>\$375</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$750</b>

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding

## 2020 Capital Project Detail Report

**Project Title:** Fire Hose Replacement

**Project Number:** BF1020

**Department:** Barrie Fire & Emergency Services

**Summary:** Fire Hose upgrade and replacement program for current fire hose.

**Rationale:** Current BFES fire hose does not meet the Section 21 guidance note, or the NFPA 1410 standard establishing the minimum required water flow for a residential fire. Upgrade to current standards, and the establishment of a replacement program will be undertaken. Fire Hose lifecycle is primarily activity dependent. The environment, nature of the exposure and duration limit the lifecycle. Alternate interventions to extend the lifecycle are not available.

### **PROJECT EXPENDITURE AND FUNDING**

#### **Expenditure (in 000's):**

	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Capital Purchase - Request	<b>\$80</b>	<b>\$40</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$120</b>
Capital Purchase - Forecast	\$0	\$0	\$40	\$0	\$0	\$0	\$40	\$0	\$0	\$0	\$0	\$80
<b>Total</b>	<b>\$80</b>	<b>\$40</b>	<b>\$40</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$40</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$200</b>

#### **Funding (in 000's):**

	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Contribution from Tax Capital Reserve	\$80	\$40	\$40	\$0	\$0	\$0	\$40	\$0	\$0	\$0	\$0	\$200
<b>Total</b>	<b>\$80</b>	<b>\$40</b>	<b>\$40</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$40</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$200</b>

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding

## 2020 Capital Project Detail Report

**Project Title:** Fire Training Facility Temporary Expansion

**Project Number:** BF1013

**Department:** Barrie Fire & Emergency Services

**Summary:** Continue construction on the current facility to meet operational needs and reduce the rental of external or non- City facilities.

**Rationale:** BFES is obligated to provide all staff with adequate training. Recommendations, after the line of duty death of Barrie Firefighter Bill Wilkins referenced the need to provide more fire training. Increasing legislative requirements and industry standards across our service delivery areas require us to have adequate training facilities and this addition will be an interim solution until a permanent facility is built.

BFES has rented facilities outside the City, but this becomes problematic.

When attending remote training grounds, it creates extra implications to the training budget, such as travel time, tuition and overtime pay are required to send crews outside the City. On duty personnel are required every day to cover the City, so if training is required outside the City it requires overtime. A normal live fire training session would require a minimum of 8 to 10 firefighters on overtime. The costs of renting an outside facility is another expensive cost and there are limited resources available in the immediate area, therefore compounding the implications of the overtime budget, due to travel times.

The use of a training facility in Barrie would permit BFES to meet it's requirements under the Occupational Health & Safety Act, the Section 21 Committee, FPPA, and NFPA Standards.

Another problem when going outside the City for training is the availability of other sites for our usage. Many departments have their sites already booked for their own personnel, if not other outside clients.

This facility could be used as a means of revenue generation by the City by renting it to other local fire services, which would offset some of the operational costs.

It has been identified that the acquisition of a permanent site could be another 8 to 10 years away and thus places BFES in a very precarious position, in not realizing it's training obligations. And such failure will also fall back on the Corporation, if a serious injury to a firefighter were to happen and it was found that it was due to the lack of training, it could lead to charges against the City under the OH&S Act.

Any training props that were acquired for a temporary site could be moved and re-used at the permanent site.

BFES is currently using our temp facility to its full potential and require expansion of the facility to meet best practice and industry standards.

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding

**PROJECT EXPENDITURE AND FUNDING****Expenditure (in 000's):**

	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Construction - Request	<b>\$0</b>	<b>\$100</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$100</b>
Capital Purchase - Request	\$150	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$150
<b>Total</b>	\$150	\$100	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$250

**Funding (in 000's):**

	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Contribution from Tax Capital Reserve	\$150	\$100	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$250
<b>Total</b>	\$150	\$100	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$250

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding

## 2020 Capital Project Detail Report

**Project Title:** HazMat detection equipment Replacement

**Project Number:** 000968

**Department:** Barrie Fire & Emergency Services

**Summary:** Replacement of HazMat detection equipment

**Rationale:** BFES uses these highly technical pieces of equipment to help mitigate a potential life or property or environmental hazard. With older machines and older technology this is harder to do due to the ever increasing chemical transportation on our roads and in our industrial buildings. With increased repair costs and non-current technology we will be falling behind in our ability to protect life and property.

### **PROJECT EXPENDITURE AND FUNDING**

#### **Expenditure (in 000's):**

	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Capital Purchase - Request	\$0	\$40	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$40
<b>Total</b>	\$0	\$40	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$40

#### **Funding (in 000's):**

	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Contribution from Tax Capital Reserve	\$0	\$40	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$40
<b>Total</b>	\$0	\$40	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$40

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding

## 2020 Capital Project Detail Report

**Project Title:** Portable Radio

**Project Number:** 000951

**Department:** Barrie Fire & Emergency Services

**Summary:** Addition of portable radios to achieve consistency for emergency responders.

**Rationale:** Additional portables required for contracted technical rescue responses and spare units

<b><u>PROJECT EXPENDITURE AND FUNDING</u></b>												
<b><u>Expenditure (in 000's):</u></b>												
	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Capital Purchase - Request	\$0	\$56	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$56
<b>Total</b>	\$0	\$56	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$56
<b><u>Funding (in 000's):</u></b>												
	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Contribution from Tax Capital Reserve	\$0	\$56	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$56
<b>Total</b>	\$0	\$56	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$56

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding

## 2020 Capital Project Detail Report

**Project Title:** Self Contained Breathing Apparatus - 60 Minute Air Bottle Replacement

**Project Number:** BF1025

**Department:** Barrie Fire & Emergency Services

**Summary:** Replacement of Self Contained Breathing Apparatus (SCBA) air bottles.

**Rationale:** Self Contained Breathing Apparatus air bottles have a life cycle of 15 years from manufacture date. No maintenance program, or alternate life cycle is permitted under current standards. To lessen the financial impact of replacement, a phased approach will be undertaken and maximize the lifecycle of the current inventory. These bottles are the primary SCBA bottles used for all firefighting operations.

### **PROJECT EXPENDITURE AND FUNDING**

#### **Expenditure (in 000's):**

	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Capital Purchase - Request</b>	<b>\$35</b>	<b>\$35</b>	<b>\$35</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$105</b>
<b>Total</b>	\$35	\$35	\$35	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$105

#### **Funding (in 000's):**

	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Contribution from Tax Capital Reserve</b>	\$35	\$35	\$35	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$105
<b>Total</b>	\$35	\$35	\$35	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$105

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding

## 2020 Capital Project Detail Report

**Project Title:** Self Contained Breathing Apparatus - 45 Minute Air Bottle Replacement

**Project Number:** BF1016

**Department:** Barrie Fire & Emergency Services

**Summary:** Replacement of Self Contained Breathing Apparatus (SCBA) air bottles as required by CSA standard.

**Rationale:** Self Contained Breathing Apparatus air bottles have a life cycle of 15 years from manufacture date. No maintenance program, or alternate life cycle is permitted under current standards. To lessen the financial impact of replacement, a phased approach will be undertaken and maximize the lifecycle of the current inventory. These bottles are the primary SCBA bottles used for all firefighting operations.

<b><u>PROJECT EXPENDITURE AND FUNDING</u></b>												
<b><u>Expenditure (in 000's):</u></b>												
	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Capital Purchase - Request	\$155	\$55	\$55	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$265
<b>Total</b>	\$155	\$55	\$55	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$265
<b><u>Funding (in 000's):</u></b>												
	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Contribution from Tax Capital Reserve	\$155	\$55	\$55	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$265
<b>Total</b>	\$155	\$55	\$55	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$265

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding



## 2020 Capital Project Detail Report

**Project Title:** Thermal Imaging Camera Replacement

**Project Number:** BF1021

**Department:** Barrie Fire & Emergency Services

**Summary:** Replacement of thermal imaging cameras over a 3 year period.

**Rationale:** BFES currently uses Thermal Imaging Cameras that are reaching their lifecycle limits. Maintenance and repair costs are exceeding the current value of the in service cameras. The current camera's do not meet the updated NFPA standard.

### **PROJECT EXPENDITURE AND FUNDING**

#### **Expenditure (in 000's):**

	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Capital Purchase - Request</b>	<b>\$110</b>	<b>\$55</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$165</b>
<b>Total</b>	\$110	\$55	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$165

#### **Funding (in 000's):**

	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Contribution from Tax Capital Reserve</b>	\$110	\$55	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$165
<b>Total</b>	\$110	\$55	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$165

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding

## 2020 Capital Project Detail Report

**Project Title:** Unmanned Aerial Vehicle

**Project Number:** 000979

**Department:** Barrie Fire & Emergency Services

**Summary:** Unmanned Aerial Vehicle equipped with thermal imaging camera and air monitoring equipment.

**Rationale:** Unmanned Aerial Vehicle (UAV's) provide incident commanders with improved situational awareness and important information to formulate correct incident action plans.

Utilization of a UAV will reduce the toxicological and physical hazards firefighters are exposed to during Hazardous Material Incidents and structural fires.

Using on board air monitoring equipment will allow on scene firefighters to determine what hazards are present without having to enter the contaminated areas. Reducing chemical exposure is an important component in our overall health and wellness program. Air monitoring/quality is important information to be able to members of the community during significant fire/Haz-Mat events.

UAV's will provide direct visual over watch capabilities for incident commands during operations occurring at remote locations that cannot be accessed by the command team.

A UAV would be utilized at Haz Mat incidents both in the City of Barrie and across Simcoe county as part of our broader regional response program.

### **PROJECT EXPENDITURE AND FUNDING**

#### **Expenditure (in 000's):**

	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Capital Purchase - Request	\$0	\$30	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$30
<b>Total</b>	\$0	\$30	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$30

#### **Funding (in 000's):**

	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Contribution from Tax Capital Reserve	\$0	\$30	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$30
<b>Total</b>	\$0	\$30	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$30

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding

## 2020 Capital Project Detail Report

**Project Title:** Alliance Boulevard Expansion - Bell Farm to Bell Farm

**Project Number:** Z1174

**Department:** Engineering Department

**Summary:** Urbanization of Alliance Boulevard, including pavement reconstruction, watermain Cathodic protection, storm sewer installation, local drainage improvement, sidewalk installation, and street lighting replacement / upgrading.

**Rationale:** The pavement is considered to be in poor condition and the watermain and sanitary sewer are still in good to very good condition. During the construction phase, it is proposed to install cathodic protection on the existing Ductile Iron watermain. There are multiple drainage concerns are noted in this area and will be addressed as part of this project.

### PROJECT EXPENDITURE AND FUNDING

#### Expenditure (in 000's):

	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Pre-Design - Request	\$0	\$22	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$22
Design - Forecast	\$0	\$0	\$284	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$284
Utilities - Forecast	\$0	\$0	\$0	\$361	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$361
Construction - Forecast	\$0	\$0	\$0	\$0	\$2,869	\$0	\$0	\$0	\$0	\$0	\$0	\$2,869
<b>Total</b>	\$0	\$22	\$284	\$361	\$2,869	\$0	\$0	\$0	\$0	\$0	\$0	\$3,536

#### Funding (in 000's):

	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Contribution from DC Reserves Tax	\$0	\$0	\$1	\$0	\$4	\$0	\$0	\$0	\$0	\$0	\$0	\$5
Contribution from Tax Capital Reserve	\$0	\$22	\$253	\$361	\$2,432	\$0	\$0	\$0	\$0	\$0	\$0	\$3,068
Contribution from WW Capital Reserve	\$0	\$0	\$22	\$0	\$433	\$0	\$0	\$0	\$0	\$0	\$0	\$455
Contribution from Water Capital Reserve	\$0	\$0	\$8	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$8
<b>Total</b>	\$0	\$22	\$284	\$361	\$2,869	\$0	\$0	\$0	\$0	\$0	\$0	\$3,536

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding

## 2020 Capital Project Detail Report

**Project Title:** Anne Street Right of Way Expansion - Wellington to Dunlop

**Project Number:** 000142

**Department:** Engineering Department

**Summary:** Road reconstruction and widening of Anne Street between Wellington Street and Dunlop Street to five lanes as recommended in the City's Transportation Master Plan.

**Rationale:** Improvements focus on addressing poor traffic operations due to existing congestion and expected future traffic increases, as well as asset condition. Undertaking this work will improve overall traffic operations in the vicinity of the Highway 400/Dunlop Interchange. This work is planned to follow the reconstruction of the Highway 400/Anne Street bridge and the Highway 400/Dunlop Street interchange by the Ministry of Transportation.

### **PROJECT EXPENDITURE AND FUNDING**

#### **Expenditure (in 000's):**

	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Environmental Assessment - Request	\$0	\$75	\$75	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$150
Pre-Design - Forecast	\$0	\$0	\$0	\$35	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$35
Environmental Assessment - Forecast	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Design - Forecast	\$0	\$0	\$0	\$0	\$243	\$243	\$0	\$0	\$0	\$0	\$0	\$486
Property - Forecast	\$0	\$0	\$0	\$0	\$0	\$0	\$1,263	\$0	\$0	\$0	\$0	\$1,263
Utilities - Forecast	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$422	\$0	\$0	\$0	\$422
Construction - Forecast	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,144	\$1,144	\$0	\$2,289
<b>Total</b>	\$0	\$75	\$75	\$35	\$243	\$243	\$1,263	\$422	\$1,144	\$1,144	\$0	\$4,645

#### **Funding (in 000's):**

	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Contribution from DC Reserves Tax	\$0	\$49	\$49	\$23	\$117	\$117	\$821	\$274	\$550	\$550	\$0	\$2,548
Contribution from Tax Capital Reserve	\$0	\$26	\$26	\$12	\$63	\$63	\$442	\$148	\$296	\$296	\$0	\$1,372
Contribution from WW Capital Reserve	\$0	\$0	\$0	\$0	\$32	\$32	\$0	\$0	\$149	\$149	\$0	\$362
Contribution from Water Capital Reserve	\$0	\$0	\$0	\$0	\$32	\$32	\$0	\$0	\$149	\$149	\$0	\$362
<b>Total</b>	\$0	\$75	\$75	\$35	\$243	\$243	\$1,263	\$422	\$1,144	\$1,144	\$0	\$4,645

## 2020 Capital Project Detail Report

**Project Title:** Bear Creek Ridge Subdivision New Trail Development

**Project Number:** 000916

**Department:** Engineering Department

**Summary:** New subdivision development adding a pedestrian trail linkage within the Salem Secondary Planning Area.

**Rationale:** The Developer is required to fulfill their development obligation through the development approval process. The Developer is required to deliver the completed trail for public use in 2021. This will ensure that there are no service gaps for new residents. If the park is not delivered within the first year of development construction, the City will not be fulfilling our obligation to provide a trail linkage for the local residents.

<b><u>PROJECT EXPENDITURE AND FUNDING</u></b>												
<b><u>Expenditure (in 000's):</u></b>												
	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Construction - Request	\$0	\$80	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$80
Total	\$0	\$80	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$80
<b><u>Funding (in 000's):</u></b>												
	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Developer Front Ending (Annex) - Developer Build	\$0	\$80	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$80
Total	\$0	\$80	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$80

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding

## 2020 Capital Project Detail Report

**Project Title:** Bell Farm Road ROW Expansion - St. Vincent to Duckworth

**Project Number:** EN1164

**Department:** Engineering Department

**Summary:** Reconstruction and widening of Bell Farm Road to 3-lanes, bike lanes and sidewalks between St. Vincent Street to Duckworth Street.

**Rationale:** The existing 2-lane rural cross-section requires reconstruction to address renewal needs. This corridor has been identified for implementation of sidewalks to enhance pedestrian safety as well as stormwater management to improve drainage and mitigate environmental impacts. The existing watermain is approaching the end of its forecasted service life and is identified for replacement. This corridor is a primary route for both Barrie Fire and Emergency Services and Barrie Police Services. Implementation of cycling lanes and pedestrian facilities will promote the use of Active Transportation by Georgian College students to access student residences and St. Vincent Street.

In 2016/17, the City undertook a Schedule 'C' Class EA. The study recommends construction of two vehicular lanes with a two-way left turn lane, sidewalks and bicycle lanes. In June 2017, Council approved recommendations identified in the Class EA study.

**PROJECT EXPENDITURE AND FUNDING****Expenditure (in 000's):**

	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Environmental Assessment- Request	\$113	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$113
Property, Utilities, Design - Request	\$1,802	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,802
Construction - Request	<b>\$0</b>	<b>\$4,250</b>	<b>\$5,170</b>	<b>\$1,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$10,420</b>
<b>Total</b>	\$1,915	\$4,250	\$5,170	\$1,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$12,335

**Funding (in 000's):**

	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Contribution from DC Reserves Tax	\$1,117	\$1,820	\$3,361	\$650	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$6,947
Contribution from DC Reserves Water	\$0	\$845	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$845
Contribution from DC Reserves Wastewater	\$0	\$98	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$98
Contribution from Tax Capital Reserve	\$601	\$980	\$1,810	\$350	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,741
Contribution from WW Capital Reserve	\$79	\$53	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$131
Contribution from Water Capital Reserve	\$118	\$455	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$573
<b>Total</b>	\$1,915	\$4,250	\$5,170	\$1,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$12,335

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding

## 2020 Capital Project Detail Report

**Project Title:** Big Bay Point Rd., Painswick Bridge B Rehabilitation- (Metrolinx Corridor)- Ashford to Pine

**Project Number:** EN1324

**Department:** Engineering Department

**Summary:** Rehabilitation of Big Bay Point Road (Painswick “B”) Bridge, east of Ashford Drive (above Metrolinx corridor). This project includes removals, repairs, replacement, and upgrades of concrete, asphalt, and structural elements. Conversion and rehabilitation of this bridge in advance of Metrolinx’ planned electrification of the rail corridor.

**Rationale:** Structural inspection has shown the Painswick Bridge “B” requires construction rehabilitation and a conversion to semi-integral design to reduce the risk of structural failure. The proposed timing allows for the City's rehabilitation to proceed in advance of Metrolinx’s project to electrify the rail corridor. Proceeding with this proposal will mitigate increases in repair costs. Furthermore, capital expenditures will be reduced by completing the project prior to Metrolinx construction. Given the age and risk of further deterioration to the substructure, other lifecycle strategies (status quo, do nothing/run to failure, operate/maintain differently, repair, or replace) are not as cost effective and/or not expected to significantly extend the existing life of the asset.

### **PROJECT EXPENDITURE AND FUNDING**

#### **Expenditure (in 000's):**

	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Design - Request</b>	<b>\$130</b>	<b>\$65</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$195</b>
<b>Construction - Forecast</b>	\$0	\$0	\$0	\$820	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$820
<b>Total</b>	<b>\$130</b>	<b>\$65</b>	<b>\$0</b>	<b>\$820</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$1,105</b>

#### **Funding (in 000's):**

	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Contribution from Tax Capital Reserve</b>	<b>\$130</b>	<b>\$65</b>	<b>\$0</b>	<b>\$820</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$1,105</b>
<b>Total</b>	<b>\$130</b>	<b>\$65</b>	<b>\$0</b>	<b>\$820</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$1,105</b>

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding



## 2020 Capital Project Detail Report

**Project Title:** Big Bay Point Road ROW Expansion - Bayview to Huronia

**Project Number:** EN1286

**Department:** Engineering Department

**Summary:** Reconstruction and widening of Big Bay Point Road to 5-lanes, buffered bike lanes and sidewalk on the south side between Bayview Drive and Huronia Road. This link is a critical component of the Harvie Road / Big Bay Point Road Highway Crossing. The Bayview / Big Bay intersection is being constructed as part of the Harvie Hwy 400 Crossing.

**Rationale:** The Transportation Master Plan identified the need to construct a highway crossing at Harvie Road / Big Bay Point Road to accommodate existing traffic volumes and planned growth in the Secondary Plan Lands. The construction of this link is needed to be implemented in conjunction with the Harvie Road / Big Bay Point Road Highway Crossing to provide 5-lanes continuously on Big Bay Point Road from Bayview Drive (east terminus of crossing project) to Huronia Road.

The existing 2-lane rural cross-section is not sufficient to accommodate traffic volumes associated with the planned highway crossing. The City has completed a Schedule C Environmental Assessment; expansion to 5-lanes, buffered bike lanes and sidewalk is identified as the preferred solution.

The project is identified in the Council endorsed Transportation Master Plan

Cash flow has been modified to reflect the elements to be constructed as part of the Harvie Crossing in 2019 and 2020.

<b><u>PROJECT EXPENDITURE AND FUNDING</u></b>												
<b><u>Expenditure (in 000's):</u></b>												
	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Design - Request</b>	\$1,222	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,222
<b>Property &amp; Utilities - Request</b>	<b>\$1,220</b>	<b>\$1,108</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$2,328</b>
<b>Construction - Request</b>	\$634	\$634	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,267
<b>Construction - Forecast</b>	\$0	\$0	\$2,956	\$4,223	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$7,180
<b>Total</b>	\$3,075	\$1,741	\$2,956	\$4,223	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$11,996
<b><u>Funding (in 000's):</u></b>												
	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Contribution from Debt &amp; DC Reserves</b>	\$2,050	\$1,132	\$1,922	\$2,745	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$7,849
<b>Contribution from Tax Capital Reserve</b>	\$1,025	\$609	\$1,035	\$1,478	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$4,147
<b>Total</b>	\$3,075	\$1,741	\$2,956	\$4,223	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$11,996

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding

## 2020 Capital Project Detail Report

**Project Title:** Bryne Drive New Road Construction - Harvie to North of Caplan

**Project Number:** EN1277

**Department:** Engineering Department

**Summary:** Construction of the unopened portion of Bryne Drive to 5-lanes, bike lanes and sidewalks between Harvie Road and north of Caplan Avenue. This link is required to support the Harvie Road / Big Bay Point Road Highway Crossing.

**Rationale:** The 2013 Council endorsed Transportation Master Plan and Bryne ESR identified the need to construct a highway crossing at Harvie Road / Big Bay Point Road to reduce congestion in the south end of Barrie and to accommodate planned growth. The completion of Bryne Drive from Caplan to Harvie is needed to reduce traffic congestion at the Essa and Maplevue Drive interchanges by redirecting east / west traffic to the Harvie Road / Big Bay Point Road Highway Crossing.

The City has completed a Schedule C Environmental Assessment to determine the preferred alternative for implementation. The project is identified in the Council endorsed Transportation Master Plan

Cash flow has been modified to reflect a segment of Bryne immediately south of Harvie being constructed as part of the Harvie Crossing in 2019 and 2020.

<b><u>PROJECT EXPENDITURE AND FUNDING</u></b>												
<b><u>Expenditure (in 000's):</u></b>												
	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Design - Request	\$1,045	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,045
Property & Utilities - Request	\$493	\$900	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,393
Construction - Request	\$334	\$334	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$667
Construction - Forecast	\$0	\$0	\$2,669	\$3,337	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$6,006
<b>Total</b>	\$1,872	\$1,234	\$2,669	\$3,337	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$9,111
<b><u>Funding (in 000's):</u></b>												
	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Contribution from DC Reserves Tax	\$787	\$802	\$1,735	\$2,169	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$5,493
Contribution from Tax Capital Reserve	\$1,085	\$432	\$934	\$1,168	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,619
<b>Total</b>	\$1,872	\$1,234	\$2,669	\$3,337	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$9,111

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding

## 2020 Capital Project Detail Report

**Project Title:** Codrington Street and Lakeview Crescent ROW Replacement - Duckworth to Weldon

**Project Number:** Z56

**Department:** Engineering Department

**Summary:** Replacement of the Right of Way on Codrington Street from Duckworth to Weldon and Lakeview Crescent from Codrington to Rodney. The project also includes the replacement of pavement on Highland Avenue from Cook to Codrington.

**Rationale:** The pavement condition is considered to be poor to very poor and the remainder of the buried infrastructure is at or approaching its maximum potential life. The watermain, storm sewer and sanitary sewers were all installed between 1946 and 1965 and all require replacement. While full depth resurfacing might be considered adequate treatment for the road alone, geotechnical investigations revealed structural anomalies in the pavement surface and base that make anything other than reconstruction unfeasible.

### PROJECT EXPENDITURE AND FUNDING

#### Expenditure (in 000's):

	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Pre-Design - Request	\$0	\$45	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$45
Design - Forecast	\$0	\$0	\$154	\$104	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$257
Utilities - Forecast	\$0	\$0	\$0	\$0	\$906	\$0	\$0	\$0	\$0	\$0	\$0	\$906
Construction - Forecast	\$0	\$0	\$0	\$0	\$0	\$3,020	\$3,020	\$0	\$0	\$0	\$0	\$6,041
<b>Total</b>	\$0	\$45	\$154	\$104	\$906	\$3,020	\$3,020	\$0	\$0	\$0	\$0	\$7,249

#### Funding (in 000's):

	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Developer Contributions	\$0	\$0	\$0	\$0	\$1	\$0	\$0	\$0	\$0	\$0	\$0	\$1
Contribution from Tax Capital Reserve	\$0	\$45	\$83	\$67	\$905	\$1,954	\$1,954	\$0	\$0	\$0	\$0	\$5,010
Contribution from WW Capital Reserve	\$0	\$0	\$36	\$21	\$0	\$561	\$561	\$0	\$0	\$0	\$0	\$1,179
Contribution from Water Capital Reserve	\$0	\$0	\$35	\$15	\$0	\$505	\$505	\$0	\$0	\$0	\$0	\$1,060
<b>Total</b>	\$0	\$45	\$154	\$104	\$906	\$3,020	\$3,020	\$0	\$0	\$0	\$0	\$7,249

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding

## 2020 Capital Project Detail Report

**Project Title:** Dunlop, Poyntz and Berczy New Watermain and ROW Replacement - Codrington to Mulcaster

**Project Number:** EN1101

**Department:** Engineering Department

**Summary:** Road reconstruction including watermain, sanitary sewer, storm sewer, street lights and sidewalk.

**Rationale:** The Water Storage and Distribution Master Plan identified the need for the transmission watermain which will provide connectivity between pressure Zone 1 and Zone 2N which is included in this project on Dunlop Street / Poyntz Street / Berczy Street. The Project also includes full roadway reconstruction including the replacement of storm and sanitary infrastructure, sidewalk replacement and street lighting upgrades.

### **PROJECT EXPENDITURE AND FUNDING**

#### **Expenditure (in 000's):**

	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
<b>Construction &amp; Design - Request</b>	<b>\$826</b>	<b>\$2,260</b>	<b>\$2,770</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$5,856</b>
<b>Total</b>	\$826	\$2,260	\$2,770	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$5,856

#### **Funding (in 000's):**

	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
<b>Developer Contributions</b>	\$0	\$14	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$14
<b>Contribution from DC Reserves</b>	\$48	\$75	\$250	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$373
<b>Contribution from Tax Capital Reserve</b>	\$539	\$1,219	\$1,770	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,528
<b>Contribution from WW Capital Reserve</b>	\$79	\$727	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$806
<b>Contribution from Water Capital Reserve</b>	\$161	\$225	\$750	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,136
<b>Total</b>	\$826	\$2,260	\$2,770	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$5,856

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding

## 2020 Capital Project Detail Report

**Project Title:** Dunlop Street East Corridor Improvements - Toronto to Mulcaster

**Project Number:** EN1167

**Department:** Engineering Department

**Summary:** Reconstruction of the Dunlop Street East right of way, including new pavement structure (base granular to remain), enhancement of the pedestrian environment via sidewalk replacement/widening and creation of a flexible boulevard, curb replacement, landscape/streetscape programming replacement, street lighting and duct replacement and cathodic protection of existing watermain. Underground works are to remain in place.

**Rationale:** The Class Environmental Assessment reviewed alternatives to provide a more equitable allocation of road space between all modes of transport in the downtown core. The Preferred Alternative (Reconfigurable Street) has been approved by Council. This option consists of two-way traffic, a reconfigurable boulevard that can be used for pedestrian space or parking and wider permanent sidewalks adjacent to the buildings. Construction work will be coordinated to minimize disruption during the peak summer patio and festival season.

### **PROJECT EXPENDITURE AND FUNDING**

#### **Expenditure (in 000's):**

	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Design &amp; Utilities - Request</b>	<b>\$772</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$772</b>
<b>Construction - Request</b>	<b>\$5,348</b>	<b>\$8,560</b>	<b>\$1,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$14,908</b>
<b>Total</b>	<b>\$6,120</b>	<b>\$8,560</b>	<b>\$1,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$15,680</b>

#### **Funding (in 000's):**

	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Debenture Proceeds - Tax</b>	<b>\$1,350</b>	<b>\$3,150</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$4,500</b>
<b>Government &amp; Other Grant Revenues</b>	<b>\$305</b>	<b>\$150</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$455</b>
<b>Contribution from Reserves</b>	<b>\$173</b>	<b>\$173</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$345</b>
<b>Contribution from Tax Capital Reserve</b>	<b>\$3,916</b>	<b>\$4,906</b>	<b>\$988</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$9,810</b>
<b>Contribution from WW Capital Reserve</b>	<b>\$83</b>	<b>\$30</b>	<b>\$2</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$115</b>
<b>Contribution from Water Capital Reserve</b>	<b>\$294</b>	<b>\$151</b>	<b>\$10</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$455</b>
<b>Total</b>	<b>\$6,120</b>	<b>\$8,560</b>	<b>\$1,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$15,680</b>

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding

## 2020 Capital Project Detail Report

**Project Title:** Dunlop Street Right of Way Expansion - Sarjeant to Anne (outside of CAH limits)

**Project Number:** EN1264

**Department:** Engineering Department

**Summary:** This project represents the City's portion of the work and costs associated with the Ministry of Transportation's planned reconstruction and widening of the Dunlop Street/Highway 400 interchange, that are outside of the Ministry's controlled access highway (CAH) limits.

**Rationale:** The Ministry of Transportation (MTO) plans to reconstruct the Highway 400/Dunlop Street interchange beginning in 2024. The City's Transportation Master Plan identifies the need for additional lanes on Dunlop Street, and sidewalks. The City is collaborating with MTO to build the additional infrastructure as part of MTO's reconstruction project as a joint effort to achieve economies of scale. This approach results in significant cost avoidance as compared to completing the identified works as a separate project.

### PROJECT EXPENDITURE AND FUNDING

#### Expenditure (in 000's):

	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Environmental Assessment - Request	\$267	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$267
Design - Request	\$666	\$50	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$716
Property - Request	\$0	\$1,460	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,460
Utilities - Request	\$0	\$470	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$470
Construction - Forecast	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$5,840	\$0	\$0	\$5,840
<b>Total</b>	\$933	\$1,980	\$0	\$0	\$0	\$0	\$0	\$0	\$5,840	\$0	\$0	\$8,753

#### Funding (in 000's):

	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Contribution from DC Reserves Tax	\$606	\$1,255	\$0	\$0	\$0	\$0	\$0	\$0	\$3,341	\$0	\$0	\$5,202
Contribution from DC Reserves Water	\$0	\$22	\$0	\$0	\$0	\$0	\$0	\$0	\$228	\$0	\$0	\$249
Contribution from DC Reserves Wastewater	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$228	\$0	\$0	\$228
Contribution from Tax Capital Reserve	\$327	\$676	\$0	\$0	\$0	\$0	\$0	\$0	\$1,799	\$0	\$0	\$2,801
Contribution from WW Capital Reserve	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$123	\$0	\$0	\$123
Contribution from Water Capital Reserve	\$0	\$29	\$0	\$0	\$0	\$0	\$0	\$0	\$123	\$0	\$0	\$151
<b>Total</b>	\$933	\$1,980	\$0	\$0	\$0	\$0	\$0	\$0	\$5,840	\$0	\$0	\$8,753

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding

## 2020 Capital Project Detail Report

**Project Title:** Dunlop Street Right of Way Expansion - Sarjeant to Anne (within CAH limits)

**Project Number:** EN1306

**Department:** Engineering Department

**Summary:** This project represents the City's portion of the work and costs associated with the Ministry of Transportation's planned reconstruction and widening of the Dunlop Street/Highway 400 interchange, within the Ministry's controlled access highway (CAH) limits.

