

2022 Capital Project Detail Report

Project Title: Bunker Gear Replacement

Project Number: 000810

Department: Barrie Fire & Emergency Services

Summary: Replacement of firefighter bunker gear as required by NFPA 1851

Rationale: OH&S Section 21 and NFPA 1851: Standard on Selection, Care, and Maintenance of Protective Ensembles for Structural Fire Fighting and Proximity Fire Fighting states structural firefighting ensembles used for interior firefighting shall not be over 10 years old. BFES is obligated to ensure replacement sets of bunker gear are purchased in accordance with the NFPA standard. Failing to replace expired bunker gear is a H&S issue with many negative consequences due to exposure to carcinogens and heat related stressors in fire situations. To protect the firefighters, the department must maintain and supply bunker gear that is compliant with the NFPA Standards. Failure to do so could result in serious injuries or death or potential health and safety liability. BFES began purchasing its current gear in 2008 and many sets are coming to the end of their lifespan. The department must also maintain a supply of proper fitting spare bunker gear that meets all standards and regulations. This is necessary because a firefighter requires clean gear after any exposure at an incident. Even the spare gear must be removed from service after 10 years. This requires an established replacement schedule to be followed

PROJECT EXPENDITURE AND FUNDING												
<u>Expenditure (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Capital Purchase - Request	\$0	\$320	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$320
Capital Purchase - Forecast	\$0	\$0	\$0	\$0	\$0	\$0	\$400	\$0	\$0	\$0	\$0	\$400
Total	\$0	\$320	\$0	\$0	\$0	\$0	\$400	\$0	\$0	\$0	\$0	\$720
<u>Funding (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Contribution from Tax Capital Reserve	\$0	\$320	\$0	\$0	\$0	\$0	\$400	\$0	\$0	\$0	\$0	\$720
Total	\$0	\$320	\$0	\$0	\$0	\$0	\$400	\$0	\$0	\$0	\$0	\$720

Expense amounts in **bold text** – 2022 Budget Request

Expense amounts in shaded text – Previously Committed Funding

2022 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.

<u>PROJECT EXPENDITURE AND FUNDING</u>												
<u>Expenditure (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Construction - Request	\$155	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$155
Capital Purchase - Request	\$285	\$55	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$340
Total	\$440	\$55	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$495

Expense amounts in **bold text** – 2022 Budget Request

Expense amounts in shaded text – Previously Committed Funding

Funding (in 000's):

	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Contribution from Tax Capital Reserve	\$440	\$55	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$495
Total	\$440	\$55	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$495

Expense amounts in **bold text** – 2022 Budget Request

Expense amounts in shaded text – Previously Committed Funding

2022 Capital Project Detail Report

Project Title: HazMat detection equipment Replacement

Project Number: BF1034

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												
<u>Expenditure (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Capital Purchase - Request	\$40	\$40	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$80
Capital Purchase - Forecast	\$0	\$0	\$0	\$0	\$0	\$0	\$50	\$0	\$0	\$0	\$0	\$50
Total	\$40	\$40	\$0	\$0	\$0	\$0	\$50	\$0	\$0	\$0	\$0	\$130
<u>Funding (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Contribution from Tax Capital Reserve	\$40	\$40	\$0	\$0	\$0	\$0	\$50	\$0	\$0	\$0	\$0	\$130
Total	\$40	\$40	\$0	\$0	\$0	\$0	\$50	\$0	\$0	\$0	\$0	\$130

Expense amounts in **bold text** – 2022 Budget Request

Expense amounts in shaded text – Previously Committed Funding

2022 Capital Project Detail Report

Project Title: Mobile Response Technology Replacement

Project Number: 000952

Department: Barrie Fire & Emergency Services

Summary: Mobile response technology replacement project.

Rationale: Replacement of mobile response technology that is past life cycle.

PROJECT EXPENDITURE AND FUNDING

Expenditure (in 000's):

	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Capital Purchase - Request	\$0	\$20	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$20
Capital Purchase - Forecast	\$0	\$0	\$20	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$20	\$40
Total	\$0	\$20	\$20	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$20	\$60

Funding (in 000's):

	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Contribution from Tax Capital Reserve	\$0	\$20	\$20	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$20	\$60
Contribution from WW Capital Reserve	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total	\$0	\$20	\$20	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$20	\$60

Expense amounts in **bold text** – 2022 Budget Request

Expense amounts in shaded text – Previously Committed Funding

2022 Capital Project Detail Report

Project Title: Portable/Mobile Radio Replacement

Project Number: 000028

Department: Barrie Fire & Emergency Services

Summary: Replacement of portable and mobile radio equipment that has reached the end of their useful life and should no longer be used in emergency conditions. The project duration is 3 years.

Rationale: Replacement of portable and mobile radios used by emergency responders. Equipment will be at life cycle and not reliable.