**Rationale:** The Ministry of Transportation (MTO) plans to reconstruct the Highway 400/Dunlop Street interchange beginning in 2024. The City's Transportation Master Plan identifies the need for additional lanes on Dunlop Street, and sidewalks. The City is collaborating with MTO to build the additional infrastructure as part of MTO's reconstruction project as a joint effort to achieve economies of scale. This approach results in significant cost avoidance as compared to completing the identified works as a separate project.

### PROJECT EXPENDITURE AND FUNDING

#### Expenditure (in 000's):

	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Environmental Assessment - Request	\$374	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$374
Design - Request	\$461	\$360	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$821
Design - Forecast	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,275	\$0	\$0	\$1,275
Utilities - Forecast	\$0	\$0	\$180	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$180
Construction - Forecast	\$0	\$0	\$0	\$2,800	\$0	\$0	\$0	\$0	\$10,550	\$0	\$0	\$13,350
<b>Total</b>	\$834	\$360	\$180	\$2,800	\$0	\$0	\$0	\$0	\$11,825	\$0	\$0	\$15,999

#### Funding (in 000's):

	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Contribution from DC Reserves Tax	\$542	\$155	\$77	\$1,820	\$0	\$0	\$0	\$0	\$7,686	\$0	\$0	\$10,281
Contribution from Tax Capital Reserve	\$292	\$205	\$103	\$980	\$0	\$0	\$0	\$0	\$4,139	\$0	\$0	\$5,719
<b>Total</b>	\$834	\$360	\$180	\$2,800	\$0	\$0	\$0	\$0	\$11,825	\$0	\$0	\$15,999

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding

## 2020 Capital Project Detail Report

**Project Title:** Dunlop Street West ROW Replacement - Eccles to Toronto

**Project Number:** EN1071

**Department:** Engineering Department

**Summary:** Construction of an open flow channel north of Dunlop Street, increasing the culvert capacity by installing new culverts across Dunlop Street and Bradford Street and constructing an open flow channel south of Dunlop Street. This project includes the reconstruction of the right of way including sidewalks, watermain, and local storm and sanitary sewers.

**Rationale:** Kidds Creek currently experiences several issues including flooding through many areas of the watershed resulting in loss of use of property and property damage. Increased sedimentation and erosion problems have led to reduced conveyance capacity, a decline in water quality and the alteration of fish and wildlife habitat. The Kidds Creek Master Drainage Plan (MDP) identified improvements necessary to mitigate these issues. To reduce the potential for increased flooding downstream as improvements are made, the MDP recommended that conveyance improvements ideally start at the most downstream portions of the watershed and be implemented in sequential order upstream.

The existing drainage system can typically only convey minor storm events at road crossings and channels. This project is at a key downstream location that must be improved before further improvements can be implemented upstream. Fire Station #1 is also located in this flood area and access to Dunlop Street east for emergency response is restricted during local flooding events.

In addition to the drainage concerns, Dunlop Street from Eccles Street to Toronto Street has deficient road surface conditions and the sanitary sewer is in poor structural condition and requires replacement.

The City of Barrie has been approved for a grant under Intake 4 of the National Disaster Mitigation Program (NDMP) in the amount of \$1.5 million for the construction phase of this project, which has to be used by March 31, 2020.



# PROJECT EXPENDITURE AND FUNDING

## Expenditure (in 000's):

	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Design& Property - Request	\$5,062	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$5,062
Construction - Request	<b>\$6,800</b>	<b>\$1,063</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$7,863</b>
Construction - Forecast	\$0	\$0	\$6,000	\$3,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$9,000
Total	\$11,862	\$1,063	\$6,000	\$3,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$21,926

## Funding (in 000's):

	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Government of Canada Grant Revenue	\$2,900	\$100	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,000
Contribution from Federal Gas Tax Reserve	\$4,467	\$200	\$1,128	\$564	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$6,360
Contribution from Tax Capital Reserve	\$3,992	\$691	\$4,461	\$2,231	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$11,374
Contribution from WW Capital Reserve	\$280	\$40	\$228	\$114	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$662
Contribution from Water Capital Reserve	\$223	\$32	\$182	\$91	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$529
Total	\$11,862	\$1,063	\$6,000	\$3,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$21,926

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding

## 2020 Capital Project Detail Report

**Project Title:** Dyments Creek - SWMF DY01 Rehabilitation

**Project Number:** 000066

**Department:** Engineering Department

**Summary:** Retrofit the existing Dyments Creek online pond (DY01) located between George Street and Anne Street as well as the removal of culvert across the unopened section of Victoria Street.

**Rationale:** The existing on-line pond no longer provides quantity or quality control.

### **PROJECT EXPENDITURE AND FUNDING**

#### **Expenditure (in 000's):**

	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Pre-Design - Request	\$0	\$35	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$35
Design - Forecast	\$0	\$0	\$333	\$333	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$665
Utilities - Forecast	\$0	\$0	\$0	\$0	\$525	\$0	\$0	\$0	\$0	\$0	\$0	\$525
Construction - Forecast	\$0	\$0	\$0	\$0	\$0	\$2,482	\$2,482	\$0	\$0	\$0	\$0	\$4,963
<b>Total</b>	\$0	\$35	\$333	\$333	\$525	\$2,482	\$2,482	\$0	\$0	\$0	\$0	\$6,188

#### **Funding (in 000's):**

	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Contribution from DC Reserves Tax	\$0	\$16	\$150	\$150	\$236	\$1,117	\$1,117	\$0	\$0	\$0	\$0	\$2,785
Contribution from Tax Capital Reserve	\$0	\$19	\$183	\$183	\$289	\$1,365	\$1,365	\$0	\$0	\$0	\$0	\$3,403
<b>Total</b>	\$0	\$35	\$333	\$333	\$525	\$2,482	\$2,482	\$0	\$0	\$0	\$0	\$6,188

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding

## 2020 Capital Project Detail Report

**Project Title:** Early Life Pavement Preservation Pilot Program

**Project Number:** EN1320

**Department:** Engineering Department

**Summary:** Application of Early Life Pavement Preservation techniques such as Reclamite, micro surfacing, slurry sealing and fog sealing to extend the life of pavement surface assets that are in the early stages of deterioration.

**Rationale:** The City of Barrie currently has approximately 1600 Lane kms within its road network. Many of these roads were built between 1986 and 2013, with the largest amount of network growth in the last 60 years occurring roughly within this period. Best practice indicates that the City of Barrie should currently be concentrating on preserving the roads that were built between 1988 and 2017. Many of these roads are in the ideal condition to perform early life preservation to extend the potential life of the roads. It is estimated that if the City continues with current processes (with no early life preservation), the overall network PCI for the City will decrease by 11 points and there will be more roads in the Fair to Very Poor condition. The City has conducted a pilot program of various techniques and proposes to evaluate the performance of these techniques over the next few years.

### **PROJECT EXPENDITURE AND FUNDING**

#### **Expenditure (in 000's):**

	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Design - Request</b>	<b>\$40</b>	<b>\$50</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$90</b>
<b>Construction - Request</b>	<b>\$200</b>	<b>\$300</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$500</b>
<b>Total</b>	<b>\$240</b>	<b>\$350</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$590</b>

#### **Funding (in 000's):**

	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Contribution from Federal Gas Tax Reserve</b>	<b>\$200</b>	<b>\$300</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$500</b>
<b>Contribution from Tax Capital Reserve</b>	<b>\$40</b>	<b>\$50</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$90</b>
<b>Total</b>	<b>\$240</b>	<b>\$350</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$590</b>

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding

## 2020 Capital Project Detail Report

**Project Title:** End of Life Pavement Replacement Program

**Project Number:** EN1308

**Department:** Engineering Department

**Summary:** The End of Life Pavement Replacement Program will focus on roads where ride quality is poor or very poor, physical maintenance is trending high, and reconstruction is several years away or not currently planned. Typical candidates will be roads that are too far deteriorated for the Road Resurfacing Program and are not candidates for reconstruction in the short term. The program may act as a holding strategy.

This request is not intended to replace any of the preservation programs that are being requested in the upcoming Capital Plan, but instead, provide another tool for the City to work with to improve the level of service that the residents of Barrie experience on a daily basis.

**Rationale:** The program will address Barrie's worst pavement surfaces by replacing the surfaces or managing localized trouble areas to help reduce continuous operational dependencies. There are many streets that require larger scale asphalt replacements but due to budget constraints, these repairs are usually avoided and left until reconstruction. Reconstruction is often years away or there may be no plans for reconstruction as subsurface infrastructure is still in acceptable condition. These road sections are beyond preservation or rehabilitation and require regular pothole patching and provide poor ride quality.

<b><u>PROJECT EXPENDITURE AND FUNDING</u></b>												
<b><u>Expenditure (in 000's):</u></b>												
	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Design - Request	\$45	\$25	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$70
Construction - Request	\$750	\$575	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,325
Design - Forecast	\$0	\$0	\$25	\$30	\$30	\$30	\$30	\$30	\$30	\$30	\$30	\$265
Construction - Forecast	\$0	\$0	\$600	\$625	\$625	\$625	\$625	\$625	\$625	\$625	\$625	\$5,600
<b>Total</b>	\$795	\$600	\$625	\$655	\$655	\$655	\$655	\$655	\$655	\$655	\$655	\$7,260
<b><u>Funding (in 000's):</u></b>												
	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Contribution from Federal Gas Tax Reserve	\$550	\$575	\$600	\$625	\$625	\$625	\$625	\$625	\$625	\$625	\$625	\$6,725
Contribution from Tax Capital Reserve	\$245	\$25	\$25	\$30	\$30	\$30	\$30	\$30	\$30	\$30	\$30	\$535
<b>Total</b>	\$795	\$600	\$625	\$655	\$655	\$655	\$655	\$655	\$655	\$655	\$655	\$7,260

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding

## 2020 Capital Project Detail Report

**Project Title:** Essa Road and Anne Street Intersection Reconstruction

**Project Number:** 000735

**Department:** Engineering Department

**Summary:** Reconstruction and intersection improvements at the Essa Road and Anne Street intersection.

**Rationale:** Intersection improvements are required to improve traffic operations related to existing congestion and future traffic demands associated with growth. The Ministry of Transportation is planning reconstruction of the Highway 400/Essa Road interchange beginning in 2022; to avoid conflicts with the interchange construction this project should be completed prior to the interchange work taking place.

<b><u>PROJECT EXPENDITURE AND FUNDING</u></b>												
<b><u>Expenditure (in 000's):</u></b>												
	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Construction - Request	\$0	\$4,486	\$200	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$4,686
<b>Total</b>	\$0	\$4,486	\$200	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$4,686
<b><u>Funding (in 000's):</u></b>												
	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Contribution from DC Reserves Tax	\$0	\$2,402	\$130	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,532
Contribution from DC Reserves Water	\$0	\$91	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$91
Contribution from DC Reserves Wastewater	\$0	\$423	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$423
Contribution from Tax Capital Reserve	\$0	\$1,294	\$70	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,364
Contribution from WW Capital Reserve	\$0	\$228	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$228
Contribution from Water Capital Reserve	\$0	\$49	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$49
<b>Total</b>	\$0	\$4,486	\$200	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$4,686

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding

## 2020 Capital Project Detail Report

**Project Title:** Essa Road New Transmission Watermain and Road Expansion - Athabaska to Salem (Developer)

**Project Number:** EN1275

**Department:** Engineering Department

**Summary:** Expansion of Essa Road, including urbanization and widening of the road from two to three lanes, with buffered bike lanes, and installation of a trunk watermain.

**Rationale:** Increases in traffic volumes resulting from growth in the secondary plan area justify increasing the number of lanes and urbanizing Essa Road. The trunk watermain is needed to provide potable water and fire protection in Phase 1 of the Salem Secondary Plan. Funding for this project is partially front-ended by Developers to provide servicing required for Phase 1 of growth-related development in the secondary plan area.

### **PROJECT EXPENDITURE AND FUNDING**

#### **Expenditure (in 000's):**

	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Environmental Assessment - Request</b>	<b>\$180</b>	<b>(\$180)</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
<b>Design - Request</b>	<b>\$1,230</b>	<b>(\$470)</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$760</b>
<b>Property - Request</b>	<b>\$444</b>	<b>(\$444)</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
<b>Construction - Request</b>	<b>\$337</b>	<b>\$1,172</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$1,509</b>
<b>Property - Forecast</b>	\$0	\$0	\$1,739	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,739
<b>Utilities - Forecast</b>	\$0	\$0	\$0	\$1,025	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,025
<b>Construction - Forecast</b>	\$0	\$0	\$0	\$0	\$2,696	\$2,696	\$0	\$0	\$0	\$0	\$0	\$5,392
<b>Total</b>	<b>\$2,190</b>	<b>\$79</b>	<b>\$1,739</b>	<b>\$1,025</b>	<b>\$2,696</b>	<b>\$2,696</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$10,425</b>

#### **Funding (in 000's):**

	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Developer Front Ending (Annex) - Developer Build</b>	<b>\$1,902</b>	<b>\$268</b>	<b>\$1,478</b>	<b>\$871</b>	<b>\$2,303</b>	<b>\$2,303</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$9,126</b>
<b>Debenture Proceeds - Tax / Tax Capital</b>	<b>\$288</b>	<b>(\$189)</b>	<b>\$261</b>	<b>\$154</b>	<b>\$393</b>	<b>\$393</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$1,298</b>
<b>Total</b>	<b>\$2,190</b>	<b>\$79</b>	<b>\$1,739</b>	<b>\$1,025</b>	<b>\$2,696</b>	<b>\$2,696</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$10,425</b>

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding

## 2020 Capital Project Detail Report

**Project Title:** Essa Road Right of Way Expansion - Bryne to Fairview (outside of CAH limits)

**Project Number:** EN1015

**Department:** Engineering Department

**Summary:** This project includes additional road improvements beyond MTO's controlled access highway (CAH) limits associated with the Essa Road Highway 400 crossing/interchange replacement. The objective is to extend improvements to the Essa Road/Ardagh Drive and Essa Road/Fairview Road intersections.

**Rationale:** MTO is presently undertaking detailed design for this project and is planning to initiate construction in 2022. This work is required to ensure that improvements are extended to logical termination points. This also achieves economies of scale by including this work with MTO's planned improvements within CAH limits.

### **PROJECT EXPENDITURE AND FUNDING**

#### **Expenditure (in 000's):**

	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Design &amp; EA - Request</b>	<b>\$5,664</b>	<b>\$80</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$5,744</b>
<b>Property - Forecast</b>	\$0	\$0	\$0	\$5,700	\$60	\$0	\$0	\$0	\$0	\$0	\$0	\$5,760
<b>Utilities - Forecast</b>	\$0	\$0	\$0	\$0	\$550	\$0	\$0	\$0	\$0	\$0	\$0	\$550
<b>Construction - Forecast</b>	\$0	\$0	\$0	\$0	\$0	\$0	\$7,910	\$0	\$0	\$0	\$0	\$7,910
<b>Total</b>	<b>\$5,664</b>	<b>\$80</b>	<b>\$0</b>	<b>\$5,700</b>	<b>\$610</b>	<b>\$0</b>	<b>\$7,910</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$19,964</b>

#### **Funding (in 000's):**

	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Developer Contributions</b>	\$920	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$920
<b>Debenture Proceeds - Tax</b>	\$460	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$460
<b>Contribution from DC Reserves</b>	\$3,102	\$52	\$0	\$3,705	\$397	\$0	\$5,051	\$0	\$0	\$0	\$0	\$12,307
<b>Contribution from Reserves</b>	\$1,182	\$28	\$0	\$1,995	\$214	\$0	\$2,859	\$0	\$0	\$0	\$0	\$6,278
<b>Total</b>	<b>\$5,664</b>	<b>\$80</b>	<b>\$0</b>	<b>\$5,700</b>	<b>\$610</b>	<b>\$0</b>	<b>\$7,910</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$19,964</b>

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding

## 2020 Capital Project Detail Report

**Project Title:** Essa Road Right of Way Expansion - Bryne to Fairview (within CAH limits)

**Project Number:** 000655

**Department:** Engineering Department

**Summary:** This project represents the City's portion of the work and costs associated with the Ministry of Transportation's planned reconstruction and widening of the Essa Road/Highway 400 interchange, within the Ministry's controlled access highway (CAH) limits.

**Rationale:** The Ministry of Transportation (MTO) plans to reconstruct the Highway 400/Essa Road interchange beginning in 2022. The City's Transportation Master Plan identifies the need for additional lanes on Essa Road, and sidewalks. The City is collaborating with MTO to build the additional infrastructure as part of MTO's reconstruction project as a joint effort to achieve economies of scale. This approach results in significant cost avoidance as compared to completing the identified works as a separate project.

### **PROJECT EXPENDITURE AND FUNDING**

#### **Expenditure (in 000's):**

	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Design - Request	\$0	\$1,120	\$10	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,130
Construction - Forecast	\$0	\$0	\$0	\$0	\$0	\$10	\$8,110	\$0	\$0	\$0	\$0	\$8,120
<b>Total</b>	\$0	\$1,120	\$10	\$0	\$0	\$10	\$8,110	\$0	\$0	\$0	\$0	\$9,250

#### **Funding (in 000's):**

	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Contribution from DC Reserves Tax	\$0	\$728	\$7	\$0	\$0	\$7	\$5,272	\$0	\$0	\$0	\$0	\$6,013
Contribution from Tax Capital Reserve	\$0	\$392	\$4	\$0	\$0	\$4	\$2,839	\$0	\$0	\$0	\$0	\$3,238
<b>Total</b>	\$0	\$1,120	\$10	\$0	\$0	\$10	\$8,110	\$0	\$0	\$0	\$0	\$9,250

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding



## 2020 Capital Project Detail Report

**Project Title:** Essa Road ROW Expansion - Coughlin to Maplevue

**Project Number:** EN1170

**Department:** Engineering Department

**Summary:** Reconstruction and widening of Essa Road from Coughlin Road to Maplevue Drive West. The scope of work includes complete road reconstruction and widening to 5 lanes with a multi-use trail and sidewalk.

**Rationale:** A 2017 Environmental Assessment recommended the widening to 5 lanes to accommodate traffic growth which will otherwise result in poor level of service (congestion). The project will also address the lack of active transportation infrastructure in this priority corridor, and poor condition of the existing pavement.

### **PROJECT EXPENDITURE AND FUNDING**

#### **Expenditure (in 000's):**

	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Design &amp; EA - Request</b>	<b>\$200</b>	<b>\$172</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$372</b>
<b>Utilities - Forecast</b>	\$0	\$0	\$0	\$566	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$566
<b>Construction - Forecast</b>	\$0	\$0	\$0	\$0	\$0	\$2,720	\$3,298	\$0	\$0	\$0	\$0	\$6,018
<b>Total</b>	\$200	\$172	\$0	\$566	\$0	\$2,720	\$3,298	\$0	\$0	\$0	\$0	\$6,957

#### **Funding (in 000's):**

	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Contribution from DC Reserves Tax</b>	\$59	\$112	\$0	\$368	\$0	\$1,700	\$2,076	\$0	\$0	\$0	\$0	\$4,316
<b>Contribution from DC Reserves Water</b>	\$0	\$0	\$0	\$0	\$0	\$68	\$68	\$0	\$0	\$0	\$0	\$135
<b>Contribution from Tax Capital Reserve</b>	\$142	\$60	\$0	\$198	\$0	\$916	\$1,118	\$0	\$0	\$0	\$0	\$2,434
<b>Contribution from Water Capital Reserve</b>	\$0	\$0	\$0	\$0	\$0	\$36	\$36	\$0	\$0	\$0	\$0	\$73
<b>Total</b>	\$200	\$172	\$0	\$566	\$0	\$2,720	\$3,298	\$0	\$0	\$0	\$0	\$6,957

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding

## 2020 Capital Project Detail Report

**Project Title:** Fairview Road Right of Way Expansion - Essa to Little Avenue (Phase 1)

**Project Number:** Z498

**Department:** Engineering Department

**Summary:** Road reconstruction and widening of Fairview Road from Essa Road to 250m south of Essa Road to facilitate improvements at the Essa Road and Fairview Road intersection, specifically an additional lane on the E/S-N ramp. This will require construction of an additional lane on Fairview Drive as the existing outside lane is a right turn only lane.

**Rationale:** Discussions are underway with MTO to determine if this work can be included in the Highway 400/Essa Road interchange reconstruction project. This work is required to address the severe queuing on northbound Fairview Road that occurs typically during the PM peak. This queuing is anticipated to be exacerbated with the opening of the Harvie Road / Big Bay Point Highway 400 crossing.

### **PROJECT EXPENDITURE AND FUNDING**

#### **Expenditure (in 000's):**

	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Environmental Assessment - Request</b>	<b>\$0</b>	<b>\$60</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$60</b>
<b>Design - Forecast</b>	\$0	\$0	\$325	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$325
<b>Property - Forecast</b>	\$0	\$0	\$0	\$530	\$470	\$0	\$0	\$0	\$0	\$0	\$0	\$1,000
<b>Construction - Forecast</b>	\$0	\$0	\$0	\$0	\$0	\$0	\$2,320	\$0	\$0	\$0	\$0	\$2,320
<b>Total</b>	<b>\$0</b>	<b>\$60</b>	<b>\$325</b>	<b>\$530</b>	<b>\$470</b>	<b>\$0</b>	<b>\$2,320</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$3,705</b>

#### **Funding (in 000's):**

	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Contribution from DC Reserves Tax</b>	\$0	\$39	\$146	\$345	\$306	\$0	\$1,053	\$0	\$0	\$0	\$0	\$1,888
<b>Contribution from DC Reserves Water</b>	\$0	\$0	\$33	\$0	\$0	\$0	\$228	\$0	\$0	\$0	\$0	\$260
<b>Contribution from DC Reserves Wastewater</b>	\$0	\$0	\$33	\$0	\$0	\$0	\$228	\$0	\$0	\$0	\$0	\$260
<b>Contribution from Tax Capital Reserve</b>	\$0	\$21	\$79	\$186	\$165	\$0	\$567	\$0	\$0	\$0	\$0	\$1,017
<b>Contribution from WW Capital Reserve</b>	\$0	\$0	\$18	\$0	\$0	\$0	\$123	\$0	\$0	\$0	\$0	\$140
<b>Contribution from Water Capital Reserve</b>	\$0	\$0	\$18	\$0	\$0	\$0	\$123	\$0	\$0	\$0	\$0	\$140
<b>Total</b>	<b>\$0</b>	<b>\$60</b>	<b>\$325</b>	<b>\$530</b>	<b>\$470</b>	<b>\$0</b>	<b>\$2,320</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$3,705</b>

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding

## 2020 Capital Project Detail Report

**Project Title:** Ferndale Drive South Watermain Replacement – Tiffin to Ardagh

**Project Number:** 000728

**Department:** Engineering Department

**Summary:** Reconstruction of the existing 600 mm HDPE watermain along Ferndale Drive, which has been out of service for a few years due to leakage/operational issues.

**Rationale:** Reconstruction of the Ferndale HDPE watermain and putting it back into service, would provide another partial water supply source into pressure zone 3S and 2S, providing redundancy in case the Surface Water Treatment Plant is disrupted. Also, it is expected to delay expansion of the SWTP as identified in the 2019 Water Supply Master Plan, thereby deferring additional investment.

### **PROJECT EXPENDITURE AND FUNDING**

#### **Expenditure (in 000's):**

	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Pre-Design - Request	\$0	\$29	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$29
Design - Forecast	\$0	\$0	\$399	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$399
Utilities - Forecast	\$0	\$0	\$0	\$143	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$143
Construction - Forecast	\$0	\$0	\$0	\$3,460	\$1,153	\$0	\$0	\$0	\$0	\$0	\$0	\$4,613
<b>Total</b>	\$0	\$29	\$399	\$3,603	\$1,153	\$0	\$0	\$0	\$0	\$0	\$0	\$5,184

#### **Funding (in 000's):**

	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Contribution from Water Capital Reserve	\$0	\$29	\$399	\$3,603	\$1,153	\$0	\$0	\$0	\$0	\$0	\$0	\$5,184
<b>Total</b>	\$0	\$29	\$399	\$3,603	\$1,153	\$0	\$0	\$0	\$0	\$0	\$0	\$5,184

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding

## 2020 Capital Project Detail Report

**Project Title:** Grove Street East Watermain Replacement and Road Renewal – Duckworth to Fletcher

**Project Number:** 000026

**Department:** Engineering Department

**Summary:** Watermain replacement and full-depth asphalt replacement on Grove Street East, between Duckworth St. and Fletcher Dr.

**Rationale:** The watermain along Grove Street East, from Duckworth St. to Davies Cres. and from Cook St. to Fletcher Dr. are in poor condition, resulting in operational challenges and a high risk of failure and service disruptions. The pavement on Grove Street East is within a window where full-depth asphalt removal and replacement is expected to be an effective strategy to renew the road surface and defer more costly reconstruction. Timely renewal of the watermain and road is recommended to ensure adequate levels of service.

### **PROJECT EXPENDITURE AND FUNDING**

#### **Expenditure (in 000's):**

	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Pre-Design - Request	\$0	\$20	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$20
Design - Forecast	\$0	\$0	\$75	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$75
Construction - Forecast	\$0	\$0	\$0	\$200	\$2,480	\$0	\$0	\$0	\$0	\$0	\$0	\$2,680
<b>Total</b>	\$0	\$20	\$75	\$200	\$2,480	\$0	\$0	\$0	\$0	\$0	\$0	\$2,775

#### **Funding (in 000's):**

	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Contribution from Tax Capital Reserve	\$0	\$20	\$28	\$0	\$999	\$0	\$0	\$0	\$0	\$0	\$0	\$1,047
Contribution from Water Capital Reserve	\$0	\$0	\$47	\$200	\$1,481	\$0	\$0	\$0	\$0	\$0	\$0	\$1,728
<b>Total</b>	\$0	\$20	\$75	\$200	\$2,480	\$0	\$0	\$0	\$0	\$0	\$0	\$2,775

## 2020 Capital Project Detail Report

**Project Title:** Harvie Road and Big Bay Point Road New Crossing - Highway 400

**Project Number:** EN1287

**Department:** Engineering Department

**Summary:** Construction of a new 5-lane Highway 400 crossing at Harvie Road and Big Bay Point Road between Bryne Drive and Bayview Drive. The crossing will include buffered bike lanes, sidewalks and protection for a future 7-lane crossing and interchange. The project has been and will continue to be accelerated where possible. Utility relocations are continuing through the winter of 2018/2019 and the crossing contractor has mobilized and is advancing construction of the crossing.

**Rationale:** The Transportation Master Plan identified the need to construct a Highway 400 crossing connecting Harvie and Big Bay Point Roads to reduce traffic congestion and accommodate planned growth in the south end of Barrie. The proposed construction of this crossing, coupled with transportation improvements on Bryne Drive, Harvie Road, Big Bay Point Road, and Bayview Drive, will reduce traffic congestion at the Essa Road and Maplevue Drive interchanges.

<b>PROJECT EXPENDITURE AND FUNDING</b>												
<b><u>Expenditure (in 000's):</u></b>												
	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Design - Request</b>	\$388	\$244	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$632
<b>Property - Request</b>	\$872	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$872
<b>Utilities - Request</b>	\$1,939	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,939
<b>Construction - Request</b>	<b>\$18,826</b>	<b>\$21,420</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$40,246</b>
<b>Total</b>	\$22,025	\$21,664	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$43,689
<b><u>Funding (in 000's):</u></b>												
	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Debenture Proceeds - DCs</b>	\$12,379	\$7,705	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$20,083
<b>Debenture Proceeds - Tax</b>	\$989	\$3,671	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$4,660
<b>Province of Ontario Grant Revenue</b>	\$0	\$10,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$10,000
<b>Contribution from Reserves</b>	\$8,657	\$288	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$8,945
<b>Total</b>	\$22,025	\$21,664	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$43,689

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding

## 2020 Capital Project Detail Report

**Project Title:** Harvie Road ROW Expansion - Essa to Bryne

**Project Number:** EN1262

**Department:** Engineering Department

**Summary:** Urbanize the existing rural cross section of Harvie Road and widen to 3 lanes from Essa to Veterans and five lanes from Veterans Drive to Bryne Drive. This project will include buffered bike lanes and sidewalks. Timing of the construction costs have been adjusted to reflect anticipation of actual spending.

**Rationale:** The Transportation Master Plan identified the need to construct a highway crossing at Harvie Road / Big Bay Point Road to reduce traffic congestion in the south end of Barrie and to accommodate planned growth. A Schedule C Environmental Assessment was completed. The construction of these transportation improvements are a critical component of the Harvie Road / Big Bay Point Road Highway Crossing and required to connect the highway crossing to Veteran's Drive and Essa Road.

### PROJECT EXPENDITURE AND FUNDING

#### Expenditure (in 000's):

	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Design - Request	\$1,659	\$120	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,779
Property - Request	\$2,377	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,377
Utilities - Request	\$669	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$669
Construction - Request	<b>\$5,682</b>	<b>\$6,688</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$12,370</b>
<b>Total</b>	\$10,387	\$6,808	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$17,195

#### Funding (in 000's):

	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Developer Contributions & Local Improv.	\$213	\$87	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$301
Contribution from DC Reserves Tax	\$6,383	\$4,045	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$10,428
Contribution from DC Reserves Water	\$0	\$324	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$324
Contribution from Tax Capital Reserve	\$2,698	\$2,178	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$4,876
Contribution from WW Capital Reserve	\$620	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$620
Contribution from Water Capital Reserve	\$472	\$174	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$646
<b>Total</b>	\$10,387	\$6,808	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$17,195

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding

## 2020 Capital Project Detail Report

**Project Title:** Hotchkiss Creek Culvert Extension - Anne, 55m North of Tiffin

**Project Number:** Z567

**Department:** Engineering Department

**Summary:** Extend existing culvert under Anne Street, and daylight creek both east and west of Anne Street by replacing sections of culvert with open channel.

**Rationale:** Improvements to the capacity of Hotchkiss Creek in the vicinity of Anne and Tiffin Streets is required to safely convey storm water during significant rain events. The increased capacity will help prevent overtopping of the roads.

### **PROJECT EXPENDITURE AND FUNDING**

#### **Expenditure (in 000's):**

	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Pre-Design - Request	\$0	<b>\$22</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$22</b>
Design - Forecast	\$0	\$0	\$200	\$214	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$414
Property - Forecast	\$0	\$0	\$0	\$0	\$3,447	\$0	\$0	\$0	\$0	\$0	\$0	\$3,447
Utilities - Forecast	\$0	\$0	\$0	\$0	\$0	\$327	\$0	\$0	\$0	\$0	\$0	\$327
Construction - Forecast	\$0	\$0	\$0	\$0	\$0	\$0	\$3,087	\$0	\$0	\$0	\$0	\$3,087
<b>Total</b>	\$0	<b>\$22</b>	<b>\$200</b>	<b>\$214</b>	<b>\$3,447</b>	<b>\$327</b>	<b>\$3,087</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$7,297</b>

#### **Funding (in 000's):**

	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Contribution from DC Reserves Tax	\$0	\$10	\$90	\$96	\$1,551	\$147	\$1,389	\$0	\$0	\$0	\$0	\$3,284
Contribution from Tax Capital Reserve	\$0	\$12	\$110	\$118	\$1,896	\$180	\$1,698	\$0	\$0	\$0	\$0	\$4,013
<b>Total</b>	\$0	<b>\$22</b>	<b>\$200</b>	<b>\$214</b>	<b>\$3,447</b>	<b>\$327</b>	<b>\$3,087</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$7,297</b>

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding

## 2020 Capital Project Detail Report

**Project Title:** Hotchkiss Creek Storm Ponds at Wood Street and Associated Culvert Improvements

**Project Number:** 000737

**Department:** Engineering Department

**Summary:** Construction of two new stormwater attenuation facilities, and associated culvert and watercourse improvements on Hotchkiss Creek in the vicinity of Wood Street.