<u>PROJECT EXPENDITURE AND FUNDING</u>												
<u>Expenditure (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Capital Purchase - Request	\$0	\$35	\$210	\$210	\$210	\$0	\$0	\$0	\$0	\$0	\$0	\$665
Total	\$0	\$35	\$210	\$210	\$210	\$0	\$0	\$0	\$0	\$0	\$0	\$665
<u>Funding (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Contribution from Tax Capital Reserve	\$0	\$35	\$210	\$210	\$210	\$0	\$0	\$0	\$0	\$0	\$0	\$665
Total	\$0	\$35	\$210	\$210	\$210	\$0	\$0	\$0	\$0	\$0	\$0	\$665

Expense amounts in **bold text** – 2022 Budget Request

Expense amounts in shaded text – Previously Committed Funding

2022 Capital Project Detail Report

Project Title: Asset Management Plan Updates - Regulatory Compliance and Program Advancement

Project Number: EN1470

Department: Corporate Asset Management

Summary: Preparing and updating asset management plans for the City's assets in accordance with O. Reg 588/17 and good practice. The asset management plans focus on documenting existing asset inventory, condition and level of service information, as well as capital and operating cost requirements to meet existing and proposed levels of service. Asset management plans are increasingly incorporated into the City's operation, planning and other activities, and are critical for long range financial planning.

Rationale: In 2017 the Province passed O. Reg. 588/17 – Asset Management Planning for Municipal Infrastructure, which requires municipalities to have proposed level of services outlined in asset management plans (AMPs) for all assets by July 1, 2025. The plans are required to be updated on a five year cycle. Updating the AMPs will help the City better understand current and long-range investment needs for the City's \$5 billion asset portfolio, and plan for renewal and growth more effectively. Furthermore, by undertaking this process the City will gain a better understanding of how service is impacted by changing infrastructure performance and needs, as well as the risk associated with asset failure. This is key to effective decision making related to investment in and management of assets - in particular, in the development of capital and operating and maintenance programs. It is also important to understand the investment required in newer assets so that they continue to support service delivery at an acceptable level of risk into the future.

PROJECT EXPENDITURE AND FUNDING												
<u>Expenditure (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Study - Request	\$75	\$314	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$389
Study - Forecast	\$0	\$0	\$289	\$300	\$263	\$211	\$238	\$394	\$265	\$263	\$211	\$2,434
Total	\$75	\$314	\$289	\$300	\$263	\$211	\$238	\$394	\$265	\$263	\$211	\$2,823
<u>Funding (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Contribution from DC Administration Reserve	\$8	\$31	\$29	\$30	\$26	\$21	\$24	\$39	\$27	\$26	\$21	\$282
Contribution from Tax Capital Reserve	\$68	\$283	\$260	\$270	\$237	\$190	\$214	\$355	\$239	\$237	\$190	\$2,541
Total	\$75	\$314	\$289	\$300	\$263	\$211	\$238	\$394	\$265	\$263	\$211	\$2,823

Expense amounts in **bold text** – 2022 Budget Request

Expense amounts in shaded text – Previously Committed Funding

2022 Capital Project Detail Report

Project Title: City Standards Improvements – Technical Expertise

Project Number: 001082

Department: Corporate Asset Management

Summary: A two year pilot project to obtain consultant expertise to assist the Standards team in evaluating new and emerging options of building City infrastructure (roads, watermains, sewers etc).

Rationale: Staff do not have the expertise not the time to keep the City's infrastructure standards current; consulting expertise is required. Standards are essential to ensure that the City assumes and builds infrastructure that delivers services as intended, can be operated cost effectively, and meet regulatory obligations. Keeping the City's standards current ensures that the City is benefiting from new and emerging trends in infrastructure and materials design. Standards can impact the City's ability to adapt and mitigate for climate change and other risks. Making changes to standards must be done thoughtfully with full evaluation of cost, risk and performance expectations. While many staff have very specific expertise, they are fully allocated to other projects and operational activities. In addition, there are many areas of infrastructure where the City does not have expertise in house. The consultant expertise provided through this project will assist the Standards team in the evaluation of new and emerging infrastructure options. By applying consultant expertise and combining the output with existing processes the City will maximize it's ability to make informed and justified decisions that directly influence how all City infrastructure can be built.

PROJECT EXPENDITURE AND FUNDING												
<u>Expenditure (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Study - Request	\$0	\$50	\$75	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$125
Total	\$0	\$50	\$75	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$125
<u>Funding (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Contribution from Tax Capital Reserve	\$0	\$50	\$75	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$125
Total	\$0	\$50	\$75	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$125

Expense amounts in **bold text** – 2022 Budget Request

Expense amounts in shaded text – Previously Committed Funding

2022 Capital Project Detail Report

Project Title: DC Update - Infrastructure Cost Study

Project Number: EN1471

Department: Corporate Asset Management

Summary: Update to the projects and cost estimates from the 2019 infrastructure master plans for use in an interim update to the Development Charges Bylaw.

Rationale: The infrastructure master plans and DC study are key components of the City's growth studies program. The projects and costs from the infrastructure master plans are a key input into the DC bylaw. These costs have major impact on the City's finances and the development community and therefore need to reflect the best and most current information.

The cost of construction is changing rapidly and the City risks under collecting DCs if we wait until the next round of master plan updates are complete to update the DC bylaw. The City plans an interim update to the DC bylaw focused on updating the 2019 master plan information as a base.

PROJECT EXPENDITURE AND FUNDING												
<u>Expenditure (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Study - Request	\$170	\$55	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$225
Total	\$170	\$55	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$225
<u>Funding (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Contribution from DC Administration Reserve	\$170	\$55	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$225
Total	\$170	\$55	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$225

Expense amounts in **bold text** – 2022 Budget Request

Expense amounts in shaded text – Previously Committed Funding

2022 Capital Project Detail Report

Project Title: Fleet Replacement Program

Project Number: RP1156

Department: Corporate Asset Management

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 or other service level changes.

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.