**Rationale:** Construction of two new stormwater attenuation facilities, and associated culvert improvements is required to attenuate stormwater flows. This will reduce the risk of flooding downstream including at the Wastewater Treatment Facility. By attenuating the flows the size of the downstream culverts can be reduced, this in turn reduces costs of infrastructure.

### **PROJECT EXPENDITURE AND FUNDING**

#### **Expenditure (in 000's):**

	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Design - Request	\$0	\$251	\$1,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,251
Property - Forecast	\$0	\$0	\$0	\$3,831	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,831
Utilities - Forecast	\$0	\$0	\$0	\$0	\$938	\$0	\$0	\$0	\$0	\$0	\$0	\$938
Construction - Forecast	\$0	\$0	\$0	\$0	\$0	\$4,430	\$4,430	\$0	\$0	\$0	\$0	\$8,860
<b>Total</b>	\$0	\$251	\$1,000	\$3,831	\$938	\$4,430	\$4,430	\$0	\$0	\$0	\$0	\$14,880

#### **Funding (in 000's):**

	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Contribution from DC Reserves Tax	\$0	\$113	\$450	\$1,724	\$422	\$1,994	\$1,994	\$0	\$0	\$0	\$0	\$6,696
Contribution from Tax Capital Reserve	\$0	\$138	\$550	\$2,107	\$516	\$2,437	\$2,437	\$0	\$0	\$0	\$0	\$8,184
<b>Total</b>	\$0	\$251	\$1,000	\$3,831	\$938	\$4,430	\$4,430	\$0	\$0	\$0	\$0	\$14,880

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding



## 2020 Capital Project Detail Report

**Project Title:** Interim Watermain Replacement Pilot Program

**Project Number:** EN1178

**Department:** Engineering Department

**Summary:** Pilot program for the rehabilitation of various old and undersized galvanized watermain using trenchless technologies such as directional drilling and other approaches as appropriate.

**Rationale:** Throughout the City there are many small and/or galvanized watermain, many of them dead ends that are below the 150mm recommended minimum diameter as per City standards. Water Operations staff are regularly required to perform maintenance activities in attempts to improve service to residents in these areas. Many of the mains are old and require upsizing and replacement. Through this program, watermain with deficient flows will be corrected by installing an interim watermain until a full watermain reconstruction can occur. This project will utilize trenchless technologies such as directional drilling to reduce the construction disruptions in the area. This project will reduce overall operational costs by reducing the need for frequent maintenance activities. The use of directional drilling will minimize road restoration costs.

### **PROJECT EXPENDITURE AND FUNDING**

#### **Expenditure (in 000's):**

	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Design - Request</b>	<b>\$90</b>	<b>\$25</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$115</b>
<b>Construction - Request</b>	<b>\$2,090</b>	<b>\$600</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$2,690</b>
<b>Total</b>	<b>\$2,180</b>	<b>\$625</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$2,805</b>

#### **Funding (in 000's):**

	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Contribution from Water Capital Reserve</b>	<b>\$2,180</b>	<b>\$625</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$2,805</b>
<b>Total</b>	<b>\$2,180</b>	<b>\$625</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$2,805</b>

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding

## 2020 Capital Project Detail Report

**Project Title:** Kidds and Sophia Creek Storm Pond Upgrades - Irwin (KD03), Ford (KD06), and Ottaway (SP03)

**Project Number:** EN1269

**Department:** Engineering Department

**Summary:** Kidds Creek and Sophia Creek Storm Pond expansion and water quality upgrades - Irwin (KD03), Ford (KD06), and Ottaway (SP03)

**Rationale:** The Sophia Creek Master Drainage Plan, the City Wide Master Drainage Plan as well as the City Growth Stormwater Management study identified several stormwater management facilities that could be expanded and upgraded to minimize flooding, property damage, and safety issues downstream and also reduce phosphorus loading to Lake Simcoe. The Sophia and Kidds Creek watersheds are underserved for water conveyance and water quality controls. The identified stormwater management facilities are critical conveyance peak flow controls and can also provide stream water quality enhancements to support the present and future drainage servicing needs of the City.

### **PROJECT EXPENDITURE AND FUNDING**

#### **Expenditure (in 000's):**

	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Design &amp; Property - Request</b>	<b>\$1,293</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$1,293</b>
<b>Construction - Request</b>	<b>\$0</b>	<b>\$1,800</b>	<b>\$1,800</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$3,600</b>
<b>Utilities - Forecast</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$750</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$750</b>
<b>Construction - Forecast</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$2,500</b>	<b>\$3,000</b>	<b>\$1,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$6,500</b>
<b>Total</b>	<b>\$1,293</b>	<b>\$1,800</b>	<b>\$1,800</b>	<b>\$0</b>	<b>\$750</b>	<b>\$2,500</b>	<b>\$3,000</b>	<b>\$1,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$12,143</b>

#### **Funding (in 000's):**

	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Contribution from DC Reserves Tax</b>	<b>\$900</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$900</b>
<b>Contribution from Reserves</b>	<b>\$393</b>	<b>\$1,800</b>	<b>\$0</b>	<b>\$0</b>	<b>\$750</b>	<b>\$2,500</b>	<b>\$3,000</b>	<b>\$1,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$11,243</b>
<b>Total</b>	<b>\$1,293</b>	<b>\$1,800</b>	<b>\$1,800</b>	<b>\$0</b>	<b>\$750</b>	<b>\$2,500</b>	<b>\$3,000</b>	<b>\$1,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$12,143</b>

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding

## 2020 Capital Project Detail Report

**Project Title:** Lampman to Anne New Transmission Watermain and Lampman to Leacock ROW Rehabilitation

**Project Number:** EN1263

**Department:** Engineering Department

**Summary:** This project will improve the water distribution system for pressure Zone 3N by installing a new 300mm watermain from the Zone 3N Pumping Station on Anne Street to Leacock Drive by way of Letitia Street. This project also includes a 200mm watermain along Letitia Street from Callaghan Drive to Anne Street and full depth road resurfacing along Leacock Drive from Browning Trail to Cundles Road West. The pump station works are to be performed concurrently as part of project 000629.

**Rationale:** The proposed 300mm watermain is the preferred solution required to provide water distribution system improvements for pressure Zone 3N. Pressure Zone 3N currently only has one pumping station and requires a second pumping station with associated transmission watermain to provide supply redundancy and system reinforcement in the event of a pumping station or watermain failure. The noted roadway outlined for full-depth resurfacing is in very poor to poor condition and is deteriorating rapidly. By conducting this work the City of Barrie will improve service levels to the community and provide capacity requirements for future growth.

### **PROJECT EXPENDITURE AND FUNDING**

#### **Expenditure (in 000's):**

	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Design - Request</b>	\$105	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$105
<b>Utilities - Request</b>	\$315	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$315
<b>Construction - Request</b>	<b>\$890</b>	<b>\$1,450</b>	<b>\$922</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$3,262</b>
<b>Total</b>	\$1,310	\$1,450	\$922	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,682

#### **Funding (in 000's):**

	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Contribution from Tax Capital Reserve</b>	\$921	\$0	\$922	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,843
<b>Contribution from Water Capital Reserve</b>	\$389	\$1,450	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,839
<b>Total</b>	\$1,310	\$1,450	\$922	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,682

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding

## 2020 Capital Project Detail Report

**Project Title:** Mapleview Dr E New Sanitary Sewer & Road Expansion - Prince William to Phase 1 Boundary (Developer)

**Project Number:** EN1270

**Department:** Engineering Department

**Summary:** Expansion of Mapleview Drive East, including installation of a sanitary sewer, and road widening from two lanes to three lanes with adjacent multi-use trail.

**Rationale:** Different sanitary servicing alternatives were examined in the Wastewater Collection MP for the Salem Secondary Plan area. The preferred alternative was to drain this sewer shed to the Hewitt's Trunk Sewer because this sewer has spare capacity. Anticipated increases in traffic volumes and active transportation resulting from growth in the Secondary Plan area justifies urbanizing Mapleview Drive east of Prince William Way. The Transportation MP recommended three lanes plus buffered bike lanes. Within former Barrie the existing road is relatively new but the south side has not been urbanized. In consideration of this the project scope was adjusted to include a multi-use trail to retain as much of the existing road as possible. Funding for this project is partially front-ended by Developers to provide servicing required for Phase 1 of growth-related development in the secondary plan area.

### **PROJECT EXPENDITURE AND FUNDING**

#### **Expenditure (in 000's):**

	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Design - Request</b>	<b>\$2,822</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$2,822</b>
<b>Property &amp; Utilities - Request</b>	<b>\$1,656</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$1,656</b>
<b>Construction - Request</b>	<b>\$0</b>	<b>\$2,293</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$2,293</b>
<b>Construction - Forecast</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$4,867</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$4,867</b>
<b>Total</b>	<b>\$4,478</b>	<b>\$2,293</b>	<b>\$0</b>	<b>\$4,867</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$11,638</b>

#### **Funding (in 000's):**

	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Developer Front Ending (Annex) - Developer Build</b>	<b>\$4,109</b>	<b>\$2,250</b>	<b>\$0</b>	<b>\$4,137</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$10,495</b>
<b>Debenture Proceeds - Tax</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
<b>Contribution from DC Reserves Tax</b>	<b>\$0</b>	<b>\$41</b>	<b>\$0</b>	<b>\$621</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$661</b>
<b>Contribution from Tax Capital Reserve</b>	<b>\$369</b>	<b>\$2</b>	<b>\$0</b>	<b>\$110</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$481</b>
<b>Total</b>	<b>\$4,478</b>	<b>\$2,293</b>	<b>\$0</b>	<b>\$4,867</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$11,638</b>

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding

## 2020 Capital Project Detail Report

**Project Title:** Mapleview Dr E Road Expansion & New Trunk Watermain - East of Yonge to Prince William (City)

**Project Number:** EN1271

**Department:** Engineering Department

**Summary:** Widening of Mapleview Drive East from Yonge to Prince William to 5-lanes with buffered bike lanes, sidewalk on the south side, multi-use trail on the north side, local sanitary sewer, trunk watermain and grade separated railway crossing (underpass).

**Rationale:** The Transportation Master Plan identified the need to widen Mapleview to 5 lanes between Yonge and Prince William with a grade separated railway crossing. The Water Distribution Master Plan and Waste Collection Master Plan recommends the installation of a trunk watermain and a local sanitary sewer. A Schedule C Environmental Assessment was completed. The transportation improvements and the trunk watermain are included in the Infrastructure Implementation Plan and the Memorandum of Understanding with developers in the Secondary Plan lands. The watermain is required to provide potable water and fire flow in Phase 1 of the Hewitt's Secondary Plan area.

### **PROJECT EXPENDITURE AND FUNDING**

#### **Expenditure (in 000's):**

	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Design - Request</b>	<b>\$6,913</b>	<b>(\$989)</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$5,924</b>
<b>Property - Request</b>	<b>\$0</b>	<b>\$6,591</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$6,591</b>
<b>Utilities - Forecast</b>	\$0	\$0	\$648	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$648
<b>Construction - Forecast</b>	\$0	\$0	\$0	\$0	\$12,338	\$15,998	\$13,660	\$0	\$0	\$0	\$0	\$41,995
<b>Total</b>	\$6,913	\$5,603	\$648	\$0	\$12,338	\$15,998	\$13,660	\$0	\$0	\$0	\$0	\$55,158

#### **Funding (in 000's):**

	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Contribution from DC Reserves Tax (Annex)</b>	\$5,876	\$4,762	\$551	\$0	\$10,487	\$13,598	\$11,611	\$0	\$0	\$0	\$0	\$46,884
<b>Contribution from Tax Capital Reserve</b>	\$1,037	\$840	\$97	\$0	\$1,851	\$2,400	\$2,049	\$0	\$0	\$0	\$0	\$8,274
<b>Total</b>	\$6,913	\$5,603	\$648	\$0	\$12,338	\$15,998	\$13,660	\$0	\$0	\$0	\$0	\$55,158

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding

## 2020 Capital Project Detail Report

**Project Title:** Mapleview Drive Diverging Diamond Interchange Retrofit

**Project Number:** 000559

**Department:** Engineering Department

**Summary:** Implement a diverging diamond interchange at Mapleview Drive/Highway 400.

**Rationale:** To address existing demands and planned growth; the MTO Transportation Environmental Study Report (TESR) recommended conversion of the current Highway 400/Mapleview Drive interchange to a Diverging Diamond interchange. The City's 2019 Transportation Master Plan identified this project as a critical part of the solution to traffic congestion in the City's south end. The City wishes to accelerate implementation by beginning the necessary traffic studies and discussions with MTO.

### **PROJECT EXPENDITURE AND FUNDING**

#### **Expenditure (in 000's):**

	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
<b>Environmental Assessment - Request</b>	<b>\$0</b>	<b>\$300</b>	<b>\$300</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$600</b>
<b>Design - Forecast</b>	\$0	\$0	\$0	\$600	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$600
<b>Property - Forecast</b>	\$0	\$0	\$0	\$0	\$1,500	\$0	\$0	\$0	\$0	\$0	\$0	\$1,500
<b>Utilities - Forecast</b>	\$0	\$0	\$0	\$0	\$0	\$1,125	\$0	\$0	\$0	\$0	\$0	\$1,125
<b>Construction - Forecast</b>	\$0	\$0	\$0	\$0	\$0	\$0	\$4,050	\$4,050	\$0	\$0	\$0	\$8,100
<b>Total</b>	<b>\$0</b>	<b>\$300</b>	<b>\$300</b>	<b>\$600</b>	<b>\$1,500</b>	<b>\$1,125</b>	<b>\$4,050</b>	<b>\$4,050</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$11,925</b>

#### **Funding (in 000's):**

	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
<b>Province of Ontario Grant Revenue</b>	\$0	\$300	\$300	\$600	\$1,500	\$1,125	\$4,050	\$4,050	\$0	\$0	\$0	\$11,925
<b>Total</b>	<b>\$0</b>	<b>\$300</b>	<b>\$300</b>	<b>\$600</b>	<b>\$1,500</b>	<b>\$1,125</b>	<b>\$4,050</b>	<b>\$4,050</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$11,925</b>

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding

## 2020 Capital Project Detail Report

**Project Title:** Maplevue Drive E New Transmission Watermain - Yonge to Royal Jubilee (Developer)

**Project Number:** EN1291

**Department:** Engineering Department

**Summary:** Installation of a transmission watermain on Maplevue Drive East, from Yonge to Prince William.

**Rationale:** The Water Distribution Master Plan calls for a transmission watermain to service and provide redundancy to development in the secondary plan area, to ensure adequate potable water supply and fire protection flows. Funding for this project is front-ended by Developers to provide servicing required for Phase 1 of growth-related development in the secondary plan area. The transmission watermain is proposed south of Maplevue through the proposed subdivision.

<b>PROJECT EXPENDITURE AND FUNDING</b>												
<b>Expenditure (in 000's):</b>												
	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Design - Request	\$541	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$541
Construction - Request	<b>\$2,132</b>	<b>\$697</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$2,829</b>
<b>Total</b>	\$2,673	\$697	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,370
<b>Funding (in 000's):</b>												
	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Developer Front Ending (Annex) - Developer Build	\$2,132	\$697	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,829
Contribution from DC Reserves Water (Annex)	\$541	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$541
<b>Total</b>	\$2,673	\$697	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,370

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding

## 2020 Capital Project Detail Report

**Project Title:** McDonald Municipal Parking Lot Reconstruction

**Project Number:** EN1337

**Department:** Engineering Department

**Summary:** Resurfacing of the existing parking lot at the Provincial court house including minor drainage improvements and lighting improvements.

**Rationale:** The City recently released the Province on Ontario from a lease of the Macdonald Street unopened right of way. As part of the lease agreement, The Province was to grade the entire area including asphalt resurfacing and landscaping for the purposes of parking and in general keep the area in a state of good repair. The province did not meet these obligation and in lieu of not meeting these obligations, the province provided a Obligations Payment in the amount of \$907,000 to which the city will complete the obligations and complete the resurfacing work to bring the parking lot into a state of good repair.

### **PROJECT EXPENDITURE AND FUNDING**

#### **Expenditure (in 000's):**

	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Design &amp; Construction - Request</b>	<b>\$77</b>	<b>\$830</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$907</b>
<b>Total</b>	<b>\$77</b>	<b>\$830</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$907</b>

#### **Funding (in 000's):**

	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Contribution from Parking Capital Reserve</b>	<b>\$77</b>	<b>\$830</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$907</b>
<b>Total</b>	<b>\$77</b>	<b>\$830</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$907</b>

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding



## 2020 Capital Project Detail Report

**Project Title:** McKay Road New Interchange - Highway 400 (City)

**Project Number:** EN1251

**Department:** Engineering Department

**Summary:** Design and construction of a new highway interchange at McKay Road and widening of the structure to a 5-lane cross section.

**Rationale:** McKay Road is currently a two lane rural road in poor condition except for the crossing over Highway 400 which was recently reconstructed by MTO with financial contribution from the City so that it will accommodate a future interchange and structure widening.

The proposed McKay Interchange is located in the Secondary Plan lands between Maplevue Drive and Innisfil Beach Road, the Transportation Master Plan indicates that McKay is required to support transportation growth in the area and is a critical infrastructure capacity improvement required in Phase 1 development.

The Transportation Master Plan recommends that with increased traffic volumes the construction of a McKay Interchange and widening of the crossing from two to five lanes with buffered bike lanes and sidewalks is needed in Phase 1.

The existing Maplevue Drive / Highway 400 interchange operates at a poor level of service and without the McKay Interchange in Phase 1, growth cannot be accommodated.

The McKay Interchange is included in the Infrastructure Implementation Plan and the Memorandum of Understanding with developers.

The McKay Schedule C Class Environmental Assessment is scheduled to be complete early in 2018.

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding

**PROJECT EXPENDITURE AND FUNDING****Expenditure (in 000's):**

	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Design - Request	\$3,657	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,657
Property - Request	<b>\$4,364</b>	<b>\$3,500</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$7,864</b>
Utilities - Forecast	\$0	\$0	\$114	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$114
Construction - Forecast	\$0	\$0	\$0	\$0	\$6,558	\$13,558	\$7,000	\$0	\$0	\$0	\$0	\$27,117
<b>Total</b>	<b>\$8,021</b>	<b>\$3,500</b>	<b>\$114</b>	<b>\$0</b>	<b>\$6,558</b>	<b>\$13,558</b>	<b>\$7,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$38,751</b>

**Funding (in 000's):**

	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Contribution from DC Reserves Tax (Annex)	\$6,743	\$2,975	\$97	\$0	\$5,575	\$11,525	\$5,950	\$0	\$0	\$0	\$0	\$32,864
Contribution from DC Reserves Water (Annex)	\$88	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$88
Contribution from Tax Capital Reserve	\$1,190	\$525	\$17	\$0	\$984	\$2,034	\$1,050	\$0	\$0	\$0	\$0	\$5,800
<b>Total</b>	<b>\$8,021</b>	<b>\$3,500</b>	<b>\$114</b>	<b>\$0</b>	<b>\$6,558</b>	<b>\$13,558</b>	<b>\$7,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$38,751</b>

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding

## 2020 Capital Project Detail Report

<b>Project Title:</b>	McKay Road ROW Expansion - Reid Drive to West of Highway 400 (Developer)		
<b>Project Number:</b>	EN1257	<b>Department:</b>	Engineering Department
<b>Summary:</b>	Construction of a trunk sanitary sewer and watermain from Highway 400 westerly. Expansion of the McKay Road right of way, with the construction of a five lane urban road from Reid Drive to Highway 400 and the south half of a three lane rural road from portions of County Road 27 to Reid Drive.		
<b>Rationale:</b>	The City of Barrie Growth Studies and Transportation Master Plan identified McKay Road as a rural road in poor condition, with no current City subsurface infrastructure. Installation of a sanitary sewer, trunk watermain and associated transportation improvements are included in both the Infrastructure Implementation Plan and the MOU with developers in Phase 1 of the secondary plan area. The Wastewater Collection Master Plan recommended drainage of the Salem Secondary Plan sewershed to Lover's Trunk Sewer as it has significant available spare capacity, while the Water Distribution Master Plan identified a need for a trunk watermain to provide potable water and fire protection in Phase 1 development. The Transportation Master Plan noted increases in traffic volume, and with construction of the proposed McKay Interchange necessitates an expansion from two lanes to three (west of Reid) and five (Reid to Highway 400) lanes. Funding for this project is partially front-ended by Developers to provide servicing required for Phase 1 of growth-related development in the secondary plan area.		

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding

# **PROJECT EXPENDITURE AND FUNDING**

## **Expenditure (in 000's):**

	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Design - Request	\$4,116	(\$1,313)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,803
Property & Utilities - Request	\$3,234	\$1,994	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$5,228
Construction - Request	\$3,828	\$7,384	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$11,212
Design - Forecast	\$0	\$0	\$0	\$16	\$0	\$50	\$0	\$0	\$0	\$0	\$0	\$66
Utilities - Forecast	\$0	\$0	\$0	\$279	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$279
Construction - Forecast	\$0	\$0	\$1,477	\$7,168	\$0	\$0	\$0	\$0	\$627	\$0	\$0	\$9,272
<b>Total</b>	\$11,178	\$8,064	\$1,477	\$7,462	\$0	\$50	\$0	\$0	\$627	\$0	\$0	\$28,859

## **Funding (in 000's):**

	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Developer Front Ending (Annex) - Developer Build	\$9,727	\$8,012	\$1,477	\$6,343	\$0	\$42	\$0	\$0	\$533	\$0	\$0	\$26,134
Debenture Proceeds - Tax	\$1,103	(\$247)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$856
Contribution from DC Reserves Tax	\$0	\$254	\$0	\$951	\$0	\$6	\$0	\$0	\$80	\$0	\$0	\$1,292
Contribution from Tax Capital Reserve	\$349	\$45	\$0	\$168	\$0	\$1	\$0	\$0	\$14	\$0	\$0	\$577
<b>Total</b>	\$11,178	\$8,064	\$1,477	\$7,462	\$0	\$50	\$0	\$0	\$627	\$0	\$0	\$28,859

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding

## 2020 Capital Project Detail Report

**Project Title:** NRP- HNS Allandale A Neighbourhood Reconstruction

**Project Number:** EN1282

**Department:** Engineering Department

**Summary:** Reconstruction of right of way assets in the HNS Allandale A Neighbourhood, including Jacobs Terrace (Innisfil to Alfred), Marcus Street (Jacobs to Campbell), Alfred Street (Jacobs to Campbell), Campbell Street (Anne to End), Wood Street (Alfred to End), Centre Street (Anne to Caroline), and Caroline Street (Alfred to Innisfil). This incorporates road reconstruction, watermain replacement, sanitary sewer replacement, sanitary lateral replacement, storm sewer replacement and upgrades, local drainage improvement, major creek channel improvements, large diameter culvert replacement and upgrade, sidewalk replacement/installation, traffic signal replacement, and street lighting upgrades.

**Rationale:** Most of the infrastructure in this neighbourhood was constructed in the early to mid-1950s and is at or approaching the end of its maximum potential life. It has experienced age-related deterioration or physical failure (watermain breaks, etc.), and is in need of replacement. This neighbourhood was identified as a candidate for full Right of Way reconstruction based on aggregated risk associated with surface and subsurface infrastructure. Given the age and deteriorated condition of infrastructure, other lifecycle strategies (status quo, do nothing/run to failure, operate/maintain differently, and/or rehabilitate/refurbish) are not expected to significantly extend the existing remaining life of current assets or deliver expected service levels.

Full reconstruction of the Right of Way will improve service levels to the community, allow the City to monitor the performance of the assets over time, and bundle the application of future lifecycle activities together. This will reduce capital and operating costs in the long term, minimize disruption to the community, and limit environmental damages from construction.

# **PROJECT EXPENDITURE AND FUNDING**

## **Expenditure (in 000's):**

	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Pre-Design - Request</b>	\$70	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$70
<b>Design - Request</b>	\$943	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$943
<b>Property - Request</b>	<b>\$0</b>	<b>\$650</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$650</b>
<b>Utilities - Forecast</b>	\$0	\$0	\$890	\$890	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,780
<b>Construction - Forecast</b>	\$0	\$0	\$0	\$0	\$8,903	\$8,903	\$0	\$0	\$0	\$0	\$0	\$17,805
<b>Total</b>	\$1,013	\$650	\$890	\$890	\$8,903	\$8,903	\$0	\$0	\$0	\$0	\$0	\$21,248

## **Funding (in 000's):**

	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Developer Contributions</b>	\$0	\$0	\$0	\$0	\$22	\$6	\$0	\$0	\$0	\$0	\$0	\$28
<b>Contribution from Tax Capital Reserve</b>	\$646	\$650	\$890	\$890	\$6,056	\$6,072	\$0	\$0	\$0	\$0	\$0	\$15,204
<b>Contribution from WW Capital Reserve</b>	\$182	\$0	\$0	\$0	\$1,467	\$1,467	\$0	\$0	\$0	\$0	\$0	\$3,116
<b>Contribution from Water Capital Reserve</b>	\$185	\$0	\$0	\$0	\$1,358	\$1,358	\$0	\$0	\$0	\$0	\$0	\$2,900
<b>Total</b>	\$1,013	\$650	\$890	\$890	\$8,903	\$8,903	\$0	\$0	\$0	\$0	\$0	\$21,248

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding

## 2020 Capital Project Detail Report

**Project Title:** NRP- HNS Brock Park B Neighbourhood Reconstruction

**Project Number:** Z1193

**Department:** Engineering Department

**Summary:** This project is located in the HNS Brock Park A and B neighbourhoods and is the result of aggregated risk of failing infrastructure combined with the need to upgrade existing infrastructure to comply with City standards. The infrastructure in these neighbourhoods is experiencing age related physical deterioration and/or limited capacity. The scope for this project includes full reconstruction of the Right of Way, watermain replacement, sanitary sewer replacement, sanitary lateral rehabilitation, storm sewer rehabilitation and upgrades, and sidewalk replacement.

**Rationale:** The pavement condition in this neighbourhood ranges from fair to very poor and most of the subsurface infrastructure is either approaching the end of its maximum potential life or has experienced age-related deterioration or physical failure. The roadways in this area were identified as candidates for full Right of Way reconstruction based on aggregated risk associated with surface and subsurface infrastructure.

Given the age and deteriorated condition of infrastructure, other lifecycle strategies (status quo, do nothing/run to failure, operate/maintain differently, and/or rehabilitate/refurbish) are not expected to significantly extend the existing remaining life of current assets.

Full reconstruction of the Right of Way will improve service levels to the community and also allow the City to monitor the performance of the assets over time and bundle the application of future lifecycle activities together. This will reduce capital and operating costs in the long term, minimize disruption to the community, and limit environmental damages from construction.

**PROJECT EXPENDITURE AND FUNDING****Expenditure (in 000's):**

	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Pre-Design - Request	\$0	\$100	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$100
Design - Forecast	\$0	\$0	\$231	\$198	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$429
Utilities - Forecast	\$0	\$0	\$0	\$230	\$850	\$0	\$0	\$0	\$0	\$0	\$0	\$1,080
Construction - Forecast	\$0	\$0	\$0	\$0	\$0	\$7,485	\$7,485	\$0	\$0	\$0	\$0	\$14,970
<b>Total</b>	\$0	\$100	\$231	\$428	\$850	\$7,485	\$7,485	\$0	\$0	\$0	\$0	\$16,579

**Funding (in 000's):**

	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Contribution from Tax Capital Reserve	\$0	\$100	\$139	\$369	\$850	\$4,511	\$4,511	\$0	\$0	\$0	\$0	\$10,480
Contribution from WW Capital Reserve	\$0	\$0	\$54	\$21	\$0	\$1,744	\$1,744	\$0	\$0	\$0	\$0	\$3,563
Contribution from Water Capital Reserve	\$0	\$0	\$38	\$38	\$0	\$1,230	\$1,230	\$0	\$0	\$0	\$0	\$2,536
<b>Total</b>	\$0	\$100	\$231	\$428	\$850	\$7,485	\$7,485	\$0	\$0	\$0	\$0	\$16,579

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding



## 2020 Capital Project Detail Report

**Project Title:** NRP- HNS Queens Park A1 Neighbourhood Reconstruction

**Project Number:** EN1280

**Department:** Engineering Department

**Summary:** This project includes the reconstruction and upgrading of pavement, watermain, sanitary sewer, storm sewer, sidewalk and street lights of the HNS Queens Park A1 neighbourhood. It also includes the relocation of the Sophia Creek culvert into the Sophia Street Right of Way. This project area encompasses approximately half of the HNS Queens Park A1 neighbourhood, which contains some of the oldest infrastructure in the City. This includes Mary Street (Wellington St. W to Sophia St. W), Maple Avenue (Wellington St. W to Sophia St. W), Sophia St. W. (Ross St. to Bayfield St.), and Wellington St. (Mary St. to Maple St.).

**Rationale:** Sophia Creek runs just north of Sophia St. W, and flow is directed southwest toward Toronto Street via two box culverts installed between 1920 and 1950. These culverts run beneath several residential properties and two businesses. Both are in poor to very poor condition, and pose significant flooding and safety risks. Other buried infrastructure in the neighbourhood, including watermains, sanitary sewers, and storm sewers, is in poor to very poor physical condition and much of it is under-sized. This infrastructure has a high probability of failure. This neighbourhood was identified as a candidate for full Right of Way reconstruction based on aggregated risk associated with surface and subsurface infrastructure. Given the age and deteriorated condition of infrastructure, other life-cycle strategies (status quo, do nothing/run to failure, operate/maintain differently, and/or rehabilitate/refurbish) are not expected to significantly extend the remaining life of current assets or deliver expected service levels.

Full reconstruction of the Right of Ways in this neighbourhood will improve service levels to the community and reduce the risk of asset failures and service disruptions. This will reduce capital and operating costs in the long term, minimize disruption to the community, and limit environmental damage from construction.

**PROJECT EXPENDITURE AND FUNDING**

**Expenditure (in 000's):**

	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Pre-Design - Request	\$70	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$70
Design - Request	\$285	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$285
Utilities - Request	\$0	\$975	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$975
Construction - Forecast	\$0	\$0	\$0	\$4,910	\$300	\$0	\$0	\$0	\$0	\$0	\$0	\$5,210
<b>Total</b>	\$355	\$975	\$0	\$4,910	\$300	\$0	\$0	\$0	\$0	\$0	\$0	\$6,540

**Funding (in 000's):**

	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Contribution from Tax Capital Reserve	\$288	\$975	\$0	\$3,580	\$300	\$0	\$0	\$0	\$0	\$0	\$0	\$5,143
Contribution from WW Capital Reserve	\$34	\$0	\$0	\$680	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$714
Contribution from Water Capital Reserve	\$34	\$0	\$0	\$650	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$684
<b>Total</b>	\$355	\$975	\$0	\$4,910	\$300	\$0	\$0	\$0	\$0	\$0	\$0	\$6,540

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding

## 2020 Capital Project Detail Report

**Project Title:** NRP- HNS Queens Park B Neighbourhood Reconstruction

**Project Number:** EN1336

**Department:** Engineering Department

**Summary:** The project includes pavement, watermain, sanitary sewer, storm sewer, and sidewalk replacements along with expansion of the Kidd's Creek watercourse and culvert located on Thomson Street. This project area encompasses the majority of the HNS Queens Park B neighbourhood, which contain some of the oldest operational infrastructure in the City. This includes Thomson Street from Wellington Street to Sophia Street, Sophia Street from Parkside Drive to Eccles Street, Florence Street from Sophia Street to Park Street, Park Street from Eccles Street to Toronto Street, Parkside Drive from Ross Street to Dunlop Street West, and High Street from Park Street to Dunlop Street West.