<u>PROJECT EXPENDITURE AND FUNDING</u>												
<u>Expenditure (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Capital Purchase - Request	\$22,207	\$3,500	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$25,707
Capital Purchase - Forecast	\$0	\$0	\$3,000	\$3,000	\$2,500	\$2,500	\$2,500	\$4,500	\$4,500	\$2,500	\$2,500	\$27,500
Total	\$22,207	\$3,500	\$3,000	\$3,000	\$2,500	\$2,500	\$2,500	\$4,500	\$4,500	\$2,500	\$2,500	\$53,207
<u>Funding (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Debenture Proceeds - Tax	\$9,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$9,000
Contribution from Fleet Management Reserve	\$13,207	\$3,500	\$3,000	\$3,000	\$2,500	\$2,500	\$2,500	\$4,500	\$4,500	\$2,500	\$2,500	\$44,207
Total	\$22,207	\$3,500	\$3,000	\$3,000	\$2,500	\$2,500	\$2,500	\$4,500	\$4,500	\$2,500	\$2,500	\$53,207

Expense amounts in **bold text** – 2022 Budget Request

Expense amounts in shaded text – Previously Committed Funding

2022 Capital Project Detail Report

Project Title: Infrastructure Master Plans / DC Technical Studies Update

Project Number: EN1177

Department: Corporate Asset Management

Summary: This project is for the next Master Plan updates for Drainage, Water, Wastewater, Transportation, Park, Recreation and Culture. These critical studies will identify infrastructure needs to accommodate growth to 2051, and will provide input to future capital and operating budgets, long range financial planning, and the next update of the Development Charge Bylaw.

Rationale: The province has released population and employment projections for the City to 2051. The last set of master plans evaluated growth needs to 2031 and 2041, depending on the service area, and must now be updated to reflect the 2051 numbers. The master plans serve as the City's roadmap in implementing infrastructure to serve its future needs. The master plans need to be updated to reassess changes in needs / growth forecasts, so that they can be used to update the DC bylaw and for budgeting purposes. Having updated and comprehensive master plans allow staff at the City to support development, deliver projects and assist in keeping the City financially sustainable.

PROJECT EXPENDITURE AND FUNDING												
<u>Expenditure (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Environmental Assessment - Request	\$3,052	\$577	\$1,570	\$1,519	\$889	\$52	\$0	\$0	\$0	\$0	\$0	\$7,659
Study - Request	\$293	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$293
Design - Request	\$415	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$415
Environmental Assessment - Forecast	\$0	\$0	\$52	\$262	\$366	\$0	\$0	\$156	\$1,309	\$1,415	\$0	\$3,560
Total	\$3,760	\$577	\$1,622	\$1,781	\$1,255	\$52	\$0	\$156	\$1,309	\$1,415	\$0	\$11,927
<u>Funding (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Province of Ontario Grant Revenue	\$450	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$450
Government of Canada Grant Revenue	\$900	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$900
Contribution from Development Charge Reserves	\$100	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$100
Contribution from DC Reserves Tax	\$1,196	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,196
Contribution from DC Reserves Water	\$150	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$150
Contribution from DC Reserves Wastewater	\$65	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$65

Expense amounts in **bold text** – 2022 Budget Request

Expense amounts in shaded text – Previously Committed Funding

Contribution from DC Administration Reserve	\$254	\$577	\$1,622	\$1,781	\$1,255	\$52	\$0	\$156	\$1,309	\$1,415	\$0	\$8,421
Contribution from DC Roads Reserve	\$7	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$7
Contribution from DC Water Dist FMB Reserve	\$55	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$55
Contribution from DC WW Collection FMB Reserve	\$35	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$35
Contribution from Tax Capital Reserve	\$369	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$369
Contribution from WW Capital Reserve	\$49	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$49
Contribution from Water Capital Reserve	\$32	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$32
Contribution from Tax Rate Stabilization Reserve	\$99	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$99
Total	\$3,760	\$577	\$1,622	\$1,781	\$1,255	\$52	\$0	\$156	\$1,309	\$1,415	\$0	\$11,927

Expense amounts in **bold text** – 2022 Budget Request

Expense amounts in shaded text – Previously Committed Funding

2022 Capital Project Detail Report

Project Title: New Roll-off Truck - Wastewater Collections

Project Number: 001105

Department: Corporate Asset Management

Summary: The WWOB requires a new roll-off truck for the Wastewater Collections (WWC) Team to support the Sanitary Lateral Repair and Replacement Program (SLRRP) by acting as a dump truck, and to support the WwTF by removing waste generated through the treatment process that is collected in roll-off bins.

The WWC Team relies on other City departments to loan vehicles to the team to allow them to fulfill the requirements of the SLRRP. If other City vehicles are not available, the WWC will either rent the required vehicles from outside parties, or will contract-out the work completely. The requested vehicle, when outfitted with the proper bin, will function as a dump truck.

Additionally, the WwTF currently relies on contracted services to remove the grit and screenings waste bins from the facility and transport it to the City's Landfill. The requested roll-off truck will be utilized by WWC Team members to complete this requirement and bring this contracted service in-house, reducing operational costs and ensuring the required level of service is provided.

It is the expectation of the WWOB that utilizing the new vehicle to bring more contracted services in-house will immediately create savings that will allow a reduction to the operating budget that will cover the cost of the vehicle in under 7 years.

Rationale: A new roll-off truck, fitted with a dump truck bin, will allow the WWOB to bring a significant amount of contracted services in-house, that will create cost savings to the Corporation to allow the Branch to reduce the operating budget by \$30,000.00 per year, thereby recovering the requested cost of the vehicle within 5 years.