**Rationale:** Most of the subsurface infrastructure in this neighbourhood was constructed in the early 1910's to 1930's and is at or approaching the end of its maximum potential life. It has experienced age-related deterioration or physical failure (watermain breaks, sanitary lateral backups, etc.), and is in need of replacement. Roadways in this area were identified as candidates for full Right of Way reconstruction based on aggregated risk associated with surface and subsurface infrastructure. Although the MPL for roadways in this area should generally be acceptable, actual PCI values rate the physical condition of these roadways in the range of fair to very poor, the majority of which are poor. Given the age and deteriorated condition of infrastructure, other lifecycle strategies (status quo, do nothing/run to failure, operate/maintain differently, and/or rehabilitate/refurbish) are not expected to significantly extend the existing remaining life of current assets. Full reconstruction of the Right of Way will improve service levels to the community, allow the City to monitor the performance of the assets over time, and bundle the application of future lifecycle activities together. This will reduce capital and operating costs in the long term, minimize disruption to the community, and limit environmental damages from construction.

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding

**PROJECT EXPENDITURE AND FUNDING****Expenditure (in 000's):**

	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Design - Request</b>	<b>\$100</b>	<b>\$591</b>	<b>\$591</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$1,281</b>
<b>Property - Forecast</b>	\$0	\$0	\$0	\$824	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$824
<b>Utilities - Forecast</b>	\$0	\$0	\$0	\$750	\$750	\$0	\$0	\$0	\$0	\$0	\$0	\$1,500
<b>Construction - Forecast</b>	\$0	\$0	\$0	\$0	\$1,500	\$6,480	\$6,480	\$0	\$0	\$0	\$0	\$14,460
<b>Total</b>	\$100	\$591	\$591	\$1,574	\$2,250	\$6,480	\$6,480	\$0	\$0	\$0	\$0	\$18,065

**Funding (in 000's):**

	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Contribution from Tax Capital Reserve</b>	\$100	\$443	\$443	\$1,574	\$2,250	\$4,137	\$4,137	\$0	\$0	\$0	\$0	\$13,084
<b>Contribution from WW Capital Reserve</b>	\$0	\$100	\$100	\$0	\$0	\$1,225	\$1,225	\$0	\$0	\$0	\$0	\$2,649
<b>Contribution from Water Capital Reserve</b>	\$0	\$48	\$48	\$0	\$0	\$1,118	\$1,118	\$0	\$0	\$0	\$0	\$2,332
<b>Total</b>	\$100	\$591	\$591	\$1,574	\$2,250	\$6,480	\$6,480	\$0	\$0	\$0	\$0	\$18,065

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding

## 2020 Capital Project Detail Report

**Project Title:** NRP- HNS The Grove A1 Neighbourhood Reconstruction

**Project Number:** 000046

**Department:** Engineering Department

**Summary:** Reconstruction of sections of four streets (Drury, Clapperton, Sophia, and McDonald) in the HNS The Grove A neighbourhood, including road reconstruction, distribution watermain replacement, sanitary sewer replacement, sanitary lateral replacement to property line, storm sewer replacement and installation, sidewalk replacement and installation, and streetlight upgrades.

**Rationale:** Most of the infrastructure in this neighbourhood was constructed in the early to mid-1950s and is at or past the end of its maximum potential life. It has experienced age-related deterioration or physical failure and is in need of replacement. This neighbourhood was identified as a candidate for full Right of Way reconstruction based on aggregated risk associated with surface and subsurface infrastructure. Given the age and deteriorated condition of infrastructure, other lifecycle strategies are not expected to significantly extend the existing remaining life of current assets or deliver expected service levels.

Full reconstruction will improve service levels to the community and reduce the risk of asset failures and service disruptions. This will reduce capital and operating costs in the long term, minimize disruption to the community, and limit environmental damage from construction.

### **PROJECT EXPENDITURE AND FUNDING**

#### **Expenditure (in 000's):**

	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
<b>Pre-Design - Request</b>	<b>\$0</b>	<b>\$60</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$60</b>
<b>Design - Forecast</b>	\$0	\$0	\$142	\$142	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$284
<b>Utilities - Forecast</b>	\$0	\$0	\$0	\$516	\$516	\$0	\$0	\$0	\$0	\$0	\$0	\$1,032
<b>Construction - Forecast</b>	\$0	\$0	\$0	\$0	\$0	\$5,222	\$5,222	\$0	\$0	\$0	\$0	\$10,444
<b>Total</b>	<b>\$0</b>	<b>\$60</b>	<b>\$142</b>	<b>\$658</b>	<b>\$516</b>	<b>\$5,222</b>	<b>\$5,222</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$11,820</b>

#### **Funding (in 000's):**

	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
<b>Contribution from Tax Capital Reserve</b>	\$0	\$60	\$88	\$604	\$516	\$3,259	\$3,259	\$0	\$0	\$0	\$0	\$7,786
<b>Contribution from WW Capital Reserve</b>	\$0	\$0	\$27	\$27	\$0	\$988	\$988	\$0	\$0	\$0	\$0	\$2,030
<b>Contribution from Water Capital Reserve</b>	\$0	\$0	\$27	\$27	\$0	\$975	\$975	\$0	\$0	\$0	\$0	\$2,004
<b>Total</b>	<b>\$0</b>	<b>\$60</b>	<b>\$142</b>	<b>\$658</b>	<b>\$516</b>	<b>\$5,222</b>	<b>\$5,222</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$11,820</b>

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding

## 2020 Capital Project Detail Report

**Project Title:** NRP- Wellington D1 Neighbourhood Reconstruction

**Project Number:** EN1238

**Department:** Engineering Department

**Summary:** Reconstruction of four streets (Berczy, Amelia, Theresa, and Worsley) in the Wellington D neighbourhood, including road reconstruction, watermain replacement, sanitary sewer replacement and upgrading to current City standards, sanitary lateral replacement to property line, storm sewer replacement and installation, sidewalk replacement, and streetlight upgrades.

**Rationale:** This neighbourhood contains some of the City's oldest subsurface infrastructure outside of the downtown core. This neighbourhood was identified as a candidate for full Right of Way reconstruction based on aggregated risk associated with surface and subsurface infrastructure. Given the age and deteriorated condition of infrastructure, other lifecycle strategies (status quo, do nothing/run to failure, operate/maintain differently, and/or rehabilitate/refurbish) are not expected to significantly extend the existing remaining life of current assets or deliver expected service levels.

Full reconstruction of the Right of Ways in this neighbourhood will improve service levels to the community and reduce the risk of asset failures and service disruptions. This will reduce capital and operating costs in the long term, minimize disruption to the community, and limit environmental damage from construction.

<b>PROJECT EXPENDITURE AND FUNDING</b>												
<b><u>Expenditure (in 000's):</u></b>												
	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Pre-Design - Request	\$70	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$70
Design - Request	\$324	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$324
Utilities - Request	\$0	\$825	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$825
Construction - Forecast	\$0	\$0	\$4,400	\$350	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$4,750
<b>Total</b>	\$394	\$825	\$4,400	\$350	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$5,969
<b><u>Funding (in 000's):</u></b>												
	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Contribution from Tax Capital Reserve	\$213	\$825	\$3,050	\$350	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$4,438
Contribution from WW Capital Reserve	\$113	\$0	\$750	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$863
Contribution from Water Capital Reserve	\$68	\$0	\$600	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$668
<b>Total</b>	\$394	\$825	\$4,400	\$350	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$5,969

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding

## 2020 Capital Project Detail Report

**Project Title:** PRV Chamber Replacement Program

**Project Number:** EN1252

**Department:** Engineering Department

**Summary:** A program to annually upgrade existing Pressure Reducing Valves (PRVs) in the water distribution system to the new standard.

**Rationale:** The City of Barrie has 29 Pressure Reducing Valves (PRVs) and chambers, excluding those installed in the last 1 to 2 years, on the water distribution system supplying water between pressure zones. They reduce pressure spikes and increase fire water supply. They are a critical component of the water supply, with some of the pressure zones having only one PRV. Many PRV chambers throughout the City are deficient and require significant maintenance to keep running, and do not have SCADA capabilities. The City has also adopted a new standard for PRV chambers, which the older assets do not meet. Staff recently completed a condition assessment and strategic plan for its existing PRVs and chambers to determine their current condition, remaining useful life, major maintenance and/or replacement needs. The proposed solution includes immediate (0-2 years), medium (3-5 years), and long term (6-10 years) replacement requirements. The PRVs in need of immediate replacement were replaced in 2015. This program is to replace the PRV chambers where the replacement was noted as medium and long term in the 2014 PRV Condition Assessment Report. This will minimize risk of PRV and chamber failure, and ensure safe and adequate drinking water and fire protection supplies for the community.

### **PROJECT EXPENDITURE AND FUNDING**

#### **Expenditure (in 000's):**

	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Design - Request</b>	<b>\$150</b>	<b>\$55</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$205</b>
<b>Construction - Request</b>	<b>\$1,400</b>	<b>\$425</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$1,825</b>
<b>Design - Forecast</b>	\$0	\$0	\$0	\$0	\$150	\$0	\$0	\$0	\$0	\$0	\$0	\$150
<b>Construction - Forecast</b>	\$0	\$0	\$0	\$0	\$850	\$1,250	\$0	\$0	\$0	\$0	\$0	\$2,100
<b>Total</b>	<b>\$1,550</b>	<b>\$480</b>	<b>\$0</b>	<b>\$0</b>	<b>\$1,000</b>	<b>\$1,250</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$4,280</b>

#### **Funding (in 000's):**

	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Contribution from Water Capital Reserve</b>	<b>\$1,550</b>	<b>\$480</b>	<b>\$0</b>	<b>\$0</b>	<b>\$1,000</b>	<b>\$1,250</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$4,280</b>
<b>Total</b>	<b>\$1,550</b>	<b>\$480</b>	<b>\$0</b>	<b>\$0</b>	<b>\$1,000</b>	<b>\$1,250</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$4,280</b>

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding

## 2020 Capital Project Detail Report

**Project Title:** Queen St. ROW Reconstruction- St. Vincent Street to Berczy Street

**Project Number:** 000874

**Department:** Engineering Department

**Summary:** This project includes full right-of way reconstruction, and new installation of surface assets (roadway, sidewalks, and streetlights); with the removal, replacement, upgrading, and/or rehabilitation of subsurface assets (watermain, sanitary sewer, and storm sewer) along Queen Street, from St. Vincent Street to Berczy Street.

**Rationale:** The infrastructure in the proposed area is experiencing age-related deterioration (watermain breaks, holes in sanitary sewer, pothole in the road, etc.) and physical failure. Multiple assets are approaching the end of their expected useful lives, and are in poor to very poor condition and are in need of replacement, however the water main in particular is driving the urgency of this project. Queen St. was identified as a candidate for full right-of-way reconstruction based on the aggregated risk associated with surface and subsurface infrastructure. Furthermore, capacity deficiencies (fire flow, road width, storm sewer size) can only be met through the replacement and reconstruction of these assets. Given the age, material, condition, and size of the infrastructure, other lifecycle strategies (status quo, do nothing/run to failure, operate/maintain differently, and/or rehabilitate/refurbish) are not expected to significantly extend the existing remaining life of current assets or deliver expected service levels.

Full reconstruction of the right-of-way will improve service levels to the community and reduce the risk of asset failures and service disruptions. This will reduce capital and operating costs in the long term, and minimize disruption to the community.

### **PROJECT EXPENDITURE AND FUNDING**

#### **Expenditure (in 000's):**

	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Design - Request	\$0	\$310	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$310
Utilities - Forecast	\$0	\$0	\$522	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$522
Construction - Forecast	\$0	\$0	\$0	\$2,552	\$2,552	\$0	\$0	\$0	\$0	\$0	\$0	\$5,104
<b>Total</b>	<b>\$0</b>	<b>\$310</b>	<b>\$522</b>	<b>\$2,552</b>	<b>\$2,552</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$5,936</b>

#### **Funding (in 000's):**

	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Contribution from Tax Capital Reserve	\$0	\$192	\$522	\$1,577	\$1,577	\$0	\$0	\$0	\$0	\$0	\$0	\$3,868
Contribution from WW Capital Reserve	\$0	\$59	\$0	\$486	\$486	\$0	\$0	\$0	\$0	\$0	\$0	\$1,031
Contribution from Water Capital Reserve	\$0	\$59	\$0	\$489	\$489	\$0	\$0	\$0	\$0	\$0	\$0	\$1,037
<b>Total</b>	<b>\$0</b>	<b>\$310</b>	<b>\$522</b>	<b>\$2,552</b>	<b>\$2,552</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$5,936</b>



## 2020 Capital Project Detail Report

**Project Title:** Road Resurfacing Program

**Project Number:** EN1289

**Department:** Engineering Department

**Summary:** Annual program focused on road resurfacing to restore and preserve road pavement condition at various locations selected each year. Road resurfacing preserves the road structure and addresses problems on the surface of the roadway by replacing all or part of the asphalt pavement. Resurfacing roads using well-timed and appropriate preservation strategies is substantially less expensive than the full reconstruction of a road. The goal of the program is to maximize the life of road assets at the lowest overall life-cycle cost.

**Rationale:** The City owns and maintains over 1600 lane km of roads all of which require renewal activities at various points in their life-cycle to ensure that service levels to the public are met in the most financially efficient way possible. Timely application of road resurfacing activities preserves and protects the road structure, thereby preventing rapid deterioration in pavement condition and the need for costly reconstruction. Risks due to unsafe driving conditions are also reduced. Resurfacing has been demonstrated to be effective in reducing the life-cycle cost of roads when applied at the right time as a part of a comprehensive pavement preservation approach.

<b>PROJECT EXPENDITURE AND FUNDING</b>												
<b>Expenditure (in 000's):</b>												
	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Design - Request	\$475	\$225	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$700
Construction - Request	\$11,625	\$4,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$15,625
Design - Forecast	\$0	\$0	\$250	\$300	\$325	\$375	\$400	\$400	\$400	\$400	\$400	\$3,250
Construction - Forecast	\$0	\$0	\$4,500	\$5,500	\$6,500	\$7,500	\$8,000	\$8,000	\$8,000	\$8,000	\$8,000	\$64,000
<b>Total</b>	\$12,100	\$4,225	\$4,750	\$5,800	\$6,825	\$7,875	\$8,400	\$8,400	\$8,400	\$8,400	\$8,400	\$83,575
<b>Funding (in 000's):</b>												
	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Contribution from Federal Gas Tax Reserve	\$11,540	\$4,000	\$4,513	\$5,510	\$6,500	\$7,500	\$8,000	\$8,000	\$8,000	\$8,000	\$8,000	\$79,563
Contribution from Tax Capital Reserve	\$560	\$225	\$238	\$290	\$325	\$375	\$400	\$400	\$400	\$400	\$400	\$4,013
<b>Total</b>	\$12,100	\$4,225	\$4,750	\$5,800	\$6,825	\$7,875	\$8,400	\$8,400	\$8,400	\$8,400	\$8,400	\$83,575

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding

## 2020 Capital Project Detail Report

**Project Title:** Secondary Plan Area New Trail Development (Developer)

**Project Number:** Z324

**Department:** Engineering Department

**Summary:** Recreational and Active Transportation trail development based on development growth in the Annexed Lands and with implementation and to meet the timing of subdivision development.

**Rationale:** Design for the Phase 1 trails ahead of construction implementation by the developer. Projected timelines will be adjusted depending on how fast the Phases 1 and 2 subdivisions are being implemented (partly impacted by market demands and infrastructure implementation).

<b><u>PROJECT EXPENDITURE AND FUNDING</u></b>												
<b><u>Expenditure (in 000's):</u></b>												
	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Construction - Request	\$0	\$210	\$875	\$875	\$841	\$0	\$0	\$0	\$0	\$0	\$0	\$2,801
<b>Total</b>	\$0	\$210	\$875	\$875	\$841	\$0	\$0	\$0	\$0	\$0	\$0	\$2,801
<b><u>Funding (in 000's):</u></b>												
	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Developer Front Ending (Annex) - Developer Build	\$0	\$179	\$744	\$744	\$715	\$0	\$0	\$0	\$0	\$0	\$0	\$2,381
Contribution from DC Reserves Tax	\$0	\$30	\$125	\$125	\$120	\$0	\$0	\$0	\$0	\$0	\$0	\$399
Contribution from Cash-In-Lieu Parkland Reserve	\$0	\$2	\$7	\$7	\$6	\$0	\$0	\$0	\$0	\$0	\$0	\$21
<b>Total</b>	\$0	\$210	\$875	\$875	\$841	\$0	\$0	\$0	\$0	\$0	\$0	\$2,801

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding

## 2020 Capital Project Detail Report

**Project Title:** Sewer Rehabilitation Program

**Project Number:** EN1184

**Department:** Engineering Department

**Summary:** Rehabilitation of sanitary sewers using trenchless technologies such as cured-in-place pipe lining, slip lining, and other approaches as appropriate. Sewers to be rehabilitated through this program are selected annually based on criticality and available budget.

**Rationale:** Throughout the City there are many sanitary sewers that require rehabilitation but not necessarily total replacement. A program of sanitary rehabilitation using trenchless technologies will reduce capital costs over replacement by reducing road restoration requirements and will also reduce operational costs and staff time associated with repeated maintenance activities or emergency repairs.

<b><u>PROJECT EXPENDITURE AND FUNDING</u></b>												
<b><u>Expenditure (in 000's):</u></b>												
	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Design - Request	\$65	\$20	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$85
Construction - Request	\$750	\$300	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,050
Design - Forecast	\$0	\$0	\$20	\$20	\$20	\$20	\$20	\$20	\$20	\$20	\$0	\$160
Construction - Forecast	\$0	\$0	\$300	\$300	\$300	\$300	\$300	\$300	\$300	\$300	\$300	\$2,700
<b>Total</b>	\$815	\$320	\$320	\$320	\$320	\$320	\$320	\$320	\$320	\$320	\$300	\$3,995
<b><u>Funding (in 000's):</u></b>												
	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Contribution from WW Capital Reserve	\$815	\$320	\$320	\$320	\$320	\$320	\$320	\$320	\$320	\$320	\$300	\$3,995
<b>Total</b>	\$815	\$320	\$320	\$320	\$320	\$320	\$320	\$320	\$320	\$320	\$300	\$3,995

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding

## 2020 Capital Project Detail Report

**Project Title:** Stormwater Utility Finance Study

**Project Number:** EN1299

**Department:** Engineering Department

**Summary:** Feasibility study to assess funding needs and alternative options to fund all aspects of the City's stormwater management infrastructure.

**Rationale:** To increase the resiliency of the City's stormwater management infrastructure to climate change and implement identified capital improvements to protect public safety, private property and improve water quality, significant investment is required. Dedicated stormwater funding would facilitate the long term implementation of stormwater infrastructure improvements that have been identified in Drainage Master Plans as well as operations, maintenance, renewal, and replacement needs.

### **PROJECT EXPENDITURE AND FUNDING**

#### **Expenditure (in 000's):**

	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Study - Request	\$300	\$125	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$425
Total	\$300	\$125	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$425

#### **Funding (in 000's):**

	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Contribution from Tax Rate Stabilization Reserve	\$300	\$125	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$425
Total	\$300	\$125	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$425

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding

## 2020 Capital Project Detail Report

**Project Title:** Summit Pines Subdivision New Park Development

**Project Number:** Z1181

**Department:** Engineering Department

**Summary:** New subdivision development adding a neighbourhood park into the Ardagh Bluffs Secondary Planning Area (former golf course).

**Rationale:** The Developer is required to fulfill their development obligation through the development approval process. The Developer is required to deliver the completed park for public use in 2021. This will ensure that there are no service gaps for new residents. If the park is not delivered within the first year of development construction, the City will not be fulfilling our obligation to provide adequate parkland, for the local residents.

### **PROJECT EXPENDITURE AND FUNDING**

#### **Expenditure (in 000's):**

	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Construction - Request	\$0	\$400	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$400
<b>Total</b>	\$0	\$400	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$400

#### **Funding (in 000's):**

	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Developer Front Ending - Developer Build	\$0	\$360	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$360
Contribution from DC Reserves Tax	\$0	\$36	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$36
Contribution from Cash-In-Lieu Parkland Reserve	\$0	\$4	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$4
<b>Total</b>	\$0	\$400	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$400

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding

## 2020 Capital Project Detail Report

**Project Title:** Tiffin/Bradford/Essa Transportation Feasibility Study

**Project Number:** 000557

**Department:** Engineering Department

**Summary:** Transportation Feasibility Study for network improvements in proximity to the Bradford/Tiffin/Essa intersection and the Bradford Street corridor.

**Rationale:** Bradford Street and Essa Road have been identified as intensification areas. In addition, the 2019 Transportation Master Plan identifies improvements along the Bradford Street corridor, and there are known operational issues at the Bradford/Tiffin/Essa intersection. A transportation study is required to examine opportunities to improve operations at the intersection and along the corridor. This study should be completed now to ensure the City's infrastructure needs can be considered during the redevelopment.

### **PROJECT EXPENDITURE AND FUNDING**

#### **Expenditure (in 000's):**

	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Pre-Design - Request	\$0	\$100	\$200	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$300
Pre-Design - Forecast	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>Total</b>	\$0	\$100	\$200	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$300

#### **Funding (in 000's):**

	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Contribution from DC Reserves Tax	\$0	\$65	\$130	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$195
Contribution from Tax Capital Reserve	\$0	\$35	\$70	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$105
<b>Total</b>	\$0	\$100	\$200	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$300

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding

## 2020 Capital Project Detail Report

<b>Project Title:</b>	Veterans Drive New Trunk Watermain and Road Expansion - Salem to McKay (Developer)		
<b>Project Number:</b>	EN1258	<b>Department:</b>	Engineering Department
<b>Summary:</b>	Construction of a trunk watermain from Salem Road southerly to the City limits, Expansion of Veterans Drive right of way, urbanization and widening of the road from two to five lanes, with buffered bike lanes (Salem to McKay)		
<b>Rationale:</b>	The City of Barrie Growth Studies and Transportation Master Plan identified Veterans Drive as a rural road in poor condition, with no current City subsurface infrastructure. The Water Distribution Master plan recommends the installation of a trunk watermain along with the associated local wastewater collection and transportation improvements recommended. These infrastructure elements are included in the Infrastructure Implementation Plan and the MOU with developers in the secondary plan area. The watermain is required to provide potable water and fire flow in Phase 1 of the Salem Secondary Plan area. Road reconstruction will improve safety and drivability, with increases in traffic volume necessitating an expansion from two lanes. Funding for this project is partially front-ended by Developers to provide servicing required for Phase 1 of growth-related development in the secondary plan area.		

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding

**PROJECT EXPENDITURE AND FUNDING****Expenditure (in 000's):**

	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Design - Request	\$3,213	(\$1,381)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,832
Property - Request	\$2,600	\$2,206	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$4,806
Utilities - Request	\$381	(\$129)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$252
Construction - Request	\$2,303	\$31	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,334
Construction - Forecast	\$0	\$0	\$0	\$0	\$0	\$0	\$5,329	\$5,329	\$0	\$0	\$0	\$10,657
<b>Total</b>	\$8,497	\$727	\$0	\$0	\$0	\$0	\$5,329	\$5,329	\$0	\$0	\$0	\$19,881

**Funding (in 000's):**

	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Developer Front Ending (Annex) - Developer Build	\$7,412	\$968	\$0	\$0	\$0	\$0	\$4,529	\$4,529	\$0	\$0	\$0	\$17,439
Debenture Proceeds - Tax	\$682	(\$210)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$473
Contribution from DC Reserves Tax	\$0	(\$27)	\$0	\$0	\$0	\$0	\$679	\$679	\$0	\$0	\$0	\$1,332
Contribution from Reserves	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Contribution from Tax Capital Reserve	\$403	(\$5)	\$0	\$0	\$0	\$0	\$120	\$120	\$0	\$0	\$0	\$638
<b>Total</b>	\$8,497	\$727	\$0	\$0	\$0	\$0	\$5,329	\$5,329	\$0	\$0	\$0	\$19,881

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding



## 2020 Capital Project Detail Report

**Project Title:** Veterans Drive Road Expansion - McKay to City limits (Developer)

**Project Number:** EN1338

**Department:** Engineering Department

**Summary:** Expansion of Veterans Drive right of way, urbanization and widening of the road from two to three lanes, with buffered bike lanes (McKay to City Limits).

**Rationale:** The City of Barrie Growth Studies Transportation Master Plan identified Veterans Drive as a rural road in poor condition, with no current City subsurface infrastructure. These infrastructure elements are included in the Infrastructure Implementation Plan and the MOU with developers in the secondary plan area. Road reconstruction will improve safety and drivability, with increases in traffic volume necessitating an expansion from two lanes. Funding for this project is partially front-ended by Developers to provide servicing required for Phase 1 of growth-related development in the secondary plan area.

### **PROJECT EXPENDITURE AND FUNDING**

#### **Expenditure (in 000's):**

	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Design - Request	\$0	\$559	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$559
Utilities - Request	\$175	\$118	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$293
Construction - Request	\$1,060	(\$74)	\$69	\$119	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,174
Construction - Forecast	\$0	\$0	\$931	\$1,868	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,799
<b>Total</b>	\$1,236	\$602	\$1,000	\$1,987	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$4,825

#### **Funding (in 000's):**

	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Developer Front Ending (Annex) - Developer Build	\$1,050	\$512	\$850	\$1,689	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$4,101
Contribution from DC Reserves Tax	\$0	\$76	\$129	\$255	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$459
Contribution from Tax Capital Reserve	\$185	\$15	\$21	\$43	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$264
<b>Total</b>	\$1,236	\$602	\$1,000	\$1,987	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$4,825

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding

## 2020 Capital Project Detail Report

**Project Title:** Wastewater Peak Flow Attenuation Facility

**Project Number:** 000587

**Department:** Engineering Department

**Summary:** Implementation of a peak flow attenuation facility to capture, temporarily store, and reduce peak flows before entering the Wastewater Treatment Facility (WwTF).

**Rationale:** The wet weather flows to the WwTF have been steadily increasing over the last few years. The sewer surcharge capacity has been reducing due to the additional hydraulic loads, especially during intense storm events and rapid snow melts. If the WwTF is not properly protected then the biological treatment processes would be affected, causing operational and compliance challenges. The Wastewater Master Plan recommended to construct a flow attenuation tank at the south side of the WwTF. The new tank, in combination with the existing tanks, that could be available after the MBR treatment technology, would assist in equalizing the flows for a steady state biological treatment. The flow attenuation tank would also provide an optimal design point for the MBR system by not oversizing the system. This work should proceed in coordination with the MBR construction so that it can be used to help protect the biological processes during construction, when there will be reduced operational flexibility at the plant. This project could also benefit residents near the plant since the tanks would mitigate the risk of wastewater flooding the streets and basements near the WwTF.

### PROJECT EXPENDITURE AND FUNDING

#### Expenditure (in 000's):

	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
<b>Design - Request</b>	<b>\$0</b>	<b>\$337</b>	<b>\$1,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$1,337</b>
<b>Design - Forecast</b>	\$0	\$0	\$0	\$1,408	\$1,000	\$0	\$0	\$0	\$0	\$0	\$0	\$2,408
<b>Construction - Forecast</b>	\$0	\$0	\$0	\$2,994	\$8,007	\$5,788	\$1,831	\$0	\$0	\$0	\$0	\$18,620
<b>Total</b>	\$0	\$337	\$1,000	\$4,402	\$9,007	\$5,788	\$1,831	\$0	\$0	\$0	\$0	\$22,365

#### Funding (in 000's):

	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
<b>Contribution from DC Reserves Tax</b>	\$0	\$138	\$410	\$1,805	\$3,693	\$2,373	\$751	\$0	\$0	\$0	\$0	\$9,170
<b>Contribution from WW Capital Reserve</b>	\$0	\$199	\$590	\$2,597	\$5,314	\$3,415	\$1,080	\$0	\$0	\$0	\$0	\$13,195
<b>Total</b>	\$0	\$337	\$1,000	\$4,402	\$9,007	\$5,788	\$1,831	\$0	\$0	\$0	\$0	\$22,365

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding

## 2020 Capital Project Detail Report

**Project Title:** Water and Transportation Asset Management Plans - Update

**Project Number:** 000927

**Department:** Engineering Department

**Summary:** Completion of a gap assessment and required updates to the Water and Transportation Asset Management Plans (AMPs), to meet Ontario Regulation 588/17 (O. Reg. 588/17), Asset Management Planning for Municipal Infrastructure 2021 milestones, and, to align with the City of Barrie's Strategic Plan and Strategic Asset Management Policy, industry best practice, and other asset management initiatives.

**Rationale:** A gap assessment and update of the existing Water and Transportation Asset Management Plans is needed to meet legislated requirements, promote informed investment decisions, and identify areas of improvement in regards to the management of associated infrastructure. Failure to do so will also directly affect the City's ability to secure Federal and Provincial grants used to fund capital project and programs. This does not promote financial sustainability or conform to the City's commitment to residence to provide the level of service they expect to be delivered.

### **PROJECT EXPENDITURE AND FUNDING**

#### **Expenditure (in 000's):**

	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Study - Request	\$0	\$200	\$100	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$300
<b>Total</b>	\$0	\$200	\$100	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$300

#### **Funding (in 000's):**

	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Contribution from Tax Rate Stabilization Reserve	\$0	\$100	\$50	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$150
Contribution from Water Rate Stabilization Reserve	\$0	\$100	\$50	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$150
<b>Total</b>	\$0	\$200	\$100	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$300

## 2020 Capital Project Detail Report

**Project Title:** Watermain CIPP Lining Program

**Project Number:** EN1294

**Department:** Engineering Department

**Summary:** Pilot program for the rehabilitation of watermain using trenchless technologies such as cured-in-place pipe lining in existing ductile and cast iron watermain as part of an annual rehabilitation program.

**Rationale:** A third of the City's water distribution network is composed of cast and ductile iron mains, and many are approaching or at the end of their Maximum Potential Life. Metallic mains are prone to corrosion, which can result in pipe wall thinning and pitting leading to cracks, fractures, and breaks, further reducing the remaining useful life. This represents a significant challenge in meeting service requirements when numerous breaks occur on the same main. Repeated, reactive repairs to watermain necessitate excavation of and damage to other assets, such as roadways and sidewalks, which shortens these other assets' remaining useful lives as well. If the City does not invest in rehabilitation for these watermain assets, it will assume the increased risk associated with repeated break failures and public safety concerns with inadequate fire flows as service levels decrease.

Cured-in-place pipe creates a fully structural, corrosion-resistant, pipe-within-a-pipe, without the need to remove the old main. This has several advantages when road and other subsurface infrastructure replacement is not required.

<b><u>PROJECT EXPENDITURE AND FUNDING</u></b>												
<b><u>Expenditure (in 000's):</u></b>												
	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Design - Request</b>	<b>\$82</b>	<b>\$30</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$112</b>
<b>Construction - Request</b>	<b>\$970</b>	<b>\$970</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$1,940</b>
<b>Design - Forecast</b>	\$0	\$0	\$0	\$0	\$30	\$30	\$0	\$0	\$0	\$0	\$0	\$60
<b>Construction - Forecast</b>	\$0	\$0	\$0	\$0	\$970	\$970	\$970	\$0	\$0	\$0	\$0	\$2,910
<b>Total</b>	<b>\$1,052</b>	<b>\$1,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$1,000</b>	<b>\$1,000</b>	<b>\$970</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$5,022</b>
<b><u>Funding (in 000's):</u></b>												
	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Debt &amp; Contr fr Water Capital Reserve</b>	<b>\$1,052</b>	<b>\$1,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$1,000</b>	<b>\$1,000</b>	<b>\$970</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$5,022</b>
<b>Total</b>	<b>\$1,052</b>	<b>\$1,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$1,000</b>	<b>\$1,000</b>	<b>\$970</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$5,022</b>

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding

## 2020 Capital Project Detail Report

**Project Title:** Water Service and Backflow Prevention Upgrades for Parks and Open Spaces

**Project Number:** EN1152

**Department:** Engineering Department

**Summary:** Installation of backflow prevention devices and water meters for Parks and Open Spaces to reduce the risk of water distribution system contamination and to improve water consumption/usage data.