Additionally, the vehicle will allow City staff to provide more services directly to the residents, in the form of sanitary lateral repair and replacement, ensuring that service levels will not only be maintained but will be elevated, by eliminating delays caused internally while WWOB staff create and issue specs for construction companies to bid on.

<u>PROJECT EXPENDITURE AND FUNDING</u>												
<u>Expenditure (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Capital Purchase - Request	\$0	\$200	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$200
Total	\$0	\$200	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$200
<u>Funding (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Contribution from Fleet Management Reserve	\$0	\$200	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$200
Total	\$0	\$200	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$200

Expense amounts in **bold text** – 2022 Budget Request

Expense amounts in shaded text – Previously Committed Funding

2022 Capital Project Detail Report

Project Title: Wastewater Inflow/Infiltration Reduction Action Plan

Project Number: EN1465

Department: Corporate Asset Management

Summary: A project to develop an Inflow and Infiltration (I&I) reduction program for the City. Project involves compilation of all current data and the creation of a specific, actionable plan that has metrics and deliverables and is fiscally responsible. It also includes identifying and actioning repairs in the wastewater collection system and developing policies and procedures to reduce I&I.

Rationale: I&I is rainwater and groundwater which gets into the sanitary collection system and to the Wastewater Treatment Facility (WwTF). Significant I&I flows are currently being experienced at the WwTF and therefore increase the volume of water requiring treatment. This effectively increases costs to treat rainwater which has been combined with raw sewage. Increased flows into the WwTF also use available capacity, advancing the need for plant expansion. In addition, higher than expected flows increase the risk of spills to the natural environment.

PROJECT EXPENDITURE AND FUNDING												
Expenditure (in 000's):												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Study - Request	\$200	\$200	\$200	\$200	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$800
Construction - Request	\$0	\$314	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$314
Study - Forecast	\$0	\$0	\$0	\$0	\$207	\$207	\$207	\$207	\$207	\$207	\$207	\$1,449
Construction - Forecast	\$0	\$0	\$314	\$314	\$314	\$314	\$314	\$314	\$314	\$314	\$314	\$2,826
Total	\$200	\$514	\$514	\$514	\$521	\$521	\$521	\$521	\$521	\$521	\$521	\$5,389
Funding (in 000's):												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Contribution from DC WW Collection FMB Reserve	\$86	\$221	\$221	\$221	\$224	\$224	\$224	\$224	\$224	\$224	\$224	\$2,317
Contribution from WW Capital Reserve	\$114	\$293	\$293	\$293	\$297	\$297	\$297	\$297	\$297	\$297	\$297	\$3,072
Total	\$200	\$514	\$514	\$514	\$521	\$521	\$521	\$521	\$521	\$521	\$521	\$5,389

Expense amounts in **bold text** – 2022 Budget Request

Expense amounts in shaded text – Previously Committed Funding

2022 Capital Project Detail Report

Project Title: Annual Playground Revitalization Program

Project Number: EN1117

Department: Development Services

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: Deteriorating playground equipment and parkland result in decreased play-value and may result in the playground becoming unsafe or 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):												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Construction - Request	\$1,835	\$292	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,126
Construction - Forecast	\$0	\$0	\$297	\$303	\$309	\$312	\$315	\$320	\$350	\$0	\$0	\$2,206
CSR - Request	\$4	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$4
Total	\$1,839	\$292	\$297	\$303	\$309	\$312	\$315	\$320	\$350	\$0	\$0	\$4,336
Funding (in 000's):												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Government of Canada Grant Revenue	\$50	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$50
Contribution from Cash-In-Lieu Parkland Reserve	\$1,376	\$292	\$297	\$303	\$309	\$312	\$315	\$320	\$350	\$0	\$0	\$3,873
Contribution from Tax Capital Reserve	\$413	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$413
Total	\$1,839	\$292	\$297	\$303	\$309	\$312	\$315	\$320	\$350	\$0	\$0	\$4,336

Expense amounts in **bold text** – 2022 Budget Request

Expense amounts in shaded text – Previously Committed Funding

2022 Capital Project Detail Report

Project Title: Bayfield Street Right of Way Expansion - Cundles to Grove

Project Number: Z347

Department: Development Services

Summary: The MTO will undertake detailed design and construction for the replacement of the Bayfield Street Interchange in the mid-2020s. The MTO is planning to construct a 6-lane highway crossing structure (3-lanes per direction).

To align required transportation improvements on Bayfield Street with the interchange replacement; Bayfield Street requires widening beyond the MTO project limits to Cundles Road.

Rationale: Bayfield Street requires widening from 4-lanes to 6-lanes to align with MTO’s proposed improvements on Bayfield Street at the Highway 400 interchange. The existing 4-lane section does not have sufficient capacity resulting in significant congestion and delays for residents during peak periods.

In consideration of the full depth rehabilitation completed in 2018 and property constraints, the EA Study will examine opportunities for phased implementation.

PROJECT EXPENDITURE AND FUNDING

Expenditure (in 000's):

	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Environmental Assessment - Request	\$0	\$640	\$640	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,280
Study - Request	\$0	\$150	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$150
PreDesign - Request	\$0	\$160	\$200	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$360
PreDesign - Forecast	\$0	\$0	\$0	\$450	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$450
Design - Forecast	\$0	\$0	\$250	\$250	\$790	\$790	\$0	\$0	\$0	\$0	\$0	\$2,080
Property - Forecast	\$0	\$0	\$0	\$0	\$0	\$0	\$5,220	\$0	\$0	\$0	\$0	\$5,220
Utilities - Forecast	\$0	\$0	\$0	\$500	\$0	\$0	\$0	\$1,350	\$0	\$0	\$0	\$1,850
Construction - Forecast	\$0	\$0	\$0	\$0	\$2,400	\$2,400	\$0	\$0	\$6,430	\$6,430	\$0	\$17,660
Total	\$0	\$950	\$1,090	\$1,200	\$3,190	\$3,190	\$5,220	\$1,350	\$6,430	\$6,430	\$0	\$29,050

Funding (in 000's):

	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Developer Contributions	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1	\$0	\$0	\$0	\$1
Contribution from DC Roads Reserve	\$0	\$488	\$579	\$780	\$1,872	\$1,872	\$3,393	\$877	\$2,574	\$2,574	\$0	\$15,008

Expense amounts in **bold text** – 2022 Budget Request

Expense amounts in shaded text – Previously Committed Funding

Contribution from DC Stormwater FMB Reserve	\$0	\$0	\$0	\$0	\$117	\$117	\$0	\$0	\$936	\$936	\$0	\$2,106
Contribution from DC Water Dist FMB Reserve	\$0	\$130	\$130	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$260
Contribution from DC WW Collection FMB Reserve	\$0	\$0	\$0	\$0	\$85	\$85	\$0	\$0	\$670	\$670	\$0	\$1,508
Contribution from Tax Capital Reserve	\$0	\$263	\$312	\$420	\$1,071	\$1,071	\$1,827	\$472	\$1,890	\$1,890	\$0	\$9,215
Contribution from WW Capital Reserve	\$0	\$0	\$0	\$0	\$46	\$46	\$0	\$0	\$361	\$361	\$0	\$812
Contribution from Water Capital Reserve	\$0	\$70	\$70	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$140
Total	\$0	\$950	\$1,090	\$1,200	\$3,190	\$3,190	\$5,220	\$1,350	\$6,430	\$6,430	\$0	\$29,050

Expense amounts in **bold text** – 2022 Budget Request

Expense amounts in shaded text – Previously Committed Funding

2022 Capital Project Detail Report

Project Title: Bullut Subdivision New Park Development - Hewitts Park 10H - Village Square

Project Number: 000892

Department: Development Services

Summary: New subdivision development adding a Village Square (Park) within the Hewitt's 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 park for public use in 2022. 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.

<u>PROJECT EXPENDITURE AND FUNDING</u>												
<u>Expenditure (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Construction - Request	\$0	\$499	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$499
Total	\$0	\$499	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$499
<u>Funding (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Developer Front Ending (Annex) - Developer Build	\$0	\$499	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$499
Total	\$0	\$499	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$499

Expense amounts in **bold text** – 2022 Budget Request

Expense amounts in shaded text – Previously Committed Funding

2022 Capital Project Detail Report

Project Title: Cycle Barrie Infrastructure Program

Project Number: EN1265

Department: Development Services

Summary: The City's Transportation Master Plan (TMP) identified \$120 million in cycling infrastructure to support planned growth to 2041. The recommendations are high level and require validation, public consultation and conceptual design. The intent of this project is to develop an overall prioritization plan that will be further focused to develop a 10-year capital program. This work consists of an environmental assessment phase (recommendation validation, public consultation and conceptual design) delivered by the Transportation Planning Branch and a follow-on implementation phase that will be delivered by the Infrastructure Department.

Rationale: The City's current active transportation modal share is 5% walking and less than 1% cycling; the City has set an aggressive active transportation target of 12% in the Council approved TMP. This represents a 200% increase of the active transportation modal share.

This modal target relies on an increased cycling modal share as the City's sidewalk network is generally built-out. To achieve this target; the City must focus on implementation of cycling infrastructure within the built boundary (cycling infrastructure is being constructed in the secondary plan areas as part of arterial road widening projects and through development approval).

The focus of this program will be the development of an achievable and cost effective plan that provides active transportation linkages and enhanced mobility equity for the residents of the City of Barrie. This study will generally focus on examining solutions that can be implemented in the near term as the current approach of generally linking implementation of AT infrastructure with major road reconstruction projects is resulting in a very low rate of implementation; this will be further exacerbated as financial challenges limit the City's ability to undertake major road projects in the City's built boundary.

Although measurable change will take many years, implementation of an active transportation network with connectivity is critical to help promote and get residents used to using active transportation as well as practically making active transportation a viable alternative. Furthermore; with infill occurring within the built boundary, active transportation is critical to support planned intensification.