**Rationale:** Water services for many Parks and Open Spaces pose a potential risk for contamination of the drinking water system due to the lack of backflow prevention devices and/or the improper installation of devices. The City's Backflow Prevention By-law 2010-102 (as amended) requires the City to upgrade these Parks and Open Spaces water service connections to comply with this municipal standard and ensure the protection of the municipal drinking water system from potential cross connections. Additionally, over 90% of all Parks and Open Spaces water services are un-metered resulting in a large quantity of water that is un-accounted for. This lack of metering significantly impacts the ability to accurately calculate water loss values and subsequently the leakage index for the water distribution system.

### **PROJECT EXPENDITURE AND FUNDING**

#### **Expenditure (in 000's):**

	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Design - Request	<b>\$30</b>	<b>\$30</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$60</b>
Construction - Request	<b>\$1,230</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$1,230</b>
Design - Forecast	\$0	\$0	\$30	\$30	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$60
Construction - Forecast	\$0	\$0	\$195	\$195	\$195	\$0	\$0	\$0	\$0	\$0	\$0	\$585
<b>Total</b>	<b>\$1,260</b>	<b>\$30</b>	<b>\$225</b>	<b>\$225</b>	<b>\$195</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$1,935</b>

#### **Funding (in 000's):**

	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Contribution from Water Capital Reserve	\$1,260	\$30	\$225	\$225	\$195	\$0	\$0	\$0	\$0	\$0	\$0	\$1,935
<b>Total</b>	<b>\$1,260</b>	<b>\$30</b>	<b>\$225</b>	<b>\$225</b>	<b>\$195</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$1,935</b>

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding

## 2020 Capital Project Detail Report

**Project Title:** Whiskey Creek - Culvert Crossings - The Boulevard and Brennan Avenue

**Project Number:** 000953

**Department:** Engineering Department

**Summary:** An Environmental Assessment soliciting public feedback on alternatives to the Brennan Avenue crossing of Whiskey Creek in comparison to the Master Drainage Plan recommendations.

**Rationale:** Multiple scenarios were investigated in the 2019 Master Drainage Plan to reduce the flooding at the Whiskey Creek outlet including alternative outlet locations and trunk stormsewer alignments.

There are physical and financial challenges with implementing the Master Plan recommendations, therefore this EA is proposed to explore further alternatives. Alternatives being considered will include the Master Plan recommendation of a larger culvert, a smaller culvert (lower standard) or daylighting the creek by eliminating vehicular access. The project will also consider options for relocating the sanitary pump station which is located within the future floodway.

### **PROJECT EXPENDITURE AND FUNDING**

#### **Expenditure (in 000's):**

	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Environmental Assessment - Request	\$0	\$120	\$80	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$200
<b>Total</b>	\$0	\$120	\$80	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$200

#### **Funding (in 000's):**

	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Contribution from DC Reserves Tax	\$0	\$54	\$36	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$90
Contribution from Tax Capital Reserve	\$0	\$66	\$44	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$110
<b>Total</b>	\$0	\$120	\$80	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$200

## 2020 Capital Project Detail Report

**Project Title:** WwTF 96 MLD Expansion Program, Comprehensive Site Strategy Plan & ESR

**Project Number:** 000936

**Department:** Engineering Department

**Summary:** A Program Plan to manage various engineering studies recommended by the 2019 Wastewater Master Plan in support of 96 MLD including a Comprehensive Site Strategy Plan.

The City needs determine the validity of the above noted studies with clear outline of the studies contents by conducting a gap analysis. in addition, the site accessibility and administrative building functionality needs to be determined.

The studies in 2020 & 2021 will be used as background information in the ESR for 2021 and 2022.

**Rationale:** The City has conducted a 2019 Wastewater Master Plan for the WwTF. Coupled to the Master Plan is the MBR project that is underway and has had a major impact on the overall treatment strategy.

Based on the Master Plan the preferred solution for addressing process and digestion capacity at the WwTF is a combination of reduced inflow and infiltration, and expand plant capacity and upgrade treatment.

Additional studies and Phases 3 & 4 of the Schedule C Municipal Class need to be undertaken to sort out the details of the WwTF expansion.

### **PROJECT EXPENDITURE AND FUNDING**

#### **Expenditure (in 000's):**

	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Study - Request	\$0	\$1,000	\$600	\$1,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,600
Environmental Assessment - Forecast	\$0	\$0	\$175	\$175	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$350
Design - Forecast	\$0	\$0	\$0	\$0	\$3,250	\$2,110	\$5,090	\$5,090	\$0	\$0	\$0	\$15,540
Construction - Forecast	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$41,830	\$21,950	\$28,660	\$92,440
<b>Total</b>	\$0	\$1,000	\$775	\$1,175	\$3,250	\$2,110	\$5,090	\$5,090	\$41,830	\$21,950	\$28,660	\$110,930

#### **Funding (in 000's):**

	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Contribution from DC Reserves Wastewater	\$0	\$640	\$496	\$752	\$2,080	\$1,350	\$3,258	\$3,258	\$41,830	\$21,950	\$28,660	\$104,274
Contribution from WW Capital Reserve	\$0	\$360	\$279	\$423	\$1,170	\$760	\$1,832	\$1,832	\$0	\$0	\$0	\$6,656
<b>Total</b>	\$0	\$1,000	\$775	\$1,175	\$3,250	\$2,110	\$5,090	\$5,090	\$41,830	\$21,950	\$28,660	\$110,930

## 2020 Capital Project Detail Report

**Project Title:** WwTF Alum System Upgrade at Secondary Clarifiers

**Project Number:** EN1192

**Department:** Engineering Department

**Summary:** Upgrade the existing temporary secondary clarifier alum dosing system with a permanent system. The new alum system as configured is to be in use until the MBR project is built. The project includes new alum metering pumps, area velocity flow meters to permit flow pacing, and ancillary equipment to make the system functional.

**Rationale:** A pilot test performed by the WWOB Optimization group determined that injecting alum into the Secondary Clarifiers improved reliability and helped to stabilize the treatment process, while reducing the amount of alum used thereby saving approximately 20% in chemical costs. This project will provide the WWTF with the ability to flow pace the chemical thereby further fine tuning the treatment performance.

### **PROJECT EXPENDITURE AND FUNDING**

#### **Expenditure (in 000's):**

	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Design &amp; Construction - Request</b>	<b>\$1,434</b>	<b>\$36</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$1,470</b>
<b>Total</b>	\$1,434	\$36	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,470

#### **Funding (in 000's):**

	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Contribution from DC Reserves Wastewater</b>	\$502	\$13	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$502
<b>Contribution from WW Capital Reserve</b>	\$932	\$23	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$955
<b>Total</b>	\$1,434	\$36	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,470

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding



## 2020 Capital Project Detail Report

**Project Title:** WwTF Digester Capacity Expansion

**Project Number:** Z139

**Department:** Engineering Department

**Summary:** Wastewater sludge digestion capacity expansion by adding a new Primary Digester # 4 (PD4) to address the sludge treatment issues.

**Rationale:** The 2019 Wastewater Treatment Master Plan analyzed the sludge digestion capacity at the WwTF. Based on the analysis of the historical and projected sludge production rates, it was concluded that the WwTF needs two additional primary digesters by 2041. However it was further noted that one of these digesters is needed now to satisfy current production rates. Currently there are three primary digesters (PDs) which are part of the overall biosolids treatment process. The proposed fourth primary digester will be known as PD4. Due to the timing needed to design and construct the digester, this project focuses just on the PD4. During the sludge digestion, microbial activity is promoted to breakdown the organic material. These biosolids are then eventually applied as a fertilizer and a soil conditioner on agricultural lands. It is critical to provide an adequate treatment of the biosolids to meet NASM (non-agricultural source material) requirements under the Nutrient Management Act.

The Master Plan recommended the proposed implementation staging for the PD4: 1. Initiate the design of the primary digester in 2020 and; 2. Install one additional primary digester in 2022 to provide digestion capacity to 2034.

### **PROJECT EXPENDITURE AND FUNDING**

#### **Expenditure (in 000's):**

	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Design - Request	\$0	\$800	\$1,000	\$2,000	\$2,200	\$0	\$0	\$0	\$0	\$0	\$0	\$6,000
Construction - Forecast	\$0	\$0	\$0	\$2,000	\$6,000	\$6,000	\$7,000	\$800	\$0	\$0	\$0	\$21,800
<b>Total</b>	\$0	\$800	\$1,000	\$4,000	\$8,200	\$6,000	\$7,000	\$800	\$0	\$0	\$0	\$27,800

#### **Funding (in 000's):**

	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Contribution from DC Reserves Wastewater	\$0	\$800	\$1,000	\$4,000	\$8,200	\$6,000	\$7,000	\$800	\$0	\$0	\$0	\$27,800
<b>Total</b>	\$0	\$800	\$1,000	\$4,000	\$8,200	\$6,000	\$7,000	\$800	\$0	\$0	\$0	\$27,800

## 2020 Capital Project Detail Report

**Project Title:** WwTF Electrical Substation and Transformer Upgrade

**Project Number:** EN1297

**Department:** Engineering Department

**Summary:** At the Wastewater Treatment Facility (WwTF), it is proposed to replace the existing electrical infrastructure, including substation and transformers, in coordination with the new electrical requirements for the Membrane Bio-Reactor (MBR) project. The new MBR electrical infrastructure construction is anticipated to start in 2019, ahead of the main project.

**Rationale:** The existing electrical substation and transformers were installed in 1984 and have a typical lifespan of 25 to 30 years. Recent maintenance reports have observed leaking that has resulted in ongoing clean up and monitoring since 2015 to mitigate environmental contamination. Further the proposed MBR will require additional power requirements above what is existing to run the plant resulting in the eventual upgrade of the electrical substation and transformers. To lessen the schedule impacts to the MBR project it is proposed to replace the electrical infrastructure now in coordination with the electrical requirements for the MBR project. The substation and transformer replacements are needed to keep the equipment in a state of good repair. At this time temporary measures have been instituted to ensure the operation of the equipment to cover the duration to design and construct. The WwTF is dependent upon this equipment to remain in compliance with the Environmental Protection Act and in particular, the Environmental Compliance Approval.

### **PROJECT EXPENDITURE AND FUNDING**

#### **Expenditure (in 000's):**

	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Design - Request	\$310	\$400	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$710
Construction - Request	\$0	\$820	\$4,860	\$4,050	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$9,730
<b>Total</b>	\$310	\$1,220	\$4,860	\$4,050	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$10,440

#### **Funding (in 000's):**

	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Contribution from DC Reserves Tax	\$0	\$781	\$3,110	\$2,592	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$6,483
Contribution from WW Capital Reserve	\$310	\$439	\$1,750	\$1,458	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,957
<b>Total</b>	\$310	\$1,220	\$4,860	\$4,050	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$10,440

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding

## 2020 Capital Project Detail Report

**Project Title:** WwTF New Advanced Nutrient Removal

**Project Number:** EN1091

**Department:** Engineering Department

**Summary:** As per the Lake Simcoe Protection Act, the City of Barrie needs to comply with the phosphorous effluent limits from the WwTF. The total phosphorus effluent limit is a requirement under the Lake Simcoe Phosphorus Reduction Strategy. Membrane bioreactor (MBR) treatment technology has been selected to address the phosphorous effluent limit requirements. The MBR treatment would be retrofitted within the existing WwTF footprint for the existing WwTF rated capacity of 76 MLD. As part of this project, current high purity oxygen system would be replaced with the diffused aeration mechanism to provide bio-reaction for the membrane bioreactor treatment train at the Wastewater Treatment Facility to meet the total phosphorus effluent limit as noted in the ECA (environmental compliance approval).

**Rationale:** The constructability and process change implementation is very critical in this project. The WwTF is a live plant without any redundancy. The effluent quality management is very important to protect the Kempenfelt Bay while changing the process treatment train. The proposed solution would be implemented by first retrofitting UNOX tanks with fine bubble diffused aeration by providing a new aeration blower mechanism. Once UNOX conversion is completed, remaining secondary clarifier tanks would be converted to diffused aeration while the RBC area being converted to membrane treatment. It is imperative to provide required hydro supply and flow attenuation capacity before the construction phasing of the MBR project. Once MBR is fully retrofitted with new UV irradiation system, the existing sand filtration system would be decommissioned. The filter area would be re-designed for other purposes.

### **PROJECT EXPENDITURE AND FUNDING**

#### **Expenditure (in 000's):**

	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Design - Request	\$4,949	\$2,000	\$4,000	\$5,000	\$5,000	\$2,000	\$0	\$0	\$0	\$0	\$0	\$22,949
Construction - Forecast	\$0	\$0	\$0	\$7,000	\$20,000	\$20,000	\$30,000	\$30,000	\$14,300	\$0	\$0	\$121,300
<b>Total</b>	\$4,949	\$2,000	\$4,000	\$12,000	\$25,000	\$22,000	\$30,000	\$30,000	\$14,300	\$0	\$0	\$144,249

#### **Funding (in 000's):**

	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Debenture Proceeds - DCs	\$0	\$650	\$1,300	\$1,625	\$1,625	\$650	\$0	\$0	\$0	\$0	\$0	\$5,850
Contribution from DC Reserves Wastewater	\$0	\$0	\$0	\$4,480	\$12,800	\$12,800	\$19,200	\$19,200	\$9,152	\$0	\$0	\$77,632
Contribution from WW Capital Reserve	\$4,949	\$1,350	\$2,700	\$5,895	\$10,575	\$8,550	\$10,800	\$10,800	\$5,148	\$0	\$0	\$60,767
<b>Total</b>	\$4,949	\$2,000	\$4,000	\$12,000	\$25,000	\$22,000	\$30,000	\$30,000	\$14,300	\$0	\$0	\$144,249

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding

## 2020 Capital Project Detail Report

**Project Title:** Yonge Street ROW Expansion - Madelaine to Lockhart (City)

**Project Number:** EN1339

**Department:** Engineering Department

**Summary:** Reconstruction and widening of Yonge Street to 5 lanes, buffered bike lanes and sidewalks between Madelaine and Lockhart Road.

**Rationale:** This project is identified in the Council endorsed Transportation Master Plan.

<b><u>PROJECT EXPENDITURE AND FUNDING</u></b>												
<b><u>Expenditure (in 000's):</u></b>												
	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Design & Utilities - Request	<b>\$90</b>	<b>\$591</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$681</b>
Property - Forecast	\$0	\$0	\$0	\$0	\$0	\$0	\$292	\$0	\$0	\$0	\$0	\$292
Utilities - Forecast	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$218	\$0	\$0	\$0	\$218
Construction - Forecast	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,089	\$2,089	\$0	\$4,177
<b>Total</b>	<b>\$90</b>	<b>\$591</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$292</b>	<b>\$218</b>	<b>\$2,089</b>	<b>\$2,089</b>	<b>\$0</b>	<b>\$5,368</b>
<b><u>Funding (in 000's):</u></b>												
	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Contribution from DC Reserves Tax (Annex)	\$76	\$502	\$0	\$0	\$0	\$0	\$248	\$185	\$1,775	\$1,775	\$0	\$4,563
Contribution from Tax Capital Reserve	\$13	\$89	\$0	\$0	\$0	\$0	\$44	\$33	\$313	\$313	\$0	\$805
<b>Total</b>	<b>\$90</b>	<b>\$591</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$292</b>	<b>\$218</b>	<b>\$2,089</b>	<b>\$2,089</b>	<b>\$0</b>	<b>\$5,368</b>

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding

## 2020 Capital Project Detail Report

**Project Title:** Yonge Street ROW Expansion - Mapleview to Madelaine (City)

**Project Number:** EN1261

**Department:** Engineering Department

**Summary:** Reconstruction and widening of Yonge Street to 5 lanes, buffered bike lanes and sidewalks between Mapleview Drive and Madelaine.

**Rationale:** The Transportation Master Plan identified the need to widen Yonge Street to accommodate planned growth in the Secondary Plan lands, which will support the proposed mixed-use development that is identified for this corridor in the Hewitt's Secondary Plan.

The existing 2 lane rural cross-section is not sufficient to accommodate traffic volumes associated with planned growth. The preferred alternative identified the need to widen Yonge Street to 5 lanes and include buffered bike lanes and sidewalks.

### **PROJECT EXPENDITURE AND FUNDING**

#### **Expenditure (in 000's):**

	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Design - Request</b>	<b>\$716</b>	<b>(\$29)</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$687</b>
<b>Property &amp; Utilities - Request</b>	<b>\$293</b>	<b>\$570</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$863</b>
<b>Utilities - Forecast</b>	\$0	\$0	\$226	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$226
<b>Construction - Forecast</b>	\$0	\$0	\$0	\$0	\$1,992	\$2,439	\$447	\$0	\$0	\$0	\$0	\$4,878
<b>Total</b>	\$1,009	\$541	\$226	\$0	\$1,992	\$2,439	\$447	\$0	\$0	\$0	\$0	\$6,654

#### **Funding (in 000's):**

	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Debenture Proceeds - Tax</b>	\$0	(\$6)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	(\$6)
<b>Contribution from DC Reserves Tax (Annex)</b>	\$858	\$465	\$192	\$0	\$1,693	\$2,073	\$380	\$0	\$0	\$0	\$0	\$5,661
<b>Contribution from Tax Capital Reserve</b>	\$151	\$82	\$34	\$0	\$299	\$366	\$67	\$0	\$0	\$0	\$0	\$999
<b>Total</b>	\$1,009	\$541	\$226	\$0	\$1,992	\$2,439	\$447	\$0	\$0	\$0	\$0	\$6,654

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding

## 2020 Capital Project Detail Report

**Project Title:** Public Space Bin Upgrade Program

**Project Number:** ES1047

**Department:** Environmental Services

**Summary:** The Public Space Bin Program will be updated to create a standard, more efficient program that will be adaptable to impending legislative changes.

**Rationale:** A comprehensive Public Space Bin Rationalization Study was conducted in response to the need to update the Public Space Bin Program. The purpose of which is to reduce contamination rates, increase diversion, find efficiencies and standardization, address changing legislation and its potential impacts, and to implement a second priority initiative within the Sustainable Waste Management Strategy. Of certainty is the fact that the legislation promotes the expansion of diversion programs which will definitely impact this 'Program'. Updating the program requires a 2 year implementation period.

<b><u>PROJECT EXPENDITURE AND FUNDING</u></b>												
<b><u>Expenditure (in 000's):</u></b>												
	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Execute - Request	\$475	\$238	\$238	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$950
Total	\$475	\$238	\$238	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$950
<b><u>Funding (in 000's):</u></b>												
	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Contribution from Tax Capital Reserve	\$475	\$238	\$238	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$950
Total	\$475	\$238	\$238	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$950

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding

## 2020 Capital Project Detail Report

**Project Title:** Studies for Future Solid Waste Disposal Options

**Project Number:** 000729

**Department:** Environmental Services

**Summary:** The City of Barrie Landfill Site has landfilling capacity to until 2035. Every effort is being made to minimize landfill space utilization in order to extend the landfill life beyond 2035. Preparing and implementing a viable alternative option for waste disposal after landfill closure requires a number of years of research, analysis as well as obtaining compliance approvals for the identified preferred option.

**Rationale:** The City of Barrie Landfill Site is forecasted to no longer have the capacity to accept waste in 2035. The feasibility of various options for alternative waste disposal will need to be analyzed to assist with deciding on a preferred option. Currently, ten to fifteen (10 -15) years has been the estimated average time to obtain compliance approvals. Beginning the project in 2020 may allow for the time required to research and analyze specific options as well as obtain compliance approvals for the preferred option. It may not allow time for implementation of the preferred solution. Delaying the project any further may result in an increased cost as waste would need to be transported and disposed of off-site at an escalating cost. There would also be a time delay in obtaining approvals for this interim solution.

### **PROJECT EXPENDITURE AND FUNDING**

#### **Expenditure (in 000's):**

	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Study - Request</b>	<b>\$0</b>	<b>\$100</b>	<b>\$400</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$500</b>
<b>Total</b>	<b>\$0</b>	<b>\$100</b>	<b>\$400</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$500</b>

#### **Funding (in 000's):**

	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Contribution from DC Reserves Tax</b>	<b>\$0</b>	<b>\$90</b>	<b>\$360</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$450</b>
<b>Contribution from Reserves</b>	<b>\$0</b>	<b>\$10</b>	<b>\$40</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$50</b>
<b>Total</b>	<b>\$0</b>	<b>\$100</b>	<b>\$400</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$500</b>

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding

## 2020 Capital Project Detail Report

**Project Title:** Toronto/Simcoe Contamination Mitigation Treatment Barrier

**Project Number:** 000960

**Department:** Environmental Services

**Summary:** Installation of an Injectable Carbon Permeable Reactive Barrier (ICPRB) to mitigate potential issues from Historic Waste Site near 34 Simcoe Street.

**Rationale:** A consultant recommended a 2-step approach to address the continuous impact of contamination into Kidds Creek. Installation of an Injectable Carbon Permeable Reactive Barrier (CAC) in conjunction with a Risk Based Approach will prevent a Light Non Aqueous Phase Liquid (LNAPL) plume from migrating from 34 Simcoe Street onto City Property (Simcoe Street). The CAC will address the contaminants migrating from private property to City property. The remaining dissolved phase impacts that cannot be mitigated by the barrier will be mitigated using a Risk Based Approach. A groundwater Monitoring Program will be required to trend longer term conditions and confirm if migration has been successful. Upon successful completion of this program, the continued contamination of Kidd's Creek should cease.

### **PROJECT EXPENDITURE AND FUNDING**

#### **Expenditure (in 000's):**

	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Capital Purchase - Request</b>	<b>\$0</b>	<b>\$400</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$400</b>
<b>Total</b>	<b>\$0</b>	<b>\$400</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$400</b>

#### **Funding (in 000's):**

	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Contribution from Tax Capital Reserve</b>	<b>\$0</b>	<b>\$400</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$400</b>
<b>Total</b>	<b>\$0</b>	<b>\$400</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$400</b>

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding



## 2020 Capital Project Detail Report

**Project Title:** Well Installations for Biosolids Storage Facility Groundwater Monitoring Program

**Project Number:** 000856

**Department:** Environmental Services

**Summary:** Tree removal, site preparation and installation of additional monitoring wells for the Biosolids Storage Facility Groundwater Monitoring Program.

**Rationale:** Recommendations from the Ministry of the Environment, Conservation and Parks requested review of the current Biosolids Storage Facility Groundwater Monitoring Program include the installation of additional monitoring wells to further the proactive approach to addressing potential impacts of contamination resulting from operational activities. These wells are required to be installed in a densely forested area. In order to provide access for a well driller and staff conducting regular sampling activities site preparation and tree removal activities will be required.

### **PROJECT EXPENDITURE AND FUNDING**

#### **Expenditure (in 000's):**

	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Construction - Request	\$0	\$80	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$80
<b>Total</b>	\$0	\$80	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$80

#### **Funding (in 000's):**

	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Contribution from WW Capital Reserve	\$0	\$80	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$80
<b>Total</b>	\$0	\$80	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$80

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding

## 2020 Capital Project Detail Report

**Project Title:** 56 Mulcaster Roof Top and HVAC Replacement

**Project Number:** 000949

**Department:** Facilities Department

**Summary:** Full removal and replacement of the roof top membrane and subsequent metal flashing. Removal and replacement of all rooftop mechanical equipment. Installation of roof drain pipe insulation to avoid freezing.

**Rationale:** The existing roof top mechanical equipment and roofing membrane are at the end of their life cycle. The existing RTU's require regular maintenance to keep them operational. Complete failure is a possibility. Should 1 or more of the RTU's fail, the occupants of 56 Mulcaster would be subject working within unconditioned space for a prolonged period of time as replacement is subject to long lead material lead times. Similarly, the roof membrane is overdue for replacement and a failure in the membrane would result interior water damage to finishes and equipment. Damage to interior building material and equipment could be very costly. A roof leak was experienced in the Spring of 2019 which caused minor damage to floor and wall finishes. In recent years, replacement of these building components was delayed in effort to save money as 56 Mulcaster was scheduled to be demolished in the previous capital plan that saw the city hall building addition occurring in 2023. As shown in the 2020 capital plan, the larger city hall addition project that would include a reconstruction of the exterior site has been moved out to 2030 as increased space efficiencies have been realized through the 3rd floor design which prolongs the need for an addition. Therefore, there is a need to keep 56 Mulcaster for an additional 10-12 years which justifies the expense of replacing the roof membrane and RTU's.

### **PROJECT EXPENDITURE AND FUNDING**

#### **Expenditure (in 000's):**

	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Design - Request</b>	<b>\$0</b>	<b>\$75</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$75</b>
<b>Construction - Request</b>	<b>\$0</b>	<b>\$375</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$375</b>
<b>Total</b>	<b>\$0</b>	<b>\$450</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$450</b>

#### **Funding (in 000's):**

	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Contribution from Tax Capital Reserve</b>	<b>\$0</b>	<b>\$450</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$450</b>
<b>Total</b>	<b>\$0</b>	<b>\$450</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$450</b>

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding

## 2020 Capital Project Detail Report

**Project Title:** Allandale Historic Train Station Development

**Project Number:** FC1064

**Department:** Facilities Department

**Summary:** The current phase requested for archaeological consulting services at the Allandale Train Station site will have the City's Archaeologist of Record providing services that adhere to the Guidelines for Consultant Archaeologists, including but not limited to processing / inventory of archaeological material and associated documentation, surveying / mapping, liaising with all stakeholders, and presenting / reporting at each milestone / stage of the study.

**Rationale:** Allandale Train Station has been found to have potential archaeological significance and requires a full archaeological assessment prior to proceeding with any future development.

### **PROJECT EXPENDITURE AND FUNDING**

#### **Expenditure (in 000's):**

	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Construction - Request</b>	<b>\$3,800</b>	<b>\$1,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$4,800</b>
<b>Total</b>	\$3,800	\$1,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$4,800

#### **Funding (in 000's):**

	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Contribution from Debt &amp; Reserves</b>	\$3,800	\$1,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$4,800
<b>Total</b>	\$3,800	\$1,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$4,800

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding

## 2020 Capital Project Detail Report

**Project Title:** Allandale Recreation Centre Exterior Doors Replacement

**Project Number:** 000220

**Department:** Facilities Department

**Summary:** Allandale Recreation Centre Exterior Door Replacement. The two main vestibules have an exterior and interior door set that require replacement or significant refurbishment.

**Rationale:** 3 sets of sliding doors were installed in 2010 and have past their life expectancy. The fourth set are swing doors that are original to the building.

<b><u>PROJECT EXPENDITURE AND FUNDING</u></b>												
<b><u>Expenditure (in 000's):</u></b>												
	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Construction - Request	\$0	\$80	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$80
<b>Total</b>	\$0	\$80	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$80
<b><u>Funding (in 000's):</u></b>												
	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Contribution from Tax Capital Reserve	\$0	\$80	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$80
<b>Total</b>	\$0	\$80	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$80

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding

## 2020 Capital Project Detail Report

**Project Title:** Allandale Transit Hub Development

**Project Number:** 000795

**Department:** Facilities Department

**Summary:** In order to facilitate the construction of the Barrie Permanent Market project at the location of the existing Transit Terminal (24 Maple Ave), it is required that a new location for the Transit Terminal be found and a new Transit Facility constructed. The construction of the new Transit terminal will allow the existing Transit operations to move out of the building at 24 Maple Ave and relocate to a site in close proximity to the Metrolinx Go Station. The construction of the Allandale Transit Hub will consist of a 2 storey transit building to house ticket counters, waiting areas, washrooms, offices and storage areas. Additionally the site will include bus canopies and heated bus shelters.

**Rationale:** As outlined in the Allandale Mobility Hub Study completed in May of 2018 and Staff Report TPS003-18 dated June 11, 2018, moving the Transit Hub to a centralized location at the existing GO Train Station has been strategically planned as the location of the Allandale Transit Hub is situated on a natural crossroads at the head of Kempenfelt Bay. Allandale has been an important transportation hub for over 160 years. The return of rail service to Allandale Station in 2012 represented the beginning of the rejuvenation of the area's historic role in Ontario's transportation network. The start of electrified two-way, all-day service in 2024 will continue this progress by providing a fast, frequent and reliable rapid transit connection to the rest of the Greater Golden Horseshoe. The site is ideally situated to host travel connections between the GTA, Simcoe County, Muskoka and cities along the Georgian Bay coast. With it's proximity to Barrie's rapidly growing south and designation by the Province as an Urban Growth Centre, Allandale is also well suited to serve as a central transportation hub for the city of Barrie. An expanded central bus terminal at Allandale Station builds on previous and planned strategic investments to advance the community's evolution into a modern intermodal and inter-regional mobility hub. The relocation of the transit facility creates space in the downtown for a new farmers market and event space while consolidating the transit hub function at the GO Rail station to coincide with the arrival of all-day rail service. Reducing the footprint of the transit facility in the downtown while maintaining high service levels furthers the City's objectives for downtown revitalization. Investing in transportation and public realm amenities in the Allandale area advances the City's preparation for intensification and development in the area in the future. The new terminal further advances transportation plans to coordinate local and regional transit services with seamless connections.

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding

**PROJECT EXPENDITURE AND FUNDING****Expenditure (in 000's):**

	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Construction - Request	\$0	\$2,150	\$7,750	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$9,900
<b>Total</b>	\$0	\$2,150	\$7,750	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$9,900

**Funding (in 000's):**

	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Province of Ontario Grant Revenue	\$0	\$710	\$2,558	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,267
Government of Canada Grant Revenue	\$0	\$860	\$3,100	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,960
Contribution from DC Reserves Tax	\$0	\$116	\$419	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$535
Contribution from Tax Capital Reserve	\$0	\$464	\$1,674	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,138
<b>Total</b>	\$0	\$2,150	\$7,750	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$9,900

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding

## 2020 Capital Project Detail Report

**Project Title:** Barrie - Simcoe Emergency Services Campus - Phase 1

**Project Number:** FC1020

**Department:** Facilities Department

**Summary:** The Barrie-Simcoe Emergency Services Campus Phase 1 has been approved by Council, as per Staff Report FCT006-17.

**Rationale:** The Barrie-Simcoe Emergency Services Campus Phase 1 has been approved by Council, as per Staff Report FCT006-17.

<b><u>PROJECT EXPENDITURE AND FUNDING</u></b>												
<b><u>Expenditure (in 000's):</u></b>												
	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Execute - Request</b>	\$621	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$621
<b>Construction - Request</b>	<b>\$99,373</b>	<b>\$3,666</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$103,039</b>
<b>Total</b>	\$99,994	\$3,666	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$103,660
<b><u>Funding (in 000's):</u></b>												
	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Debenture Proceeds - DCs</b>	\$15,338	\$564	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$15,903
<b>Debenture Proceeds - Tax</b>	\$37,613	\$1,457	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$39,070
<b>Contribution from DC Reserves Tax</b>	\$4,883	\$842	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$5,725
<b>Contribution from Tax Capital Reserve</b>	\$18,913	(\$51)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$18,862
<b>Intercompany - General</b>	\$23,247	\$854	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$24,100
<b>Total</b>	\$99,994	\$3,666	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$103,660

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding

## 2020 Capital Project Detail Report

**Project Title:** Barrie Fire Station 1 Roof Snow Guards Implementation

**Project Number:** 000858

**Department:** Facilities Department

**Summary:** The installation of snow guards along the roof parapet will break up the snow and ice accumulation. This will prevent large, heavy chunks from damaging other City assets including the building, fire trucks, and potentially staff.