PROJECT EXPENDITURE AND FUNDING

Expenditure (in 000's):

	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Environmental Assessment - Request	\$235	\$175	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$410
Design - Request	\$60	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$60
Construction - Request	\$1,795	\$200	\$200	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,195
Design - Forecast	\$0	\$0	\$100	\$100	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$200
Construction - Forecast	\$0	\$0	\$0	\$300	\$400	\$0	\$0	\$0	\$0	\$0	\$0	\$700
Total	\$2,090	\$375	\$300	\$400	\$400	\$0	\$0	\$0	\$0	\$0	\$0	\$3,565

Funding (in 000's):

Expense amounts in **bold text** – 2022 Budget Request

Expense amounts in shaded text – Previously Committed Funding

	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Province of Ontario Grant Revenue	\$1,014	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,014
Contribution from DC Roads Reserve	\$153	\$244	\$195	\$260	\$260	\$0	\$0	\$0	\$0	\$0	\$0	\$1,112
Contribution from Tax Capital Reserve	\$924	\$131	\$105	\$140	\$140	\$0	\$0	\$0	\$0	\$0	\$0	\$1,440
Total	\$2,090	\$375	\$300	\$400	\$400	\$0	\$0	\$0	\$0	\$0	\$0	\$3,565

Expense amounts in **bold text** – 2022 Budget Request

Expense amounts in shaded text – Previously Committed Funding

2022 Capital Project Detail Report

Project Title: Lockmaple Development New Park Development - Hewitts Park 1H - Village Square

Project Number: 000885

Department: Development Services

Summary: New subdivision development adding a Village Square (Park) within the Hewitt's Secondary Planning Area. Please note that this is only a trail head and is not considered a traditional village square.

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 2022. 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.

<u>PROJECT EXPENDITURE AND FUNDING</u>												
<u>Expenditure (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Construction - Request	\$0	\$175	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$175
Construction - Forecast	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total	\$0	\$175	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$175
<u>Funding (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Developer Front Ending (Annex) - Developer Build	\$0	\$175	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$175
Total	\$0	\$175	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$175

Expense amounts in **bold text** – 2022 Budget Request

Expense amounts in shaded text – Previously Committed Funding

2022 Capital Project Detail Report

Project Title: MacMorrison Park Sports Program Replacement Plan

Project Number: EN1301

Department: Development Services

Summary: The relocation of a lit softball baseball diamond and 14 lit horseshoe pits from MacMorrison Park into another park is required before the entire decommissioning of the existing park takes place so that sport programming and service levels are not severely impacted. The removal of all the park facilities (with the exception of the park's playground) was recommended in the Sophia Creek Master Drainage Study.

Rationale: This request is in direct response to the design and construction of the storm water management pond that will completely remove the lit softball diamond and lit horseshoe pits in MacMorrison Park. In addition, the SWM Pond preliminary design also notes the removal of the existing washroom building and parking lot but retains the existing playground for neighbourhood use.

Based on the current information available for the Lampman Lane site, the design drawings are expected to be produced in-house with the \$50,000 budget projected for staff time, sub-consultant procurement (electrical lighting, etc.), agency review (LSRCA), survey and any additional testing requirements, permits and fees. The construction costs are based on DC values for baseball diamond retrofits and an approximate cost to reconstruct the horseshoe pits to match the current site design (wooden structure and sand surface). Both facilities will require LED lighting designs.

PROJECT EXPENDITURE AND FUNDING												
<u>Expenditure (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Design - Request	\$30	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$30
Construction - Request	\$0	\$150	\$325	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$475
Total	\$30	\$150	\$325	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$505
<u>Funding (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Contribution from Cash-In-Lieu Parkland Reserve	\$30	\$150	\$325	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$505
Total	\$30	\$150	\$325	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$505

Expense amounts in **bold text** – 2022 Budget Request

Expense amounts in shaded text – Previously Committed Funding

2022 Capital Project Detail Report

Project Title: Mapleview Drive Diverging Diamond Interchange Retrofit

Project Number: EN1388

Department: Development Services

Summary: Implementation of a diverging diamond interchange at Mapleview Drive and Highway 400. This project is required to improve traffic operations on Mapleview Drive. This project will also examine opportunities for improved streetscape and active transportation infrastructure.

Rationale: The Mapleview Drive corridor operates poorly due to a combination of high traffic volumes, interchange configuration and intersection spacing. A diverging diamond interchange is recommended (pending performance verification during the technical study phase) to improve traffic operations.

PROJECT EXPENDITURE AND FUNDING												
<u>Expenditure (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Environmental Assessment - Request	\$300	\$300	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$600
PreDesign - Forecast	\$0	\$0	\$0	\$310	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$310
Design - Forecast	\$0	\$0	\$0	\$0	\$510	\$510	\$0	\$0	\$0	\$0	\$0	\$1,020
Property - Forecast	\$0	\$0	\$0	\$0	\$0	\$0	\$2,300	\$0	\$0	\$0	\$0	\$2,300
Utilities - Forecast	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$900	\$0	\$0	\$0	\$900
Construction - Forecast	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$4,200	\$4,200	\$0	\$8,400
Total	\$300	\$300	\$0	\$310	\$510	\$510	\$2,300	\$900	\$4,200	\$4,200	\$0	\$13,530
<u>Funding (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Province of Ontario Grant Revenue	\$300	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$300
Contribution from DC Roads Reserve	\$0	\$195	\$0	\$202	\$332	\$332	\$1,495	\$585	\$2,730	\$2,730	\$0	\$8,600
Contribution from Tax Capital Reserve	\$0	\$105	\$0	\$109	\$179	\$179	\$805	\$315	\$1,470	\$1,470	\$0	\$4,631
Total	\$300	\$300	\$0	\$310	\$510	\$510	\$2,300	\$900	\$4,200	\$4,200	\$0	\$13,530

Expense amounts in **bold text** – 2022 Budget Request

Expense amounts in shaded text – Previously Committed Funding

2022 Capital Project Detail Report

Project Title: Play Court Construction and Rehabilitation

Project Number: EN1140

Department: Development Services

Summary: Rehabilitation of tennis and play court with a primary focus on full surface asphalt replacement. Where necessary, rehabilitation may also include colour coat resurfacing, perimeter fence repair or replacement, and lighting upgrades or replacement.