**Rationale:** This issue has been identified by Barrie Fire and Emergency Services as a potential health and safety issue. There has been several incidents where falling snow or ice has damaged the roof or interior finishes of the building as well as the fire trucks when they enter / exit the apparatus bay. This has cost the City both money and resources time to repair damages. The implementation of the snow guards is being requested to prevent any further damage or loss to other City assets and prevent any potential health and safety issue.

### **PROJECT EXPENDITURE AND FUNDING**

#### **Expenditure (in 000's):**

	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Construction - Request</b>	<b>\$0</b>	<b>\$20</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$20</b>
<b>Total</b>	<b>\$0</b>	<b>\$20</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$20</b>

#### **Funding (in 000's):**

	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Contribution from Tax Capital Reserve</b>	<b>\$0</b>	<b>\$20</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$20</b>
<b>Total</b>	<b>\$0</b>	<b>\$20</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$20</b>

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding



## 2020 Capital Project Detail Report

**Project Title:** Barrie Fire Station 3 Generator Replacement

**Project Number:** 000855

**Department:** Facilities Department

**Summary:** Replace the generator and emergency electrical power components at Fire Station 3. The generator which is already at the end of its 25 year useful life cannot support adding fire trucks and other essential services to the backup power. This project would replace and right-size the generator, renew wiring, replace the transformer, replace the transfer switch and replace any panels that touch the emergency power system.

**Rationale:** The existing generator is at the end of its 25 year useful life expectancy. Annual testing requirements have found an increased amount of maintenance and repair items for the last several years. The existing 25kVA generator does not support the entire facility and recent changes to the technology within fire trucks means a service level gap in emergency situations. Fire trucks now need to be plugged in, charging any time they are not running. The existing backup power infrastructure cannot support this and other essential services during an emergency situation. If the generator replacement is not completed, a risk of reduced level of service during power outages or other emergency type situations is a possibility. The existing generator is at the end of its useful life expectancy; to right-size the generator for current loading requirements is the recommended option. A 2016 Facility Condition Assessment suggested a 2023 replacement, however a recent review of the condition, operational requirements, maintenance expenses and changes to the technology in fire trucks is leading to a 2020 request for replacement.

### **PROJECT EXPENDITURE AND FUNDING**

#### **Expenditure (in 000's):**

	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Construction - Request</b>	<b>\$0</b>	<b>\$140</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$140</b>
<b>Total</b>	<b>\$0</b>	<b>\$140</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$140</b>

#### **Funding (in 000's):**

	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Contribution from Tax Capital Reserve</b>	<b>\$0</b>	<b>\$140</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$140</b>
<b>Total</b>	<b>\$0</b>	<b>\$140</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$140</b>

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding

## 2020 Capital Project Detail Report

**Project Title:** Barrie Fire Station 4 Boiler & Piping Replacement

**Project Number:** 000866

**Department:** Facilities Department

**Summary:** The existing cast iron hot water boiler is at the end of its twenty year useful life. The existing unit does both domestic hot water and heating for the building with no redundancy. This project will replace the hot water tank, separate the heating function from the domestic water and create redundancy.

**Rationale:** Parts are no longer readily available for the dual wall cast iron tank with fin/tube heater assembly. With the existing tank providing both hot water and heat to the building and having no redundancy, a prolonged repair or downtime would leave the Fire Station with no hot water and minimal heat.

<b><u>PROJECT EXPENDITURE AND FUNDING</u></b>												
<b><u>Expenditure (in 000's):</u></b>												
	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Construction - Request</b>	<b>\$0</b>	<b>\$65</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$65</b>
<b>Total</b>	<b>\$0</b>	<b>\$65</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$65</b>
<b><u>Funding (in 000's):</u></b>												
	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Contribution from Tax Capital Reserve</b>	<b>\$0</b>	<b>\$65</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$65</b>
<b>Total</b>	<b>\$0</b>	<b>\$65</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$65</b>

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding

## 2020 Capital Project Detail Report

**Project Title:** Barrie Fire Station 4 Generator Replacement

**Project Number:** 000857

**Department:** Facilities Department

**Summary:** Replace the generator and emergency electrical power components at Fire Station 4. The generator which is nearing the end of its 25 year useful life cannot support adding fire trucks and other essential services to the backup power. This project would replace and right-size the generator, renew wiring, replace the transformer, replace the transfer switch, and replace any panels that touch the emergency power system.

**Rationale:** The existing generator is nearing the end of its 25 year useful life expectancy. Annual testing requirements have found an increased amount of maintenance and repair items for the last several years. The existing 25kVA generator does not support the entire facility and recent changes to the technology within fire trucks means a service level gap in emergency situations. Fire trucks now need to be plugged in, charging any time they are not running. The existing backup power infrastructure cannot support this and other essential services during an emergency situation. If the generator replacement is not completed, a risk of reduced level of service during power outages or other emergency type situations is a possibility. The existing generator is at the end of its useful life expectancy; to right-size the generator for current loading requirements is the recommended option. A 2016 Facility Condition Assessment suggested a 2023 replacement, however a recent review of the condition, operational requirements, maintenance expenses and changes to the technology in fire trucks is leading to a 2020 request for replacement.

### **PROJECT EXPENDITURE AND FUNDING**

#### **Expenditure (in 000's):**

	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Construction - Request</b>	<b>\$0</b>	<b>\$140</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$140</b>
<b>Total</b>	<b>\$0</b>	<b>\$140</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$140</b>

#### **Funding (in 000's):**

	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Contribution from Tax Capital Reserve</b>	<b>\$0</b>	<b>\$140</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$140</b>
<b>Total</b>	<b>\$0</b>	<b>\$140</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$140</b>

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding

## 2020 Capital Project Detail Report

**Project Title:** Barrie Molson Centre AODA Washroom Upgrades

**Project Number:** 000912

**Department:** Facilities Department

**Summary:** There are currently five washrooms at the Barrie Molson Centre designated as accessible but no longer meet the minimum code requirements. This project would update all 5 washrooms to meet current AODA standards including mechanical, electrical, plumbing, signage, and interior finishes.

**Rationale:** These 5 washrooms are designated to meet AODA standards but with recent changes in legislation they no longer meet current building codes. These washrooms are original to the building so they could also use a functional update. Improvements will include mechanical, electrical, plumbing, signage and interior finishes.

### **PROJECT EXPENDITURE AND FUNDING**

#### **Expenditure (in 000's):**

	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Construction - Request</b>	<b>\$0</b>	<b>\$80</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$80</b>
<b>Total</b>	<b>\$0</b>	<b>\$80</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$80</b>

#### **Funding (in 000's):**

	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Contribution from Tax Capital Reserve</b>	<b>\$0</b>	<b>\$80</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$80</b>
<b>Total</b>	<b>\$0</b>	<b>\$80</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$80</b>

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding

## 2020 Capital Project Detail Report

**Project Title:** Barrie Molson Centre Chiller Refurbishment

**Project Number:** 000914

**Department:** Facilities Department

**Summary:** Rebuild the chiller to extend its useful life.

**Rationale:** The existing plate and frame chiller is original to the 25 year old Barrie Molson Centre. The chiller itself is in fair condition and by replacing the plates and adding new plates, the chiller will become more energy efficient and can have a prolonged life cycle. The gaskets will need to be replaced as part of any dismantle and repair. Without this minor repair and upgrade, the chiller will require full replacement within the next 5 years. With this upgrade, the chiller should be able to run an additional 10 years with only minor maintenance.

<b><u>PROJECT EXPENDITURE AND FUNDING</u></b>												
<b><u>Expenditure (in 000's):</u></b>												
	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Construction - Request	\$0	\$50	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$50
<b>Total</b>	\$0	\$50	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$50
<b><u>Funding (in 000's):</u></b>												
	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Contribution from Tax Capital Reserve	\$0	\$50	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$50
<b>Total</b>	\$0	\$50	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$50

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding

## 2020 Capital Project Detail Report

**Project Title:** Barrie Molson Centre Supply Air Fan #10 Replacement

**Project Number:** 000913

**Department:** Facilities Department

**Summary:** Removal of existing, supply and installation of new make-up air supply fan for the kitchen and restaurant at the Barrie Molson Centre. Improve control functionality and efficiency of existing restaurant vent hood to operate in coordination with other HVAC units instead of the existing stand-alone system.

**Rationale:** The existing supply air fan was installed in 1995 when the building was constructed. The fans have a 20-25 year life span and recent maintenance has shown it to be at the end of its useful life. Replacing this unit will reduce current operational costs and increase energy efficiency. Operational utility benefits are estimated at \$2,000 annually, with potential incentives valued at \$1,000. The City also has a contract with a tenant who leases this space. Without a functioning supply air fan, the restaurant cannot function for a meal service so the City could be considered in breach of contract.

### **PROJECT EXPENDITURE AND FUNDING**

#### **Expenditure (in 000's):**

	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Capital Purchase - Request</b>	<b>\$0</b>	<b>\$70</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$70</b>
<b>Total</b>	<b>\$0</b>	<b>\$70</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$70</b>

#### **Funding (in 000's):**

	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Contribution from Tax Capital Reserve</b>	<b>\$0</b>	<b>\$70</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$70</b>
<b>Total</b>	<b>\$0</b>	<b>\$70</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$70</b>

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding

## 2020 Capital Project Detail Report

**Project Title:** City Hall Redevelopment

**Project Number:** FC1139

**Department:** Facilities Department

**Summary:** Complete full floor renovations (floor by floor) at City Hall to increase the occupancy and make more efficient use of each floor to ensure City Hall has the capacity to accommodate the anticipated growth of the City of Barrie and City Hall.

**Rationale:** The existing City Hall facility is at capacity and does not have space for future growth. A proactive approach will ensure that the corporation is able to optimize service delivery to the residents of Barrie by supporting functionality and growth accommodations for staff and the public.

### **PROJECT EXPENDITURE AND FUNDING**

#### **Expenditure (in 000's):**

	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
<b>Construction - Request</b>	<b>\$650</b>	<b>\$1,700</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$2,350</b>
<b>Construction - Forecast</b>	\$0	\$0	\$860	\$880	\$1,800	\$900	\$920	\$940	\$0	\$0	\$0	\$6,300
<b>Total</b>	\$650	\$1,700	\$860	\$880	\$1,800	\$900	\$920	\$940	\$0	\$0	\$0	\$8,650

#### **Funding (in 000's):**

	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
<b>Contribution from DC Reserves Tax</b>	\$0	\$491	\$249	\$254	\$520	\$260	\$266	\$272	\$0	\$0	\$0	\$2,313
<b>Contribution from Tax Capital Reserve</b>	\$650	\$1,209	\$611	\$626	\$1,280	\$640	\$654	\$668	\$0	\$0	\$0	\$6,337
<b>Total</b>	\$650	\$1,700	\$860	\$880	\$1,800	\$900	\$920	\$940	\$0	\$0	\$0	\$8,650

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding

## 2020 Capital Project Detail Report

**Project Title:** City Hall Site Upgrade and Refurbishment

**Project Number:** 000943

**Department:** Facilities Department

**Summary:** The site upgrade and refurbishment project consists of the replacement of the; asphalt parking lot, the shipping and receiving area asphalt, new curbing around the parking lot, replacement of the paving stone pathways on the north side of City hall, replacement of paving stone pathways on the east site of 56 Mulcaster and replacement of the staircase between 56 Mulcaster and the Zamboni building.

**Rationale:** The City Hall parking lot and adjacent site elements such as the shipping receiving area, curbing, soft scape, etc. have been in a state of disrepair for many years. Over the years, patching and refurbishments have been made to the various elements to extend the useful life, however a continuation of this would not be fiscally responsible. The condition of the site is a health and safety concern as differential settlement within the asphalt and surrounding walkways is significant. Replacing the various site elements would reduce the yearly maintenance cost as ongoing refurbishments would be significantly less. As shown in the capital plan, the larger City Hall addition project that would include a reconstruction of the exterior site has been moved out to 2030 as increased space efficiencies have been realized which prolongs the need for an addition.

### **PROJECT EXPENDITURE AND FUNDING**

#### **Expenditure (in 000's):**

	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Design - Request	\$0	\$25	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$25
Construction - Request	\$0	\$625	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$625
<b>Total</b>	\$0	\$650	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$650

#### **Funding (in 000's):**

	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Contribution from Tax Capital Reserve	\$0	\$325	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$325
Contribution from Parking Capital Reserve	\$0	\$325	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$325
<b>Total</b>	\$0	\$650	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$650

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding



## 2020 Capital Project Detail Report

**Project Title:** East Bayfield Community Centre Pool Boiler & Controls Replacement

**Project Number:** 000910

**Department:** Facilities Department

**Summary:** Remove and replace the existing pool boilers including control systems. This project will create redundancy and energy efficiencies through a revamped design of the pool heating system.

**Rationale:** The existing pool boilers have failed and been rebuilt several times causing service downtime and increased operational costs. There is no redundancy in this system and programming must be cancelled if the pools are not operating within a range around 82 degrees C for the large pool and around 92 degrees C for the small pool. A revamped design of the pool heating system will create redundancy and energy savings by running 3 smaller boilers vs. the existing 2. Updates to the control systems and new installations like a heat exchanger and/or a water-to-water heat pump will also create efficiencies and allow for future flexibility. Updating the pool heating system is estimated to produce a utility operational savings of \$10,000 annually with potential incentives valued at \$2,500.

### **PROJECT EXPENDITURE AND FUNDING**

#### **Expenditure (in 000's):**

	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Construction - Request</b>	<b>\$0</b>	<b>\$275</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$275</b>
<b>Total</b>	<b>\$0</b>	<b>\$275</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$275</b>

#### **Funding (in 000's):**

	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Contribution from Tax Capital Reserve</b>	<b>\$0</b>	<b>\$275</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$275</b>
<b>Total</b>	<b>\$0</b>	<b>\$275</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$275</b>

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding

## 2020 Capital Project Detail Report

**Project Title:** Eastview Arena Chiller Replacement

**Project Number:** 000432

**Department:** Facilities Department

**Summary:** Replace the existing end-of-life ammonia chiller.

**Rationale:** The existing ammonia chiller was installed back in 1974. The average life expectancy is about 30 years. Operations staff have managed to keep this asset running for nearly 45 years but maintenance is becoming more expensive and more difficult to perform each year. This replacement will bring operational and energy efficiencies to a necessary asset. Operational utility savings are estimated at \$5,000 annually, with potential project incentives valued at \$1,500.

### **PROJECT EXPENDITURE AND FUNDING**

#### **Expenditure (in 000's):**

	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Construction - Request	\$0	\$100	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$100
Total	\$0	\$100	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$100

#### **Funding (in 000's):**

	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Contribution from Tax Capital Reserve	\$0	\$100	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$100
Total	\$0	\$100	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$100

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding

## 2020 Capital Project Detail Report

**Project Title:** Environmental Centre Drainage and Regrading

**Project Number:** 000984

**Department:** Facilities Department

**Summary:** There are several areas within the Environmental Centre site that require grading and proper drainage to be installed to move water away from existing buildings.

**Rationale:** Nearly 50% of the Environmental Centre site is paved in hard surface. Due to the complex networks of electrical, data, methane detection, etc. there is no opportunity for subsurface drainage. Water runoff is controlled completely via over land flow and requires excellent grading to move water away from buildings and infrastructure. Over the last few years there has been several area around the site settle, causing ponding, water runoff into buildings and ice buildup in the winter months. This project would regrade areas of the site to prevent further water runoff and damage to the buildings as well as prevent further ponding and ice buildups which cause health and safety risks over the winter months.

### **PROJECT EXPENDITURE AND FUNDING**

#### **Expenditure (in 000's):**

	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Construction - Request</b>	<b>\$0</b>	<b>\$95</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$95</b>
<b>Total</b>	<b>\$0</b>	<b>\$95</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$95</b>

#### **Funding (in 000's):**

	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Contribution from Tax Capital Reserve</b>	<b>\$0</b>	<b>\$95</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$95</b>
<b>Total</b>	<b>\$0</b>	<b>\$95</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$95</b>

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding

## 2020 Capital Project Detail Report

**Project Title:** Environmental Centre Eavestrough Replacement

**Project Number:** 000868

**Department:** Facilities Department

**Summary:** The Environmental Centre Administrative building is a pre-engineered structure incorporating steel eavestrough along the perimeter of the roof. This eavestrough has been damaged due to ice buildup and is in need of replacement.

**Rationale:** Sliding ice buildup on the roof of the Administrative building at the Environmental Centre has caused damage to the already outdated eavestrough that is past its useful life expectancy. As a result, the eavestrough is leaking and/or not properly directing water to downspouts and in many areas and subsequently spilling onto the ground below. These leaks are causing slip and fall hazards once frozen, requiring constant attention from operations staff. If this is not addressed, the public and staff remain at risk of injury and the Corporation remains liable for any claims as a result.

### **PROJECT EXPENDITURE AND FUNDING**

#### **Expenditure (in 000's):**

	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Capital Purchase - Request</b>	<b>\$0</b>	<b>\$50</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$50</b>
<b>Total</b>	\$0	\$50	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$50

#### **Funding (in 000's):**

	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Contribution from Tax Capital Reserve</b>	\$0	\$50	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$50
<b>Total</b>	\$0	\$50	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$50

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding

## 2020 Capital Project Detail Report

**Project Title:** Holly Community Centre Parking Lot Refurbishment

**Project Number:** 000416

**Department:** Facilities Department

**Summary:** This project involves the removal and replacement or a 'shave & pave' of the parking lot asphalt surface at the Holly Community Centre.

**Rationale:** The parking lot has surface distresses such as pot holes and seam cracking which, if left unaddressed, will lead to further base issues and exacerbate the current condition of the parking lot. The catch basins for parking lot drainage are significantly depressed and have surface distress surrounding the inlet. There are also depressions in the parking lot causing water ponding which should be investigated further.

<b><u>PROJECT EXPENDITURE AND FUNDING</u></b>												
<b><u>Expenditure (in 000's):</u></b>												
	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Construction - Request	\$0	\$100	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$100
Total	\$0	\$100	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$100
<b><u>Funding (in 000's):</u></b>												
	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Contribution from Tax Capital Reserve	\$0	\$100	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$100
Total	\$0	\$100	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$100

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding

## 2020 Capital Project Detail Report

**Project Title:** Holly Community Centre Roof Replacement

**Project Number:** 000981

**Department:** Facilities Department

**Summary:** Remove and replace entire sections of the Holly Community Centre modified bitumen roof. Repair damaged insulation, flashing and miscellaneous metals based on destructive investigation and consulting reports.

**Rationale:** The modified bitumen roof has failed. There are more blisters and de-laminated materials than good. Consulting reports have verified the poor condition of the roof membrane and a thermal imaging report is being put together in Q3 2019 to identify the extent of the failure and damage to insulation, metals and other building elements.

### **PROJECT EXPENDITURE AND FUNDING**

#### **Expenditure (in 000's):**

	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Design - Request</b>	<b>\$0</b>	<b>\$150</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$150</b>
<b>Construction - Forecast</b>	\$0	\$0	\$1,500	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,500
<b>Total</b>	\$0	\$150	\$1,500	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,650

#### **Funding (in 000's):**

	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Contribution from Tax Capital Reserve</b>	\$0	\$150	\$1,500	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,650
<b>Total</b>	\$0	\$150	\$1,500	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,650

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding

## 2020 Capital Project Detail Report

**Project Title:** Holly Community Centre RTU Duct Insulation Replacement

**Project Number:** 000280

**Department:** Facilities Department

**Summary:** Holly Community Centre rooftop HVAC duct replacement. Remove the existing saturated insulation and re-insulate with proper materials including waterproofing.

**Rationale:** 4 rooftop HVAC units at the Holly Community Centre have duct insulation that has failed and is completely saturated. The saturated insulation greatly reduces the efficiency of the HVAC units and has begun to leak inside the building causing additional damage and operational expenses to repair. Replacing the insulation and properly waterproofing for the outdoor environment is required to fix the problem and prevent further water leaks and inefficiencies. There are potential energy savings and incentives by completing this work.

### **PROJECT EXPENDITURE AND FUNDING**

#### **Expenditure (in 000's):**

	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Construction - Request</b>	<b>\$0</b>	<b>\$75</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$75</b>
<b>Total</b>	<b>\$0</b>	<b>\$75</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$75</b>

#### **Funding (in 000's):**

	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Contribution from Tax Capital Reserve</b>	<b>\$0</b>	<b>\$75</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$75</b>
<b>Total</b>	<b>\$0</b>	<b>\$75</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$75</b>

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding

## 2020 Capital Project Detail Report

**Project Title:** Lampman Lane Gymnasium Improvements

**Project Number:** 000911

**Department:** Facilities Department

**Summary:** Elements of the gymnasium at Lampman Lane CC have been identified for replacement. Flooring, basketball nets, and the stage all require replacement in coordination with the School Board.

**Rationale:** The City has a cost sharing agreement with the School Board to maintain the gymnasium at Lampman Lane. The flooring, basketball nets and stage have all been identified as failing asset that require replacement.

<b><u>PROJECT EXPENDITURE AND FUNDING</u></b>												
<b><u>Expenditure (in 000's):</u></b>												
	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Construction - Request	\$0	\$70	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$70
<b>Total</b>	\$0	\$70	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$70
<b><u>Funding (in 000's):</u></b>												
	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Contribution from Tax Capital Reserve	\$0	\$70	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$70
<b>Total</b>	\$0	\$70	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$70

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding



## 2020 Capital Project Detail Report

**Project Title:** Live Video Witness Testimony

**Project Number:** 000964

**Department:** Legislative & Court Services

**Summary:** Installation and support for a sole source judicially approved live video system to improve officer attendance at court with anticipation of reducing costs of satellite court leases, reducing costs of officer overtime and increase revenues for all participating municipal partners due to better officer attendance.

**Rationale:** The installation including hardware, software, communication lines and all labour is arranged and supplied by the Province's Judicial Video Network (JVN) group. Limited IT support is required for this project. Ongoing support is by JVN. Costs are anticipated to be offset by participating enforcement agencies at 100%.

### **PROJECT EXPENDITURE AND FUNDING**

#### **Expenditure (in 000's):**

	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Capital Purchase - Request</b>	<b>\$0</b>	<b>\$131</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$131</b>
<b>Total</b>	<b>\$0</b>	<b>\$131</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$131</b>

#### **Funding (in 000's):**

	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Contribution from Revenue Fund</b>	<b>\$0</b>	<b>\$131</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$131</b>
<b>Total</b>	<b>\$0</b>	<b>\$131</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$131</b>

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding

## 2020 Capital Project Detail Report

**Project Title:** Main Library Front Entrance Landscape Replacement

**Project Number:** Z597

**Department:** Facilities Department

**Summary:** The front entrance landscape at the Main Library is in very poor condition. The pavers, concrete, and steps are deteriorating, requiring replacement. A joint exercise was completed in 2018 to redesign the site at both John Edwin Coupe Park and the Main Library. This has provided City staff with enough information to move directly into a design+build contract to replace and regrade the landscape front entrance making it more accessible and inviting.

**Rationale:** The condition has severely deteriorated over the last few years. Each year more and more operational dollars are being spent to level pavers, patch holes, repair steps in an attempt to avoid risk. The entire front landscape, sidewalks and steps are beyond repair and require replacement. There have already been several trip and fall incidents including lost time from City Staff. There are several areas that have heaved or have settled creating low points which also create slip and fall hazards in the winter months. Approximately \$50k has been spent over the past 3 years trying to make this area safe and avoid risk, however being 25 years old, the pavers and concrete are deteriorating faster than can be repaired. We are looking to increase and advance the funding that was earmarked for 2025.

### **PROJECT EXPENDITURE AND FUNDING**

#### **Expenditure (in 000's):**

	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Design - Request	\$0	\$60	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$60
Construction - Request	\$0	\$500	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$500
<b>Total</b>	\$0	\$560	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$560

#### **Funding (in 000's):**

	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Contribution from Tax Capital Reserve	\$0	\$560	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$560
<b>Total</b>	\$0	\$560	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$560

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding

## 2020 Capital Project Detail Report

**Project Title:** Marina Administration Building Replacement

**Project Number:** Z240

**Department:** Facilities Department

**Summary:** The existing Administration Building along the waterfront serves the Marina and its patrons. It is used during the spring, summer, and fall months as an office and washroom building. There are current health and safety issues and the building is in desperate need of refurbishment. The building does not meet current fire, electrical or AODA standards, nor does it properly serve the Marina Patrons any longer. Replacing the current building with a year round building that meets current codes, standards, and Marina patron needs is required.

**Rationale:** The Marina Administration Building is used as a location for the operations of the City's Marina. It centralizes operations for the loading and unloading areas, collecting of fees and forms, gas supply and informational booth. Currently it is used for the spring, summer and fall months however there are substantial operation costs and inefficiencies to shutting down for the winter season. A new building is proposed within the same proximity as the existing building however would have additional functions such as year round public washrooms. The Administration building needs to be upgraded to facilitate better accessibility and customer service to the public as well as for health, safety and efficiencies for the Marina. The building does not meet required codes for Fire, Electrical or AODA Standards. It is proposed to construct a building that includes year round office space for the Marina Coordinator, a working area for the Marina staff, washrooms for the Marina patrons and storage. This would replace both the existing gas dock kiosk and the administration/washroom building.

### PROJECT EXPENDITURE AND FUNDING

#### Expenditure (in 000's):

	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Design - Request	\$0	\$50	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$50
Construction - Forecast	\$0	\$0	\$597	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$597
<b>Total</b>	\$0	\$50	\$597	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$647

#### Funding (in 000's):

	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Contribution from Marina Reserve	\$0	\$50	\$597	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$647
<b>Total</b>	\$0	\$50	\$597	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$647

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding

## 2020 Capital Project Detail Report

**Project Title:** Operations Centre Fleet Truck Hoist Replacement

**Project Number:** 000871

**Department:** Facilities Department

**Summary:** The hydraulic heavy truck hoist in the mechanics bay at the Operations Centre is at its end of life and is due for replacement. Unit will be replaced with a new portable truck hoist that is more flexible and mobile.

**Rationale:** The old hydraulic truck hoist is past its end of life and is under constant repair. There is significant down time each year due to repairs and as a result vehicle repairs are either transferred out to a mechanic and paid for or sit on hold until the hoist can be repaired.

<b><u>PROJECT EXPENDITURE AND FUNDING</u></b>												
<b><u>Expenditure (in 000's):</u></b>												
	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Capital Purchase - Request	\$0	\$100	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$100
<b>Total</b>	\$0	\$100	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$100
<b><u>Funding (in 000's):</u></b>												
	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Contribution from Tax Capital Reserve	\$0	\$100	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$100
<b>Total</b>	\$0	\$100	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$100

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding

## 2020 Capital Project Detail Report

**Project Title:** Operations Centre Hoop House Expansion

**Project Number:** 000870

**Department:** Facilities Department

**Summary:** The Operations Centre Hoop House is where all planters and baskets are assembled and stored until they can be installed. Due to increased landscape beautification demands, there is a requirement for an additional 200 reservoir style planters and baskets in 2020 and 300 additional planters and baskets by 2021. This project will extend the City's existing over capacity Hoop House by 1,440 square feet to accommodate the additional plantings necessary to fulfill the Corporations commitments. The Hoop House addition would also allow the propagation, planting and storing functions to remain in house, providing quality control and saving the Corporation annual expenditures.

**Rationale:** The Horticulture Section of the Parks & Forestry Branch currently operates 3 glass green houses and 1 plastic hoop house out of the Operations Centre that supplies the City of Barrie streetscapes, parks and facilities with a horticultural beautification program. The Horticulture Dept. propagates plant material required for Municipal floral displays including annual and permanent plantings, reservoir hanging baskets and planters. The Hoop House extension will bridge the gap until the Operation Centre Master Plan can be implemented. The additional demand is being driven by new parks and streetscapes such as Meridian Place and Dunlop Street redevelopment project. This additional capacity is considered to be an "Operational Reality" and will be required to be provided through internal or external means. Externally, each planter would cost approximately \$500 to supply, plant, and store in a climate controlled environment, excluding the vital reservoir style planter. The Horticultural team can provide the same plantings for \$40 each, in a more quality controlled environment. The payback period for this request is less than 1 year.

### **PROJECT EXPENDITURE AND FUNDING**

#### **Expenditure (in 000's):**

	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Capital Purchase - Request</b>	<b>\$0</b>	<b>\$75</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$75</b>
<b>Total</b>	<b>\$0</b>	<b>\$75</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$75</b>

#### **Funding (in 000's):**

	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Contribution from Tax Capital Reserve</b>	<b>\$0</b>	<b>\$75</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$75</b>
<b>Total</b>	<b>\$0</b>	<b>\$75</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$75</b>

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding

## 2020 Capital Project Detail Report

**Project Title:** Operations Centre Master Plan Implementation

**Project Number:** FC1124

**Department:** Facilities Department

**Summary:** Operations Centre renovations required to support growth, replace aging infrastructure, and support the new annexed lands operations.

**Rationale:** The Operations Master Plan was endorsed by Council in June 2016. This renovation work at Ferndale Operations is the first step in executing the phased approach from the Master Plan, to decrease operational costs and create an efficient delivery model to serve the existing boundary of the City and future growth in the secondary plan area.

### **PROJECT EXPENDITURE AND FUNDING**

#### **Expenditure (in 000's):**

	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Pre-Design - Request</b>	\$200	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$200
<b>Design - Request</b>	(\$200)	\$750	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$550
<b>Construction - Request</b>	\$1,950	\$3,750	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$5,700
<b>Design - Forecast</b>	\$0	\$0	\$1,000	\$2,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,000
<b>Construction - Forecast</b>	\$0	\$0	\$4,000	\$10,000	\$8,000	\$6,550	\$0	\$0	\$0	\$0	\$0	\$28,550
<b>Total</b>	\$1,950	\$4,500	\$5,000	\$12,000	\$8,000	\$6,550	\$0	\$0	\$0	\$0	\$0	\$38,000

#### **Funding (in 000's):**

	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Debenture Proceeds - DCs</b>	\$585	\$1,350	\$1,500	\$3,600	\$2,400	\$1,965	\$0	\$0	\$0	\$0	\$0	\$11,400
<b>Debenture Proceeds - Tax</b>	\$1,365	\$3,150	\$3,500	\$8,400	\$5,600	\$4,585	\$0	\$0	\$0	\$0	\$0	\$26,600
<b>Contribution from DC Reserves Tax (Annex)</b>	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$510
<b>Total</b>	\$1,950	\$4,500	\$5,000	\$12,000	\$8,000	\$6,550	\$0	\$0	\$0	\$0	\$0	\$38,000

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding

## 2020 Capital Project Detail Report

**Project Title:** Parks Public Washrooms Rehabilitation

**Project Number:** 000922

**Department:** Facilities Department

**Summary:** The City operates and maintains 10 public washroom facilities, some of which are more than 40 years old and in need of major refurbishment to extend the life of the building. General upkeep has been done to maintain these washrooms operationally but they are reaching the point where components need to be replaced or rebuilt in order for them to keep functioning. Some of these buildings are in need of more significant repairs to the building structure. These funds will be used for base building refurbishment that are needed across the 10 locations. Specific upgrades will be prioritized based on public safety as well as the impact each has on maintenance and operating budgets.

**Rationale:** Extend the life of washroom facilities that are in much need of replacement. The funds will be used to complete larger capital base building refurbishment in order to extend the life of these assets and hold off the larger replacements for a few more years. Many of these building have only received operational repairs and cleaning to keep them functional and the structures and components which have gone relatively untouched now require replacement or refurbishment.

### **PROJECT EXPENDITURE AND FUNDING**

#### **Expenditure (in 000's):**

	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Capital Purchase - Request</b>	<b>\$0</b>	<b>\$200</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$200</b>
<b>Capital Purchase - Forecast</b>	\$0	\$0	\$100	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$100
<b>Total</b>	\$0	\$200	\$100	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$300

#### **Funding (in 000's):**

	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Contribution from Cash-In-Lieu Parkland Reserve</b>	\$0	\$200	\$100	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$300
<b>Total</b>	\$0	\$200	\$100	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$300

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding

## 2020 Capital Project Detail Report

**Project Title:** South Shore Community Centre End of Life Renewals

**Project Number:** 000353

**Department:** Facilities Department

**Summary:** Several components within the South Shore Community Centre are failing or nearing the end of their useful life. Assets such as the fire panel, kitchen cabinetry, window coverings etc. are requiring on-going maintenance expenses to maintain and should be replaced.

**Rationale:** The Fire Panel is nearly 30 years old and a 2018 condition assessment recommended replacement as parts were nearly impossible to source. Functional components such as the automatic blinds and kitchen cabinetry require major refurbishment as they are continuously being fixed with is a drawback for rental users. These assets are a major feature to the types of rentals that frequently use the South Shore space and would greatly benefit from their refurbishment and/or replacement.

### **PROJECT EXPENDITURE AND FUNDING**

#### **Expenditure (in 000's):**

	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Construction - Request</b>	<b>\$0</b>	<b>\$75</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$75</b>
<b>Construction - Forecast</b>	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>Total</b>	\$0	\$75	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$75

#### **Funding (in 000's):**

	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Contribution from Tax Capital Reserve</b>	\$0	\$75	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$75
<b>Total</b>	\$0	\$75	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$75

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding



## 2020 Capital Project Detail Report

**Project Title:** Waterfront Life Guard Tower(s) Replacement

**Project Number:** 000950

**Department:** Facilities Department

**Summary:** There are currently seven life guard towers along Barrie waterfront. These towers have passed their fifteen year life expectancy and no longer meet the minimum requirements for life guard towers. Replacement of all seven is required.

**Rationale:** Any beach that is patrolled by a life guard, is legislatively required to have a life guard tower. There are currently 7 towers that are well past their 15 year life expectancy and no longer meet the minimum standards. These towers require a platform at 6' for visibility and a sun shade for health and safety of the life guard. The tower must be constructed using vandal resistant materials and contain all the appropriate signage for health, safety and identification purposes. Additional accessories such as flags, paddle boards and life savings equipment are all required to be stored and maintained at each tower while in use.

### **PROJECT EXPENDITURE AND FUNDING**

#### **Expenditure (in 000's):**

	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Capital Purchase - Request	\$0	\$35	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$35
<b>Total</b>	\$0	\$35	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$35

#### **Funding (in 000's):**

	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Contribution from Tax Capital Reserve	\$0	\$35	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$35
<b>Total</b>	\$0	\$35	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$35

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding

## 2020 Capital Project Detail Report

**Project Title:** WWTF Administration & Garage Building Relocation

**Project Number:** 000876

**Department:** Facilities Department

**Summary:** The existing 14,000 square foot Administrative Building consists of a laboratory, offices, meeting room, storage / filing spaces, and a garage. Also included within this square footage is a temporary site trailer that would be replaced as part of this project's scope. This multi-year project will address the best location on the existing WWTF Site or surrounding City owned properties to construct and relocate the existing administrative, laboratory, and garage functions, all of which are necessary to support the plant's MBR project. This project will complete a detailed design, costing, new construction and relocation of the existing functions that need to be relocated prior to the expansion required to take on additional hydraulic wastewater treatment capacity from the annexed lands. The 2020 pre-design funding is being requested to complete a feasibility study and site due diligence to ensure that the location of the future Administration Building and infrastructure for the additional supporting functions will not interfere with any processes and be convenient and adequate for the Wastewater Operations Branch for decades to come.

**Rationale:** The existing Administrative Building at the WWTF site was constructed in 1979 over top of existing concrete tanks at the head end or wastewater influent side of the existing treatment facility. It consists of a laboratory; office, meeting and administrative space; as well as a garage, fabrication and storage space. The existing structure is approximately 14,000 square feet including the temporary site trailer that would be replaced as part of this scope of work. The relocation of the Administrative Building and its functions is required to accommodate the additional capacity and flows of wastewater that will be brought on by the annexed lands. It is currently anticipated that the plant will reach capacity by 2031 therefore not only does this relocation project need to be complete, but all process projects dependent on the relocation of the Administrative Building will also need to be complete. The Wastewater Operations branch has legislative requirements for advance wastewater treatment, testing, reporting and process controls that cannot be interrupted. The planning, design and construction of a new Administrative Facility will coincide with many other Engineering and Wastewater Operational activities to prepare to meet new legislation and increase capacity. The timing of this project is crucial and has been aligned for completion prior to 2025 in order to allow for the start of the required hydraulic expansion of the WWTF.

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding

**PROJECT EXPENDITURE AND FUNDING****Expenditure (in 000's):**

	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
<b>Pre-Design - Request</b>	<b>\$0</b>	<b>\$175</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$175</b>
<b>Design - Forecast</b>	\$0	\$0	\$150	\$950	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,100
<b>Construction - Forecast</b>	\$0	\$0	\$0	\$0	\$8,750	\$0	\$0	\$0	\$0	\$0	\$0	\$8,750
<b>Total</b>	\$0	\$175	\$150	\$950	\$8,750	\$0	\$0	\$0	\$0	\$0	\$0	\$10,025

**Funding (in 000's):**

	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
<b>Contribution from DC Reserves Tax</b>	\$0	\$88	\$75	\$475	\$4,375	\$0	\$0	\$0	\$0	\$0	\$0	\$5,013
<b>Contribution from WW Capital Reserve</b>	\$0	\$88	\$75	\$475	\$4,375	\$0	\$0	\$0	\$0	\$0	\$0	\$5,013
<b>Total</b>	\$0	\$175	\$150	\$950	\$8,750	\$0	\$0	\$0	\$0	\$0	\$0	\$10,025

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding

## 2020 Capital Project Detail Report

**Project Title:** County of Simcoe Capital Program - Long Term Care & Senior Services

**Project Number:** FI1018

**Department:** County of Simcoe

**Summary:** Capital Plan for Long Term Care & Senior services delivered by the County of Simcoe. The costs included are the City of Barrie's share.

**Rationale:** The City of Barrie is party to an agreement with the County of Simcoe that requires the City to contribute funding toward the County's capital plan on a prescribed basis. This project reflects the County's 10 year Capital Plan, as it relates to long term care and senior services needs, at the time of budget preparation. The plan is subject to change.

### **PROJECT EXPENDITURE AND FUNDING**

#### **Expenditure (in 000's):**

	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Service Partner - Request</b>	<b>\$215</b>	<b>\$161</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$376</b>
<b>Service Partner - Forecast</b>	\$0	\$0	\$118	\$97	\$33	\$118	\$125	\$74	\$100	\$0	\$0	\$665
<b>Total</b>	\$215	\$161	\$118	\$97	\$33	\$118	\$125	\$74	\$100	\$0	\$0	\$1,041

#### **Funding (in 000's):**

	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Contribution from Reserves</b>	\$215	\$161	\$118	\$97	\$33	\$118	\$125	\$74	\$100	\$0	\$0	\$1,041
<b>Total</b>	\$215	\$161	\$118	\$97	\$33	\$118	\$125	\$74	\$100	\$0	\$0	\$1,041

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding

## 2020 Capital Project Detail Report

**Project Title:** County of Simcoe Capital Program - Paramedic Services

**Project Number:** FI1019

**Department:** County of Simcoe

**Summary:** Capital Plan for Paramedic services delivered by the County of Simcoe. The costs included are the City of Barrie's share.

**Rationale:** The City of Barrie is party to an agreement with the County of Simcoe that requires the City to contribute funding toward the County's capital plan on a prescribed basis. This project reflects the County's 10 year Capital Plan, as it relates to paramedic services, at the time of budget preparation. The plan is subject to change.

### **PROJECT EXPENDITURE AND FUNDING**

#### **Expenditure (in 000's):**

	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Service Partner - Request</b>	<b>\$4,017</b>	<b>\$1,514</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$5,531</b>
<b>Service Partner - Forecast</b>	\$0	\$0	\$1,698	\$1,585	\$1,395	\$1,475	\$1,740	\$1,988	\$2,094	\$0	\$0	\$11,975
<b>Total</b>	\$4,017	\$1,514	\$1,698	\$1,585	\$1,395	\$1,475	\$1,740	\$1,988	\$2,094	\$0	\$0	\$17,506

#### **Funding (in 000's):**

	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Contribution from DC Reserves Tax</b>	\$1,746	\$764	\$728	\$732	\$888	\$860	\$870	\$819	\$814	\$0	\$0	\$8,221
<b>Contribution from Reserves</b>	\$2,271	\$750	\$970	\$853	\$507	\$615	\$870	\$1,169	\$1,280	\$0	\$0	\$9,285
<b>Total</b>	\$4,017	\$1,514	\$1,698	\$1,585	\$1,395	\$1,475	\$1,740	\$1,988	\$2,094	\$0	\$0	\$17,506

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding

## 2020 Capital Project Detail Report

**Project Title:** County of Simcoe Capital Program - Social Housing & Community Services

**Project Number:** FI1020

**Department:** County of Simcoe

**Summary:** Capital Plan for Social Housing & Community services delivered by the County of Simcoe. The costs included are the City of Barrie's share.

**Rationale:** The City of Barrie is party to an agreement with the County of Simcoe that requires the City to contribute funding toward the County's capital plan on a prescribed basis. This project reflects the County's 10 year Capital Plan, as it relates to social housing and community services, at the time of budget preparation. The plan is subject to change.

### **PROJECT EXPENDITURE AND FUNDING**

#### **Expenditure (in 000's):**

	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Service Partner - Request</b>	<b>\$3,573</b>	<b>\$1,948</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$5,521</b>
<b>Service Partner - Forecast</b>	\$0	\$0	\$1,826	\$2,252	\$2,685	\$2,965	\$2,873	\$2,977	\$2,826	\$0	\$0	\$18,404
<b>Total</b>	\$3,573	\$1,948	\$1,826	\$2,252	\$2,685	\$2,965	\$2,873	\$2,977	\$2,826	\$0	\$0	\$23,925

#### **Funding (in 000's):**

	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Contribution from DC Reserves Tax</b>	\$2,147	\$1,391	\$1,405	\$1,689	\$2,014	\$2,400	\$2,298	\$2,165	\$2,153	\$0	\$0	\$17,663
<b>Contribution from Reserves</b>	\$1,427	\$557	\$421	\$563	\$671	\$565	\$575	\$812	\$673	\$0	\$0	\$6,263
<b>Total</b>	\$3,573	\$1,948	\$1,826	\$2,252	\$2,685	\$2,965	\$2,873	\$2,977	\$2,826	\$0	\$0	\$23,925

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding

## 2020 Capital Project Detail Report

**Project Title:** Georgian College - Advanced Technology, Innovation and Research Centre

**Project Number:** FI1017

**Department:** Other Service Partners & Grants

**Summary:** Transfer of \$5 million, or a maximum of 25% of total project costs, whichever is less, to Georgian College in support of its proposed Advanced Technology, Innovation and Research Centre.

**Rationale:** If Georgian College is successful in securing government funding for a proposed Advanced Technology, Innovation and Research Centre, the City is to provide up to \$5 million (or a maximum of 25% of the total project, whichever is less) over a four year period.

<b><u>PROJECT EXPENDITURE AND FUNDING</u></b>												
<b><u>Expenditure (in 000's):</u></b>												
	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Service Partner - Request	<b>\$3,750</b>	<b>\$1,250</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$5,000</b>
Total	\$3,750	\$1,250	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$5,000
<b><u>Funding (in 000's):</u></b>												
	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Contribution from Community Benefit Reserve	\$2,500	\$1,250	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,750
Contribution from Tax Capital Reserve	\$1,250	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,250
Total	\$3,750	\$1,250	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$5,000

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding

## 2020 Capital Project Detail Report

**Project Title:** Barrie Fire and Emergency Services Technology Program

**Project Number:** IT1044

**Department:** Information Technology

**Summary:** The Barrie Fire and Emergency Services (BFES) Technology Program is intended to modernize the data infrastructure required by BFES to maintain their high level of service to the community. Locations include Fire Stations 1, 2, 3, 4, and 5.

**Rationale:** Required to modernize and maintain essential City services provided by the Barrie Fire and Emergency Services. This program is directly required to support critical services and benefits the entire City. Some of existing technical data infrastructure has reached end of lifecycle and is required to ensure dependability.

<b><u>PROJECT EXPENDITURE AND FUNDING</u></b>												
<b><u>Expenditure (in 000's):</u></b>												
	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Plan - Request</b>	\$225	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$225
<b>Capital Purchase - Request</b>	<b>\$50</b>	<b>\$100</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$150</b>
<b>Capital Purchase - Forecast</b>	\$0	\$0	\$75	\$75	\$75	\$0	\$0	\$0	\$0	\$0	\$0	\$225
<b>Total</b>	\$275	\$100	\$75	\$75	\$75	\$0	\$0	\$0	\$0	\$0	\$0	\$600
<b><u>Funding (in 000's):</u></b>												
	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Contribution from Tax Capital Reserve</b>	\$275	\$100	\$75	\$75	\$75	\$0	\$0	\$0	\$0	\$0	\$0	\$600
<b>Total</b>	\$275	\$100	\$75	\$75	\$75	\$0	\$0	\$0	\$0	\$0	\$0	\$600

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding



## 2020 Capital Project Detail Report

**Project Title:** BFES Additional Radio Channel

**Project Number:** 000990

**Department:** Information Technology

**Summary:** An additional radio channel is required to relieve congestion and be ready for growth.

**Rationale:** BFES have been operating with 2 radio channels since the system was first commissioned in 2000. Call volumes have steadily increased to over 4 times the number of calls. In 2018, nearly 1/3 of calls overlapped with other calls. A third radio channel is required to relieve the congestion and be ready for growth.

Radio congestion can create communication delays for first responders in emergency situations.

### **PROJECT EXPENDITURE AND FUNDING**

#### **Expenditure (in 000's):**

	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Execute - Request	\$0	\$400	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$400
<b>Total</b>	\$0	\$400	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$400

#### **Funding (in 000's):**

	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Contribution from DC Reserves Tax	\$0	\$400	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$400
<b>Total</b>	\$0	\$400	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$400

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding

## 2020 Capital Project Detail Report

**Project Title:** BFES Next Gen 911 Phone System

**Project Number:** IT1050

**Department:** Information Technology

**Summary:** The City of Barrie is required to comply with updating the existing Barrie Fire and Emergency Services (BFES) dispatch phone system to meet compatibility with the Canadian Radio-television and Telecommunications Commission (CRTC) directed Next Gen 911 (NG9-1-1) phone network upgrades.

**Rationale:** Telephone companies will be responsible for the construction, operation, and maintenance of the NG9-1-1 networks, with CRTC oversight. City of Barrie will be required to update the BFES dispatch phone system to be compatible with NG 911.

### **PROJECT EXPENDITURE AND FUNDING**

#### **Expenditure (in 000's):**

	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Capital Purchase - Request</b>	<b>\$100</b>	<b>\$100</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$200</b>
<b>Capital Purchase - Forecast</b>	\$0	\$0	\$300	\$100	\$50	\$0	\$0	\$0	\$0	\$0	\$0	\$450
<b>Total</b>	\$100	\$100	\$300	\$100	\$50	\$0	\$0	\$0	\$0	\$0	\$0	\$650

#### **Funding (in 000's):**

	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Contribution from Tax Capital Reserve</b>	\$100	\$100	\$300	\$100	\$50	\$0	\$0	\$0	\$0	\$0	\$0	\$650
<b>Total</b>	\$100	\$100	\$300	\$100	\$50	\$0	\$0	\$0	\$0	\$0	\$0	\$650

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding

## 2020 Capital Project Detail Report

**Project Title:** City of Barrie Facilities Wi-Fi Expansion

**Project Number:** IT1049

**Department:** Information Technology

**Summary:** This project is to provide support to City staff through the city-wide distribution and expansion of the current City of Barrie Wi-Fi technology infrastructure to all City facilities that currently do not provide it.

**Rationale:** WiFi is a prevalent technology in most work places. Providing the agility for staff to move around to different collaboration spaces while maintaining connectivity.

### **PROJECT EXPENDITURE AND FUNDING**

#### **Expenditure (in 000's):**

	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Capital Purchase - Request	\$100	\$100	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$200
Capital Purchase - Forecast	\$0	\$0	\$100	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$100
<b>Total</b>	\$100	\$100	\$100	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$300

#### **Funding (in 000's):**

	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Contribution from Tax Capital Reserve	\$100	\$100	\$100	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$300
<b>Total</b>	\$100	\$100	\$100	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$300

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding

## 2020 Capital Project Detail Report

**Project Title:** Corporate Audio Visual Technology Infrastructure

**Project Number:** IT1029

**Department:** Information Technology

**Summary:** The City's Corporate Audio Visual Technology Infrastructure Program replaces older audio and visual equipment with modern equipment with additional functionality at a lower cost to operate and support.

**Rationale:** The City utilizes various audio and visual technologies ranging from desktop monitors, projectors, sound systems and presentation equipment. This program supports the replacement of aged visual equipment deployed throughout the City's offices and meeting rooms, with newer more energy efficient, functional and reliable devices. This program also promotes the expansion of current communications methods like unified communications (instant messaging) and virtual meeting rooms technology reducing traveling time/costs while increasing staff productivity.

### **PROJECT EXPENDITURE AND FUNDING**

#### **Expenditure (in 000's):**

	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Capital Purchase - Request</b>	<b>\$220</b>	<b>\$50</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$270</b>
<b>Capital Purchase - Forecast</b>	\$0	\$0	\$50	\$50	\$50	\$150	\$150	\$150	\$150	\$200	\$200	\$1,150
<b>Total</b>	\$220	\$50	\$50	\$50	\$50	\$150	\$150	\$150	\$150	\$200	\$200	\$1,420

#### **Funding (in 000's):**

	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Contribution from Reserves</b>	\$2	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2
<b>Contribution from Tax Capital Reserve</b>	\$218	\$50	\$50	\$50	\$50	\$150	\$150	\$150	\$150	\$200	\$200	\$1,418
<b>Total</b>	\$220	\$50	\$50	\$50	\$50	\$150	\$150	\$150	\$150	\$200	\$200	\$1,420

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding

## 2020 Capital Project Detail Report

**Project Title:** Corporate Communications Infrastructure Program

**Project Number:** IT1013

**Department:** Information Technology

**Summary:** Renewal and maintenance of the City's corporate telecommunications infrastructure including hardware upgrades, accessories (handsets, soft phones, headsets), and IP gateways to meet the City's growing voice and data communication needs.

**Rationale:** Several components of the existing communication infrastructure are beyond their useful life. Renewal and maintenance of the City's corporate communications infrastructure is required to sustain level of service. Additionally, the opportunity to replace all digital communication infrastructures with an IP based solution will reduce the risk of failure and satisfy the City's future communication needs.

<b><u>PROJECT EXPENDITURE AND FUNDING</u></b>												
<b><u>Expenditure (in 000's):</u></b>												
	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Plan - Request</b>	\$253	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$253
<b>Capital Purchase - Request</b>	<b>\$1,171</b>	<b>\$100</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$1,271</b>
<b>Capital Purchase - Forecast</b>	\$0	\$0	\$50	\$50	\$50	\$50	\$0	\$0	\$0	\$0	\$0	\$200
<b>Total</b>	\$1,424	\$100	\$50	\$50	\$50	\$50	\$0	\$0	\$0	\$0	\$0	\$1,724
<b><u>Funding (in 000's):</u></b>												
	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Contribution from Tax Capital Reserve</b>	\$1,382	\$100	\$50	\$50	\$50	\$50	\$0	\$0	\$0	\$0	\$0	\$1,682
<b>Contribution from Reserves</b>	\$42	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$42
<b>Total</b>	\$1,424	\$100	\$50	\$50	\$50	\$50	\$0	\$0	\$0	\$0	\$0	\$1,724

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding

## 2020 Capital Project Detail Report

**Project Title:** Corporate PC Infrastructure Program

**Project Number:** IT1015

**Department:** Information Technology

**Summary:** The City's Corporate PC Technology Infrastructure Program is for the workstation computers used by all City Staff.

**Rationale:** Corporate PC Technology Infrastructure Program was previous managed through a corporate lease agreement paid annually on a three year cycle. The lease expires in 2020 which provides an opportunity to change to an ownership model that doesn't require a corporate wide PC refresh every year. Corporate wide PC refresh have proven to be IT resource intensive and disruptive to business operations. An ownership model allows the replacement cycle to become a continuous replacement model that minimizes the business disruption. The ownership model also allows PC lifecycles to be extended past 3 years, providing opportunities for savings.

### **PROJECT EXPENDITURE AND FUNDING**

#### **Expenditure (in 000's):**

	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Capital Purchase - Request</b>	<b>\$2,399</b>	<b>\$1,500</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$3,899</b>
<b>Capital Purchase - Forecast</b>	\$0	\$0	\$50	\$100	\$650	\$575	\$300	\$500	\$50	\$50	\$0	\$2,275
<b>Total</b>	\$2,399	\$1,500	\$50	\$100	\$650	\$575	\$300	\$500	\$50	\$50	\$0	\$6,174

#### **Funding (in 000's):**

	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Contribution from Reserves</b>	\$2,399	\$1,500	\$50	\$100	\$650	\$575	\$300	\$500	\$50	\$50	\$0	\$6,174
<b>Total</b>	\$2,399	\$1,500	\$50	\$100	\$650	\$575	\$300	\$500	\$50	\$50	\$0	\$6,174

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding

## 2020 Capital Project Detail Report

**Project Title:** Corporate Printing Infrastructure

**Project Number:** IT1014

**Department:** Information Technology

**Summary:** The City's Corporate Printing Technology Infrastructure Program replaces hardware with current multi-function device solutions that are technically advanced and more efficient to operate and support.

**Rationale:** Corporate imaging technology infrastructure renewal is required based on the industry standard, 5 year replacement cycle to reduce the risk of failure. Imaging systems (print, scan, fax, and copy functionality) are used by over 75% of staff to produce a variety of documents in varying formats, colours, and sizes for public distribution, City staff use, reporting, billing, and records management.

<b><u>PROJECT EXPENDITURE AND FUNDING</u></b>												
<b><u>Expenditure (in 000's):</u></b>												
	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Plan - Request</b>	\$200	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$200
<b>Capital Purchase - Request</b>	\$357	\$130	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$487
<b>Capital Purchase - Forecast</b>	\$0	\$0	\$130	\$130	\$130	\$130	\$130	\$130	\$130	\$130	\$130	\$1,170
<b>Total</b>	\$557	\$130	\$130	\$130	\$130	\$130	\$130	\$130	\$130	\$130	\$130	\$1,857
<b><u>Funding (in 000's):</u></b>												
	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Contribution from Reserves</b>	\$557	\$130	\$130	\$130	\$130	\$130	\$130	\$130	\$130	\$130	\$130	\$1,857
<b>Total</b>	\$557	\$130	\$130	\$130	\$130	\$130	\$130	\$130	\$130	\$130	\$130	\$1,857

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding

## 2020 Capital Project Detail Report

**Project Title:** External Website Technology Program

**Project Number:** IT1025

**Department:** Information Technology

**Summary:** Enhancements include upgrading the core platform software (SharePoint), redesign which will separate the backend content management from the Website frontend, implementation of high availability for the Website frontend across two data centres and consideration of changes to the website's look and feel.

**Rationale:** Upgrading the City's external web site software platform is required in order to support the software lifecycle of the vendor. Industry best practices recommend continuous upgrades to corporate web sites and related technology. This program will improve the ability to provide new features and functionality on the City's external web site and will enable the digitization of processes as per the Corporate IT Strategy including additional eServices which will enhance customer service and make the City internally more efficient.

### **PROJECT EXPENDITURE AND FUNDING**

#### **Expenditure (in 000's):**

	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Study - Request</b>	<b>\$0</b>	<b>\$25</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$25</b>
<b>Capital Purchase - Request</b>	<b>\$225</b>	<b>\$250</b>	<b>\$250</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$725</b>
<b>Total</b>	<b>\$225</b>	<b>\$275</b>	<b>\$250</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$750</b>

#### **Funding (in 000's):**

	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Contribution from Tax Capital Reserve</b>	<b>\$225</b>	<b>\$275</b>	<b>\$250</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$750</b>
<b>Total</b>	<b>\$225</b>	<b>\$275</b>	<b>\$250</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$750</b>

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding



## 2020 Capital Project Detail Report

**Project Title:** Insite Upgrade

**Project Number:** 000786

**Department:** Information Technology

**Summary:** This project would include upgrading the SharePoint software that powers the site, modifications to templates, layouts and content, upgraded workflow engine, mobile support and a new resilient virtual server landscape and full site testing.

**Rationale:** The current Barrie intranet site (InSite) was originally implemented around 12-13 years ago. It was upgraded in late 2000 and then again in 2012. It is now at end of life and end of mainstream support, as we are two versions behind. This project would include upgrading the SharePoint software that powers the site, modifications to templates, layouts and content, mobile support, upgrades to the workflow engine and a new resilient virtual server landscape and full site testing.

### **PROJECT EXPENDITURE AND FUNDING**

#### **Expenditure (in 000's):**

	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Capital Purchase - Request</b>	<b>\$0</b>	<b>\$100</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$100</b>
<b>Total</b>	<b>\$0</b>	<b>\$100</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$100</b>

#### **Funding (in 000's):**

	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Contribution from Tax Capital Reserve</b>	<b>\$0</b>	<b>\$100</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$100</b>
<b>Total</b>	<b>\$0</b>	<b>\$100</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$100</b>

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding

## 2020 Capital Project Detail Report

**Project Title:** Microsoft Office 365 and Windows Enterprise

**Project Number:** IT1048

**Department:** Information Technology

**Summary:** Upgrading the computer fleet operating system to Windows 10 Enterprise, Office 365, and leveraging the Microsoft Azure cloud.

**Rationale:** Keeping our systems running the current suite of Microsoft Enterprise solutions ensures we have access to the latest management and security tools provided by Microsoft. Leveraging Microsoft's Azure Cloud provides a flexible and agile technology foundation to keep pace with the innovative business process changes happening throughout the City.

### **PROJECT EXPENDITURE AND FUNDING**

#### **Expenditure (in 000's):**

	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Capital Purchase - Request</b>	<b>\$200</b>	<b>\$300</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$500</b>
<b>Total</b>	\$200	\$300	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$500

#### **Funding (in 000's):**

	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Contribution from Tax Capital Reserve</b>	\$177	\$266	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$443
<b>Contribution from WW Capital Reserve</b>	\$8	\$12	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$20
<b>Contribution from Water Capital Reserve</b>	\$15	\$23	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$38
<b>Total</b>	\$200	\$300	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$500

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding

## 2020 Capital Project Detail Report

**Project Title:** Mobility Technology Program

**Project Number:** IT1019

**Department:** Information Technology

**Summary:** Scope of this intake form includes; purchase and replacement of all City deployed cellular phones, smartphones, tablets and licensing of mobile device management software. Also includes protective casing and screen protectors.

**Rationale:** Moving forward with mobility is mobilizing the City's workforce by providing mobile technology to aid in the delivery of City services to the community. Mobility technology is limited to cellular phones, smartphones, tablets and laptops (although laptops are not in the funding scope of this intake form covered by PC Replacement Program). Mobile technology enables secure real time access to City business applications and data available to all City staff management deems beneficial. Mobile device governance has been established through corporate policy; mobile device security is managed through mobile device management (MDM) software supported by the City's IT Department.  
The IT Department has recognized the City's growing need for mobile technology supporting mobile office and field workers in delivering services for the community.

### **PROJECT EXPENDITURE AND FUNDING**

#### **Expenditure (in 000's):**

	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Plan - Request</b>	\$285	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$285
<b>Capital Purchase - Request</b>	<b>\$557</b>	<b>\$190</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$747</b>
<b>Capital Purchase - Forecast</b>	\$0	\$0	\$290	\$290	\$290	\$290	\$290	\$290	\$290	\$290	\$290	\$2,610
<b>Total</b>	\$842	\$190	\$290	\$290	\$290	\$290	\$290	\$290	\$290	\$290	\$290	\$3,642

#### **Funding (in 000's):**

	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Contribution from Tax Capital Reserve</b>	\$842	\$190	\$290	\$290	\$290	\$290	\$290	\$290	\$290	\$290	\$290	\$3,642
<b>Total</b>	\$842	\$190	\$290	\$290	\$290	\$290	\$290	\$290	\$290	\$290	\$290	\$3,642

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding

## 2020 Capital Project Detail Report

**Project Title:** Network Technology Infrastructure Program

**Project Number:** IT1010

**Department:** Information Technology

**Summary:** The network technology infrastructure program includes the renewal and deployment of core devices and services associated with network switches, load balancers, firewalls, Wi-Fi access points and other network hardware across the City's facilities and data centres required for the continued delivery of corporate data and voice communication.

**Rationale:** Networking infrastructure renewal and improvements are required to meet performance requirements of the existing and upcoming technology projects. This program is based on a 5 year replacement cycle for all networking infrastructure including switches, routers, load balancers and firewalls to reduce the risk of failure. Should the network infrastructure not be replaced and a hardware failure occurs, extended outages would be experienced by staff due to their inability to access applications, data, and voice communications via the corporate network.

### **PROJECT EXPENDITURE AND FUNDING**

#### **Expenditure (in 000's):**

	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Capital Purchase - Request</b>	<b>\$2,815</b>	<b>\$765</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$3,580</b>
<b>Capital Purchase - Forecast</b>	\$0	\$0	\$765	\$765	\$765	\$765	\$0	\$0	\$0	\$0	\$0	\$3,060
<b>Total</b>	<b>\$2,815</b>	<b>\$765</b>	<b>\$765</b>	<b>\$765</b>	<b>\$765</b>	<b>\$765</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$6,640</b>

#### **Funding (in 000's):**

	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Contribution from Tax Capital Reserve</b>	<b>\$2,729</b>	<b>\$679</b>	<b>\$679</b>	<b>\$679</b>	<b>\$679</b>	<b>\$679</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$6,124</b>
<b>Contribution from WW Capital Reserve</b>	<b>\$30</b>	<b>\$30</b>	<b>\$30</b>	<b>\$30</b>	<b>\$30</b>	<b>\$30</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$180</b>
<b>Contribution from Water Capital Reserve</b>	<b>\$56</b>	<b>\$56</b>	<b>\$56</b>	<b>\$56</b>	<b>\$56</b>	<b>\$56</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$336</b>
<b>Total</b>	<b>\$2,815</b>	<b>\$765</b>	<b>\$765</b>	<b>\$765</b>	<b>\$765</b>	<b>\$765</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$6,640</b>

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding

## 2020 Capital Project Detail Report

**Project Title:** Public Safety Communication Program

**Project Number:** IT1043

**Department:** Information Technology

**Summary:** The City's IT Department maintains a public safety radio system used by BFES, Barrie Police and the City's Water Operations. This program supports the ongoing support, maintenance and life cycling of radio system hardware and software.