Rationale: The repair or replacement of tennis and play courts are required when physical deterioration results in a much lower quality playing surface or an increased risk of personal injury. Deteriorated courts (uneven, cracked or broken asphalt) are identified during annual surface assessments conducted by the Roads, Parks, and Fleet department. Recreation Services loses approximately \$1,000 per tennis court per season in lost revenue from bookings when this occurs. The courts also serve a local recreational need for other activities such as pickleball and winter ice rinks. For courts with a colour coat surface, maintenance is required every ten years to continue to provide the expected level of service to residents.

PROJECT EXPENDITURE AND FUNDING												
<u>Expenditure (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Construction - Request	\$1,896	\$560	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,456
Construction - Forecast	\$0	\$0	\$405	\$495	\$366	\$225	\$295	\$0	\$75	\$0	\$0	\$1,861
Total	\$1,896	\$560	\$405	\$495	\$366	\$225	\$295	\$0	\$75	\$0	\$0	\$4,317
<u>Funding (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Contribution from Federal Gas Tax Reserve	\$1,813	\$504	\$365	\$446	\$329	\$203	\$266	\$0	\$68	\$0	\$0	\$3,992
Contribution from Cash-In-Lieu Parkland Reserve	\$76	\$56	\$41	\$50	\$37	\$23	\$30	\$0	\$8	\$0	\$0	\$318
Contribution from Tax Capital Reserve	\$7	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$7
Total	\$1,896	\$560	\$405	\$495	\$366	\$225	\$295	\$0	\$75	\$0	\$0	\$4,317

Expense amounts in **bold text** – 2022 Budget Request

Expense amounts in shaded text – Previously Committed Funding

2022 Capital Project Detail Report

Project Title: Road Safety Program - Vision Zero & Traffic Calming Policy Development

Project Number: 001061

Department: Development Services

Summary: Development of a Vision Zero policy and a new traffic calming policy to increase road safety for all users across the City.

Rationale: Vision Zero is a multi-national road traffic safety project that aims to achieve a highway system with no fatalities or serious injuries involving road traffic. New road safety policies are required to provide a safer environment for all road users in consideration of industry best practices, population growth and intensification.

PROJECT EXPENDITURE AND FUNDING												
Expenditure (in 000's):												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Study - Request	\$0	\$150	\$150	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$300
Design - Forecast	\$0	\$0	\$50	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$50
Construction - Forecast	\$0	\$0	\$0	\$100	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$100
Total	\$0	\$150	\$200	\$100	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$450
Funding (in 000's):												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Contribution from Tax Capital Reserve	\$0	\$150	\$200	\$100	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$450
Total	\$0	\$150	\$200	\$100	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$450

Expense amounts in **bold text** – 2022 Budget Request

Expense amounts in shaded text – Previously Committed Funding

2022 Capital Project Detail Report

Project Title: Simcoe Street Right of Way Expansion - Bradford to Eccles

Project Number: 001067

Department: Development Services

Summary: Construction of the Simcoe Street extension connecting Bradford Street to Eccles Street.

Rationale: A new road connection is required to facilitate development of abutting properties.

<u>PROJECT EXPENDITURE AND FUNDING</u>												
<u>Expenditure (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
PreDesign - Request	\$0	\$240	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$240
Design - Forecast	\$0	\$0	\$365	\$365	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$730
Utilities - Forecast	\$0	\$0	\$0	\$0	\$600	\$0	\$0	\$0	\$0	\$0	\$0	\$600
Construction - Forecast	\$0	\$0	\$0	\$0	\$0	\$2,960	\$2,960	\$0	\$0	\$0	\$0	\$5,920
Total	\$0	\$240	\$365	\$365	\$600	\$2,960	\$2,960	\$0	\$0	\$0	\$0	\$7,490
<u>Funding (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Contribution from Tax Capital Reserve	\$0	\$240	\$340	\$340	\$600	\$2,760	\$2,760	\$0	\$0	\$0	\$0	\$7,040
Contribution from Water Capital Reserve	\$0	\$0	\$25	\$25	\$0	\$200	\$200	\$0	\$0	\$0	\$0	\$450
Total	\$0	\$240	\$365	\$365	\$600	\$2,960	\$2,960	\$0	\$0	\$0	\$0	\$7,490

Expense amounts in **bold text** – 2022 Budget Request

Expense amounts in shaded text – Previously Committed Funding

2022 Capital Project Detail Report

Project Title: Transportation Tomorrow Survey

Project Number: 001063

Department: Development Services

Summary: The City's contribution to the MTO Transportation Tomorrow Survey (TTS). The TTS is a cooperative effort by local and provincial government agencies to collect information about urban travel in southern Ontario. The survey has been undertaken every five years since 1986. The data collected helps local and regional governments, as well as the province and its agencies make transportation planning and investment decisions.

Rationale: All municipalities within the GGHA participate in the TTS. The City's share is 0.7% of the total project cost. This effort provides valuable transportation planning information that is used in the development of the Transportation Master Plan as well as traffic impact studies submitted to the City as part of development applications.