**Rationale:** This is required to maintain the City's public safety radio system used by BFES, Barrie Police and the City's Water Operations. This program covers the ongoing support, maintenance and life cycling of radio system hardware and software, ensuring this vital communication environment is always available

### **PROJECT EXPENDITURE AND FUNDING**

#### **Expenditure (in 000's):**

	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Execute - Request</b>	<b>\$1,380</b>	<b>\$440</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$1,820</b>
<b>Execute - Forecast</b>	\$0	\$0	\$530	\$510	\$240	\$240	\$240	\$240	\$0	\$0	\$0	\$2,000
<b>Total</b>	\$1,380	\$440	\$530	\$510	\$240	\$240	\$240	\$240	\$0	\$0	\$0	\$3,820

#### **Funding (in 000's):**

	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Contribution from Police Srv Board Capital Reserve</b>	\$147	\$220	\$410	\$390	\$120	\$120	\$120	\$120	\$0	\$0	\$0	\$1,647
<b>Contribution from Reserves</b>	\$933	\$220	\$120	\$120	\$120	\$120	\$120	\$120	\$0	\$0	\$0	\$1,873
<b>Intercompany - General</b>	\$300	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$300
<b>Total</b>	\$1,380	\$440	\$530	\$510	\$240	\$240	\$240	\$240	\$0	\$0	\$0	\$3,820

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding

## 2020 Capital Project Detail Report

**Project Title:** Server and Desktop Software Program

**Project Number:** IT1024

**Department:** Information Technology

**Summary:** Corporate wide program for the annual licensing renewal of the City's server and desktop software. This program includes a range of Enterprise software applications that require yearly renewal.

**Rationale:** Annual renewal of server and desktop software licenses is required in part through an existing contractual obligation with various vendors including Microsoft which require payments in 2017, 2018 and 2019, based on a new 3 year agreement signed in 2017. These license bundles offer volume pricing discounts, timely upgrades, and access to support.

### **PROJECT EXPENDITURE AND FUNDING**

#### **Expenditure (in 000's):**

	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Capital Purchase - Request</b>	<b>\$3,016</b>	<b>\$600</b>	<b>\$600</b>	<b>\$600</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$4,816</b>
<b>Capital Purchase - Forecast</b>	\$0	\$0	\$0	\$0	\$600	\$600	\$600	\$600	\$600	\$600	\$600	\$4,200
<b>Total</b>	\$3,016	\$600	\$600	\$600	\$600	\$600	\$600	\$600	\$600	\$600	\$600	\$9,016

#### **Funding (in 000's):**

	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Contribution from Reserves</b>	\$14	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$14
<b>Contribution from Tax Capital Reserve</b>	\$2,996	\$600	\$600	\$600	\$600	\$600	\$600	\$600	\$600	\$600	\$600	\$8,996
<b>Contribution from WW Capital Reserve</b>	\$3	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3
<b>Contribution from Water Capital Reserve</b>	\$3	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3
<b>Total</b>	\$3,016	\$600	\$600	\$600	\$600	\$600	\$600	\$600	\$600	\$600	\$600	\$9,016

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding

## 2020 Capital Project Detail Report

**Project Title:** Server and Storage Technology Infrastructure Program

**Project Number:** IT1012

**Department:** Information Technology

**Summary:** The City's computing server and storage technology infrastructure program estimates a 60% growth of electronic files/data annually. Replacing old technology with new increases the City's capacity and ability to manage electronic information.

**Rationale:** The City's server and storage infrastructure hardware throughout City sites and data centres is renewed every three years aligning with industry best practices. Replacement and upgrade of server and storage technology infrastructure (including physical and virtual servers) increases capacity and mitigates the risk of failure of the server and storage infrastructure.

### **PROJECT EXPENDITURE AND FUNDING**

#### **Expenditure (in 000's):**

	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Capital Purchase - Request</b>	<b>\$2,900</b>	<b>\$690</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$3,590</b>
<b>Capital Purchase - Forecast</b>	\$0	\$0	\$650	\$620	\$635	\$600	\$0	\$0	\$0	\$0	\$0	\$2,505
<b>Total</b>	\$2,900	\$690	\$650	\$620	\$635	\$600	\$0	\$0	\$0	\$0	\$0	\$6,095

#### **Funding (in 000's):**

	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Contribution from Tax Capital Reserve</b>	\$2,831	\$644	\$600	\$574	\$589	\$600	\$0	\$0	\$0	\$0	\$0	\$5,838
<b>Contribution from WW Capital Reserve</b>	\$24	\$16	\$20	\$16	\$16	\$0	\$0	\$0	\$0	\$0	\$0	\$92
<b>Contribution from Water Capital Reserve</b>	\$45	\$30	\$30	\$30	\$30	\$0	\$0	\$0	\$0	\$0	\$0	\$165
<b>Total</b>	\$2,900	\$690	\$650	\$620	\$635	\$600	\$0	\$0	\$0	\$0	\$0	\$6,095

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding

## 2020 Capital Project Detail Report

**Project Title:** Citizen Relationship Management (CRM) Solution

**Project Number:** IT1031

**Department:** Centre for Continuous Improvement

**Summary:** This project focuses on the implementation of a technology solution to enable the Corporation to centrally and electronically manage all of its customers. The need for this system is identified and further defined in the City's Corporate Technology Strategy and its Customer Service Plan. This new CRM system will manage customer complaints, requests and interactions as a single point of reference for all customer data.

**Rationale:** Implementation of the CRM system was initiated in 2019, and will be completed in 2020. The CRM implementation project implement a technology solution to enable the Corporation to centrally and electronically manage all of its customers. A centralized CRM will track the volume, type and resolution to all inquiries from multiple channels, allowing the City to identify trends and emerging issues both city wide and neighbourhood specific. The ability to implement future phases of Service Barrie will be limited without adequate technology systems to support these multi-channel services. Easy access to comprehensive metrics will improve the ability to plan, enabling the City to increase efficiencies and improve communication in order to promote a consistent customer experience. A CRM will support customer service problem management, issue ticketing and case management; a single view of the customer experience and history (customer data integration); consistent treatment of the customer across channels; real-time decision support (analytics) to understand customer intentions, and customize services and interactions accordingly; real-time feedback and surveys; and future self-service systems.

<b>PROJECT EXPENDITURE AND FUNDING</b>												
<b><u>Expenditure (in 000's):</u></b>												
	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Execute - Request</b>	<b>\$750</b>	<b>\$100</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$850</b>
<b>Total</b>	\$750	\$100	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$850
<b><u>Funding (in 000's):</u></b>												
	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Contribution from Tax Capital Reserve</b>	\$413	\$55	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$468
<b>Contribution from WW Capital Reserve</b>	\$150	\$20	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$170
<b>Contribution from Water Capital Reserve</b>	\$150	\$20	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$170
<b>Contribution from Parking Capital Reserve</b>	\$38	\$5	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$43
<b>Total</b>	\$750	\$100	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$850

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding



## 2020 Capital Project Detail Report

**Project Title:** ERP Sustainment Program

**Project Number:** CC1000

**Department:** Centre for Continuous Improvement

**Summary:** The new SAP system is slated to go live in 2018, which additional functionality going live in 2019. This system will house the City's, Police, BIA, LSRA and the Library's financial, procurement and HR information. It also contains the City's new business intelligence system (reporting system).

**Rationale:** The new SAP system is slated to go live in 2018, which additional functionality going live in 2019. This system will house the City's, Police, BIA, LSRA and the Library's financial, procurement and HR information. It also contains the City's new business intelligence system (reporting system). We will continue to grow our knowledge base internally and train our staff. However, SAP is a very complex system and external support will be required for at least 3-5 years post-launch to ensure that any problems that cannot be solved by internal staff will be remedied quickly and that we have support for software upgrades and patches.

### **PROJECT EXPENDITURE AND FUNDING**

#### **Expenditure (in 000's):**

	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Execute - Request</b>	<b>\$1,550</b>	<b>\$350</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$1,900</b>
<b>Execute - Forecast</b>	\$0	\$0	\$350	\$350	\$350	\$350	\$350	\$350	\$0	\$0	\$0	\$2,100
<b>Total</b>	\$1,550	\$350	\$350	\$350	\$350	\$350	\$350	\$350	\$0	\$0	\$0	\$4,000

#### **Funding (in 000's):**

	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Contribution from Tax Capital Reserve</b>	\$853	\$193	\$193	\$193	\$193	\$193	\$193	\$193	\$0	\$0	\$0	\$2,200
<b>Contribution from WW Capital Reserve</b>	\$310	\$70	\$70	\$70	\$70	\$70	\$70	\$70	\$0	\$0	\$0	\$800
<b>Contribution from Water Capital Reserve</b>	\$310	\$70	\$70	\$70	\$70	\$70	\$70	\$70	\$0	\$0	\$0	\$800
<b>Contribution from Parking Capital Reserve</b>	\$78	\$18	\$18	\$18	\$18	\$18	\$18	\$18	\$0	\$0	\$0	\$200
<b>Total</b>	\$1,550	\$350	\$350	\$350	\$350	\$350	\$350	\$350	\$0	\$0	\$0	\$4,000

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding

## 2020 Capital Project Detail Report

**Project Title:** Municipal Innovation Exchange (MiX) Project

**Project Number:** IO1000

**Department:** Innovate Barrie Administration

**Summary:** The City of Barrie, in partnership with the cities of London and Guelph, as well as MaRS Discovery District (MaRS), is embarking on an exciting three-year Municipal Innovation Exchange (MIX) project.

**Rationale:** This program is based on the successful Civic Accelerator model in Guelph, and the MaRS' Innovation Partnership: Procurement by Co-Design health innovation program. These programs have developed successful new products to improve service delivery, as well as key learnings from the co-design process for products that were not implemented.

### **PROJECT EXPENDITURE AND FUNDING**

#### **Expenditure (in 000's):**

	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Study - Request</b>	<b>\$140</b>	<b>\$140</b>	<b>\$70</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$350</b>
<b>Total</b>	\$140	\$140	\$70	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$350

#### **Funding (in 000's):**

	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Province of Ontario Grant Revenue</b>	\$70	\$70	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$140
<b>Contribution from Reserves</b>	\$70	\$70	\$70	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$210
<b>Total</b>	\$140	\$140	\$70	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$350

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding

## 2020 Capital Project Detail Report

**Project Title:** Live Video Witness Testimony

**Project Number:** 000964

**Department:** Legislative & Court Services

**Summary:** Installation and support for a sole source judicially approved live video system to improve officer attendance at court with anticipation of reducing costs of satellite court leases, reducing costs of officer overtime and increase revenues for all participating municipal partners due to better officer attendance.

**Rationale:** The installation including hardware, software, communication lines and all labour is arranged and supplied by the Province's Judicial Video Network (JVN) group. Limited IT support is required for this project. Ongoing support is by JVN. Costs are anticipated to be offset by participating enforcement agencies at 100%.

### **PROJECT EXPENDITURE AND FUNDING**

#### **Expenditure (in 000's):**

	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Capital Purchase - Request</b>	<b>\$0</b>	<b>\$131</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$131</b>
<b>Total</b>	<b>\$0</b>	<b>\$131</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$131</b>

#### **Funding (in 000's):**

	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Contribution from Revenue Fund</b>	<b>\$0</b>	<b>\$131</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$131</b>
<b>Total</b>	<b>\$0</b>	<b>\$131</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$131</b>

## 2020 Capital Project Detail Report

**Project Title:** Official Plan Comprehensive Update

**Project Number:** PS1000

**Department:** Planning & Building Services

**Summary:** Preparation of a comprehensive new Official Plan and Zoning Bylaw to respond to Barrie's status as an Urban Growth Centre, new legislative requirements and the City's Strategic and Capital Plans for the next 20+ years.

**Rationale:** Recently released provincial growth expectations for Barrie will continue to urbanize the city to greater extents than what has been seen before. Ensuring alignment between intensification policies and capital investment decisions through the Official Plan is essential to ensuring future growth can be appropriately accommodated across the community. It is also essential for the Zoning By-law to align with the OP in order for the vision to be achieved. The preparation of the new comprehensive Zoning By-law in conjunction with the New Official Plan will ensure proper interpretation of the policies through the Zoning By-law as the implementation tool. The amount of work involved in preparing both documents concurrently is straining current Planning staff resources and as such additional effort will be necessary by the City's planning consultant team to assist in the preparation of the new comprehensive Zoning By-law in order to have a timely completion of both documents.

With the secondary plan lands opening up for development, increasing expectations to intensify within the built-boundary, and all major infrastructure Master Plans now being updated, it is timely to advance this key land use policy tool that supports managing growth and development recommendations for the City.

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding

**PROJECT EXPENDITURE AND FUNDING****Expenditure (in 000's):**

	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Study - Request</b>	<b>\$325</b>	<b>\$170</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$495</b>
<b>Total</b>	\$325	\$170	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$495

**Funding (in 000's):**

	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Contribution from DC Reserves Tax</b>	\$293	\$153	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$446
<b>Contribution from Tax Capital Reserve</b>	\$0	\$17	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$17
<b>Contribution from Tax Rate Stabilization Reserve</b>	\$33	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$33
<b>Total</b>	\$325	\$170	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$495

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding

## 2020 Capital Project Detail Report

**Project Title:** Accessible Pedestrian Pushbutton Installation

**Project Number:** 000986

**Department:** Roads, Parks, & Fleet

**Summary:** In 2019 the Accessibility Advisory Committee identified the following locations for Accessible Pedestrian Pushbuttons.

- Simcoe and Maple
- Ferndale and Ardagh
- Ferndale and Bishop/Summerset
- Bayfield and Ferris Lane
- Livingstone and South Georgian Mall
- Yonge and Huronia

**Rationale:** The additional pushbuttons are required to increase the accessibility of these crossings and promote inclusive communities. The Accessibility Advisory Committee has recommended the locations within this budget.

<b><u>PROJECT EXPENDITURE AND FUNDING</u></b>												
<b><u>Expenditure (in 000's):</u></b>												
	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Capital Purchase - Request</b>	<b>\$0</b>	<b>\$45</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$45</b>
<b>Total</b>	<b>\$0</b>	<b>\$45</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$45</b>
<b><u>Funding (in 000's):</u></b>												
	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Contribution from Tax Capital Reserve</b>	<b>\$0</b>	<b>\$45</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$45</b>
<b>Total</b>	<b>\$0</b>	<b>\$45</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$45</b>

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding

## 2020 Capital Project Detail Report

**Project Title:** Annual Playground Revitalization Program

**Project Number:** EN1117

**Department:** Roads, Parks, & Fleet

**Summary:** The Annual Playground Revitalization Program identifies and addresses aging and worn-out playground infrastructure that poses safety concerns to the general public and liability risks to the City. The program also emphasizes upgrading existing parks to meet current accessibility standards.

**Rationale:** Deteriorated playground equipment and parklands result in decreased play-value and may result in the playground becoming unsafe or even unusable. The Annual Playground Revitalization Program reduces the likelihood of these risks as well as operation and maintenance costs. Additionally, many of the City's playgrounds do not meet current accessibility standards for people with disabilities. This program also includes upgrades to address this gap and increase the accessibility of the City's parks during revitalization work.

### **PROJECT EXPENDITURE AND FUNDING**

#### **Expenditure (in 000's):**

	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Construction - Request</b>	<b>\$1,273</b>	<b>\$280</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$1,553</b>
<b>Construction - Forecast</b>	\$0	\$0	\$286	\$292	\$297	\$303	\$309	\$270	\$0	\$0	\$0	\$1,756
<b>Total</b>	<b>\$1,273</b>	<b>\$280</b>	<b>\$286</b>	<b>\$292</b>	<b>\$297</b>	<b>\$303</b>	<b>\$309</b>	<b>\$270</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$3,309</b>

#### **Funding (in 000's):**

	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Contribution from Reserves</b>	<b>\$1,273</b>	<b>\$280</b>	<b>\$286</b>	<b>\$292</b>	<b>\$297</b>	<b>\$303</b>	<b>\$309</b>	<b>\$270</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$3,309</b>
<b>Total</b>	<b>\$1,273</b>	<b>\$280</b>	<b>\$286</b>	<b>\$292</b>	<b>\$297</b>	<b>\$303</b>	<b>\$309</b>	<b>\$270</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$3,309</b>

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding

## 2020 Capital Project Detail Report

**Project Title:** Fleet Replacement Program

**Project Number:** RP1156

**Department:** Roads, Parks, & Fleet

**Summary:** This program consolidates the fleet replacement needs for all areas of the organization with the exception of Transit. The program will fund the replacement of end-of-life light, medium, and heavy duty vehicles, equipment, and trailers. The program will address existing fleet units only and does not include fleet expansion to service growth.

**Rationale:** A significant percentage of the City's fleet is in poor condition and incurring excessive repair and maintenance costs as a result of a failure to replace fleet assets within a reasonable time after exceeding the asset's economic useful life. This program will bring fleet replacements in line with the economic life of each asset, thereby avoiding the greater escalation of costs that will otherwise be required to keep the City's fleet in operation.

### **PROJECT EXPENDITURE AND FUNDING**

#### **Expenditure (in 000's):**

	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Capital Purchase - Request	\$10,207	\$6,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$16,207
Capital Purchase - Forecast	\$0	\$0	\$6,000	\$3,500	\$3,000	\$3,000	\$2,500	\$2,500	\$2,500	\$4,500	\$4,500	\$32,000
<b>Total</b>	\$10,207	\$6,000	\$6,000	\$3,500	\$3,000	\$3,000	\$2,500	\$2,500	\$2,500	\$4,500	\$4,500	\$48,207

#### **Funding (in 000's):**

	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Contribution from Reserves	\$10,207	\$6,000	\$6,000	\$3,500	\$3,000	\$3,000	\$2,500	\$2,500	\$2,500	\$4,500	\$4,500	\$48,207
<b>Total</b>	\$10,207	\$6,000	\$6,000	\$3,500	\$3,000	\$3,000	\$2,500	\$2,500	\$2,500	\$4,500	\$4,500	\$48,207

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding



## 2020 Capital Project Detail Report

**Project Title:** New Hot Asphalt Maintenance Equipment

**Project Number:** 000989

**Department:** Roads, Parks, & Fleet

**Summary:** 2 New truck mounted heated asphalt boxes to support the use of hot mix asphalt for patching and pothole repairs during colder weather.

**Rationale:** Hot mix asphalt is a superior product as compared to cold mix asphalt to patch potholes. Currently only one crew is equipped to patch potholes with hot mix. Adding two truck mounted asphalt hot boxes will enable the near exclusive use of hot mix to patch potholes. This equipment will also be equipped with tools to better prepare the area to increase the success rate of repairs and reduce the number of returns to the same area. Roads Operations piloted a hot asphalt recycler during the winter of 2019. Old asphalt is placed into the recycler and reheated for use. This reduces trips to Toronto where new hot mix must be purchased as local plants close during the winter months. With two hot boxes the asphalt recycler will be utilized more effectively to increase the amount of usable hot mix that can be transported to the site for repairs. Roads Operations plans to phase out the regular use of cold mix.

### **PROJECT EXPENDITURE AND FUNDING**

#### **Expenditure (in 000's):**

	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Capital Purchase - Request</b>	<b>\$0</b>	<b>\$80</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$80</b>
<b>Total</b>	<b>\$0</b>	<b>\$80</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$80</b>

#### **Funding (in 000's):**

	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Contribution from Tax Capital Reserve</b>	<b>\$0</b>	<b>\$80</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$80</b>
<b>Total</b>	<b>\$0</b>	<b>\$80</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$80</b>

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding

## 2020 Capital Project Detail Report

**Project Title:** Pay & Display Machines Replacement

**Project Number:** 000580

**Department:** Roads, Parks, & Fleet

**Summary:** Replacement of failing pay and display machines.

**Rationale:** The City currently has pay and display machines at the end of their lifecycle and we are experiencing higher than normal failure rates. When the machines are out of service the parking lots do not generate revenue as there is no other source of payment. The 4 machines we are replacing generate approximately \$50/hr at each machine when in use. The replacements will upgrade the current machines to provide credit card readers.

### **PROJECT EXPENDITURE AND FUNDING**

#### **Expenditure (in 000's):**

	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Capital Purchase - Request</b>	<b>\$0</b>	<b>\$40</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$40</b>
<b>Total</b>	\$0	\$40	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$40

#### **Funding (in 000's):**

	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Contribution from Parking Capital Reserve</b>	\$0	\$40	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$40
<b>Total</b>	\$0	\$40	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$40

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding

## 2020 Capital Project Detail Report

**Project Title:** Streetlight Infill Program

**Project Number:** 000988

**Department:** Roads, Parks, & Fleet

**Summary:** Street lighting improvements in the following areas:

- Huronia Road (Direction Memo 18-G-223)
- 24 Shaina Court
- Intersection of Georgian Drive at Gallie Court
- 340 Huronia Road
- 88 Kenwell and Holly Meadow

**Rationale:** In older neighbourhoods throughout Barrie, the street lighting levels are based on old standards and are often dimly lit. Traffic Services staff receive requests to review these areas from Mayor and Council or through Service Barrie. Staff consider future renewal and recommend areas that will not be identified for reconstruction for several years, but will benefit from interim lighting upgrades. Staff focus on corner areas, heavily treed areas or short dimly lit stretches of older neighbourhoods.

### **PROJECT EXPENDITURE AND FUNDING**

#### **Expenditure (in 000's):**

	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Construction - Request	\$0	\$70	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$70
<b>Total</b>	\$0	\$70	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$70

#### **Funding (in 000's):**

	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Contribution from Tax Capital Reserve	\$0	\$70	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$70
<b>Total</b>	\$0	\$70	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$70

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding

## 2020 Capital Project Detail Report

**Project Title:** Traffic Signal Cabinet Replacement Program

**Project Number:** 000987

**Department:** Roads, Parks, & Fleet

**Summary:** The traffic signal control cabinets and components identified in this program are close to 30 years old and are from a line of products that have not been supported by the manufacturers for several years. The city has salvaged several units as a backup for replacement parts. These surplus parts have been exhausted and we are unable to replenish them.

**Rationale:** The intersections within the program have had several minor failures resulting in the intersections being in flash. Our service staff have been able to make repairs with spare supplies, however as noted these parts are no longer available. Technical support from the manufacturer is also unavailable, meaning the next failure of this intersection we will potentially not be able to recover from. A failure of this system for a long duration would result in impacts to the residents in the form of no traffic control, or additional resources from Barrie Police Services to provide onsite paid duty control. The duration of the outage would last until a replacement traffic signal cabinet could be made available. Additionally the identified traffic cabinets are not compatible with our traffic control central system, which means we are unable to remotely monitor or modify signal timings at the intersection.

<b><u>PROJECT EXPENDITURE AND FUNDING</u></b>												
<b><u>Expenditure (in 000's):</u></b>												
	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Capital Purchase - Request</b>	<b>\$0</b>	<b>\$96</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$96</b>
<b>Total</b>	<b>\$0</b>	<b>\$96</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$96</b>
<b><u>Funding (in 000's):</u></b>												
	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Contribution from Tax Capital Reserve</b>	<b>\$0</b>	<b>\$96</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$96</b>
<b>Total</b>	<b>\$0</b>	<b>\$96</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$96</b>

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding

## 2020 Capital Project Detail Report

**Project Title:** Bus Stop Infrastructure Improvement Implementation Plan

**Project Number:** 000555

**Department:** Transit & Parking Strategy

**Summary:** Develop On-Street Transit Infrastructure Improvement Plan

**Rationale:** As the City is planning for substantial growth over the next 20+ years, there is a need to perform a detailed analysis for the on-street transit infrastructure throughout the City of Barrie, including setting appropriate guidelines, assessing existing infrastructure, evaluating innovative products, consideration for enhanced active transportation coordination, and ensuring compliance with the Accessibility for Ontarians with Disabilities Act(AODA). To comply with AODA the city needs to have a plan in place by 2025 to make all of its bus stops fully accessible.

### **PROJECT EXPENDITURE AND FUNDING**

#### **Expenditure (in 000's):**

	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Study - Request	\$0	\$100	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$100
<b>Total</b>	\$0	\$100	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$100

#### **Funding (in 000's):**

	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Province of Ontario Grant Revenue	\$0	\$33	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$33
Government of Canada Grant Revenue	\$0	\$40	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$40
Contribution from Tax Rate Stabilization Reserve	\$0	\$27	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$27
<b>Total</b>	\$0	\$100	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$100

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding

## 2020 Capital Project Detail Report

**Project Title:** Bus Stop Infrastructure Replacement/Improvements 2020

**Project Number:** 000568

**Department:** Transit & Parking Strategy

**Summary:** Implementation of the On-Street Transit Infrastructure Improvement Plan

**Rationale:** The implementation of the on-street transit infrastructure plan is intended to improve comfort and safety, improve the users experience and meet accessibility guidelines. This program will replace existing bus stop infrastructure, enhance active transportation coordination, add and replace shelters, improve signage, comply with regulations and support the growth of the transit system.

### **PROJECT EXPENDITURE AND FUNDING**

#### **Expenditure (in 000's):**

	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Capital Purchase - Request</b>	<b>\$0</b>	<b>\$95</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$95</b>
<b>Capital Purchase - Forecast</b>	\$0	\$0	\$115	\$704	\$590	\$610	\$140	\$126	\$130	\$126	\$130	\$2,671
<b>Total</b>	\$0	\$95	\$115	\$704	\$590	\$610	\$140	\$126	\$130	\$126	\$130	\$2,767

#### **Funding (in 000's):**

	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Province of Ontario Grant Revenue</b>	\$0	\$31	\$38	\$232	\$195	\$201	\$46	\$42	\$43	\$41	\$43	\$913
<b>Government of Canada Grant Revenue</b>	\$0	\$38	\$46	\$282	\$236	\$244	\$56	\$50	\$52	\$50	\$52	\$1,107
<b>Contribution from Tax Capital Reserve</b>	\$0	\$26	\$31	\$190	\$159	\$165	\$38	\$34	\$35	\$34	\$35	\$747
<b>Total</b>	\$0	\$95	\$115	\$704	\$590	\$610	\$140	\$126	\$130	\$126	\$130	\$2,767

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding

## 2020 Capital Project Detail Report

**Project Title:** Comprehensive Transit Technology Review

**Project Number:** 000723

**Department:** Transit & Parking Strategy

**Summary:** With the emergence of several new technologies that are becoming available in the transit industry, the comprehensive technology review will evaluate several potential solutions to determine their feasibility, cost, and benefits to identify which technologies will result in the greatest positive impact on the transit service.

**Rationale:** The plan will assess existing technologies and identify emerging technologies that are currently being developed and implemented in other transit agencies such as traveler information (mobile application, variable message signs, LCD screens), fare payments (smart cards, mobile application payments), Dynamic Bay Applications, Digital Displays, On bus Wi-Fi, Transit Priority Signals, scheduling software and others that may have significant benefits for the future of Barrie Transit.

A comprehensive technology review will provide the department with a strategic viewpoint of future transit technologies to focus on that are compatible with existing infrastructure and equipment, enhance the ability for customer to get where they need to go, and increase the efficiency of the payment process for all transit riders.

<b><u>PROJECT EXPENDITURE AND FUNDING</u></b>												
<b><u>Expenditure (in 000's):</u></b>												
	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
Study - Request	<b>\$0</b>	<b>\$100</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$100</b>
<b>Total</b>	<b>\$0</b>	<b>\$100</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$100</b>
<b><u>Funding (in 000's):</u></b>												
	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
Contribution from Tax Capital Reserve	<b>\$0</b>	<b>\$100</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$100</b>
<b>Total</b>	<b>\$0</b>	<b>\$100</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$100</b>

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding

## 2020 Capital Project Detail Report

**Project Title:** Conventional Transit Bus Replacement Program

**Project Number:** Z1092

**Department:** Transit & Parking Strategy

**Summary:** Replacement of 3 conventional buses.

**Rationale:** Barrie Transit's current 20 year contract with MVT Barrie Bus Inc. identifies minimum maintenance requirements based on a fleet management strategy. Barrie Transit's fleet has a life cycle expectancy of 12yrs. By the end of its anticipated useful life the probability of failure on this in service asset is high and would cause significant impact on the service level provided to the residents. As such the transit bus replacement program identifies the annual requirements that will result in the retirement of the existing assets which have reached its expected life.

### **PROJECT EXPENDITURE AND FUNDING**

#### **Expenditure (in 000's):**

	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Capital Purchase - Request</b>	<b>\$0</b>	<b>\$2,018</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$2,018</b>
<b>Capital Purchase - Forecast</b>	\$0	\$0	\$2,089	\$2,883	\$2,238	\$2,316	\$2,397	\$2,481	\$3,424	\$3,544	\$5,501	\$26,872
<b>Total</b>	\$0	\$2,018	\$2,089	\$2,883	\$2,238	\$2,316	\$2,397	\$2,481	\$3,424	\$3,544	\$5,501	\$28,890

#### **Funding (in 000's):**

	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Province of Ontario Grant Revenue</b>	\$0	\$666	\$689	\$951	\$738	\$764	\$791	\$819	\$1,130	\$1,169	\$1,815	\$9,534
<b>Government of Canada Grant Revenue</b>	\$0	\$807	\$836	\$1,153	\$895	\$926	\$959	\$992	\$1,369	\$1,417	\$2,201	\$11,556
<b>Contribution from Tax Capital Reserve</b>	\$0	\$545	\$564	\$778	\$604	\$625	\$647	\$670	\$924	\$957	\$1,485	\$7,800
<b>Total</b>	\$0	\$2,018	\$2,089	\$2,883	\$2,238	\$2,316	\$2,397	\$2,481	\$3,424	\$3,544	\$5,501	\$28,890

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding



## 2020 Capital Project Detail Report

**Project Title:** Parking Application Hardware

**Project Number:** 000933

**Department:** Transit & Parking Strategy

**Summary:** Implementation of a Mobile Parking Payment Solution

**Rationale:** The Parking Strategy branch is leading an update to the 2012 Parking Study that will utilize the expertise of a consultant to better understand how technology can be utilized to improve the convenience of parking including the use of a parking application for wayfinding and mobile payments. It is anticipated that there will be capital costs associated with the recommendations such as signage, handheld units for enforcements, as well as licensing costs.

### **PROJECT EXPENDITURE AND FUNDING**

#### **Expenditure (in 000's):**

	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Capital Purchase - Request	\$0	\$125	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$125
<b>Total</b>	\$0	\$125	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$125

#### **Funding (in 000's):**

	Prior Approvals	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Contribution from DC Reserves Tax	\$0	\$28	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$28
Contribution from Parking Capital Reserve	\$0	\$97	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$97
<b>Total</b>	\$0	\$125	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$125

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding

## 2020 Capital Project Detail Report

**Project Title:** Specialized Transit Bus Replacement Program

**Project Number:** Z1090

**Department:** Transit & Parking Strategy

**Summary:** Replacement of 3 specialized buses.

**Rationale:** Barrie Transit's current 20 year contract with MVT Barrie Bus Inc. identifies minimum maintenance requirements based on a fleet management strategy. Barrie Transit's fleet has a life cycle expectancy of 7yrs. By the end of its anticipated useful life the probability of failure on this in service asset is high and would cause significant impact on the service level provided to the residents.

### **PROJECT EXPENDITURE AND FUNDING**

#### **Expenditure (in 000's):**

	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Capital Purchase - Request</b>	<b>\$0</b>	<b>\$574</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$574</b>
<b>Capital Purchase - Forecast</b>	\$0	\$0	\$793	\$0	\$212	\$220	\$682	\$706	\$731	\$756	\$783	\$4,883
<b>Total</b>	\$0	\$574	\$793	\$0	\$212	\$220	\$682	\$706	\$731	\$756	\$783	\$5,458

#### **Funding (in 000's):**

	<b>Prior Approvals</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Total</b>
<b>Province of Ontario Grant Revenue</b>	\$0	\$190	\$262	\$0	\$70	\$73	\$225	\$233	\$241	\$250	\$258	\$1,801
<b>Government of Canada Grant Revenue</b>	\$0	\$230	\$317	\$0	\$85	\$88	\$273	\$282	\$292	\$303	\$313	\$2,183
<b>Contribution from Tax Capital Reserve</b>	\$0	\$155	\$214	\$0	\$57	\$59	\$184	\$191	\$197	\$204	\$211	\$1,474
<b>Total</b>	\$0	\$574	\$793	\$0	\$212	\$220	\$682	\$706	\$731	\$756	\$783	\$5,458

Expense amounts in **bold text** – 2020 Budget Request

Expense amounts in shaded text – Previously Committed Funding