Municipalities that participated in the previous 2016 TTS include:

- City of Barrie
- City of Brantford
- City of Guelph
- City of Hamilton
- City of Kawartha Lakes
- City of Peterborough
- City of Toronto
- County of Brant
- County of Dufferin
- County of Peterborough
- County of Simcoe
- County of Wellington
- Metrolinx
- Ministry of Transportation Ontario
- Regional Municipality of Durham
- Regional Municipality of Halton
- Regional Municipality of Niagara
- Regional Municipality of Peel
- Regional Municipality of Waterloo
- Regional Municipality of York
- Toronto Transit Commission
- Town of Orangeville

PROJECT EXPENDITURE AND FUNDING												
Expenditure (in 000's):												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Study - Request	\$0	\$32	\$16	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$48
Total	\$0	\$32	\$16	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$48

Expense amounts in **bold text** – 2022 Budget Request

Expense amounts in shaded text – Previously Committed Funding

Funding (in 000's):

	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Contribution from Tax Capital Reserve	\$0	\$32	\$16	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$48
Total	\$0	\$32	\$16	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$48

Expense amounts in **bold text** – 2022 Budget Request

Expense amounts in shaded text – Previously Committed Funding

2022 Capital Project Detail Report

Project Title: Waterfront Park Furnishings Program

Project Number: RP1169

Department: Development Services

Summary: Year three of a capital program to install a higher quality and amenity of site furnishings for the waterfront to address an overall deficiency in public seating, public gathering, and accessible seating opportunities.

Rationale: In 2018, Council approved an amendment to the 2018 Business Plan to address a deficiency of high-quality site furnishings on the waterfront. This initial funding was converted into a multi-year capital program starting in 2019. Business Plan. Based on the pilot installation in the summer of 2018 of a small number of new site furnishings in Centennial Park, the City received very positive feedback regarding the style and quality of the furnishings, but also received negative feedback regarding the low number of furnishings throughout the waterfront.

The emphasis of the program is to create improved opportunities for public seating and gathering throughout the waterfront. The focus to date has been to address the deficiency in Centennial Park. This would continue to be the focus through 2021 with future years to begin expand the program to other deficient waterfront parks such as Tyndale Park, The Gables, Minet's Point, Johnson's Beach, etc.

PROJECT EXPENDITURE AND FUNDING												
<u>Expenditure (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Construction - Request	\$70	\$70	\$50	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$190
Construction - Forecast	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total	\$70	\$70	\$50	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$190
<u>Funding (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Contribution from Cash-In-Lieu Parkland Reserve	\$70	\$70	\$50	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$190
Total	\$70	\$70	\$50	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$190

Expense amounts in **bold text** – 2022 Budget Request

Expense amounts in shaded text – Previously Committed Funding

2022 Capital Project Detail Report

Project Title: Waterfront, Marina & Parks Master Plan Update

Project Number: EN1476

Department: Development Services

Summary: Updates to the Waterfront, Marina & Parks Master Plan to respond to a growing population and increased environmental pressures on the City's waterfront public areas.

Rationale: The Waterfront Strategy (2015) identifies 5 Beaches and 12-15 Parks/Facilities along the Waterfront. Only the beaches offer official direct access to the Lake although informal access is known at other locations. This strategy needs to be updated to reflect what is currently happening on the City's waterfront, both in the formal beach areas and informal waterfront access points across the City. The summer of 2020 has highlighted several operational and environmental matters that continued and excessive use of the City's waterfront. Responses to COVID-19 are not anticipated to be resolved in the near term and at the same time the population of the City continues to grow resulting in many matters that should be identified, explored, developed and implemented through a Master Plan / Strategic Plan update process.

<u>PROJECT EXPENDITURE AND FUNDING</u>												
<u>Expenditure (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Study - Request	\$75	\$75	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$150
Total	\$75	\$75	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$150
<u>Funding (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Contribution from Tax Rate Stabilization Reserve	\$75	\$75	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$150
Total	\$75	\$75	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$150

Expense amounts in **bold text** – 2022 Budget Request

Expense amounts in shaded text – Previously Committed Funding

2022 Capital Project Detail Report

Project Title: Engine 1531 Restoration for Donation to Simcoe County

Project Number: 001081

Department: Economic & Creative Development

Summary: This funding represents the City's contribution to the restoration of Engine 1531, to complete the donation of the Engine to the Simcoe County Museum.

Since 2010, Engine 1531 and caboose have been displayed at the Museum. The full restoration needs to be completed in order to preserve the integrity and life of both engine and caboose. The total restoration costs are proposed to be undertaken by the Simcoe County Museum at an estimated cost \$319,000, over a three-year period.

Rationale: The City of Barrie accepted the donation of historic train Engine 1531 from CN Rail in 1960. As part of the Lakeshore reconstruction project, in 2008, the City of Barrie and County of Simcoe entered into an agreement to relocate Engine 1531 and caboose to Simcoe County Museum. As part of the agreement, the pieces were to undergo a cosmetic restoration, with City of Barrie providing funding and Simcoe County Museum staff and volunteers completing the work. The restoration works have not been completed. As the engine is the property of the City of Barrie, funds are required to undertake this needed work in order for the piece to be considered for gifting to the Simcoe County Museum and the overall preservation of the asset.

Providing the funding for the restoration of the engine will ensure the piece is restored to a condition that preserves and honours the history of the City.

<u>PROJECT EXPENDITURE AND FUNDING</u>												
<u>Expenditure (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Execute - Request	\$0	\$150	\$100	\$69	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$319
Total	\$0	\$150	\$100	\$69	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$319
<u>Funding (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Contribution from Reinvestment Reserve	\$0	\$150	\$100	\$69	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$319
Total	\$0	\$150	\$100	\$69	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$319

Expense amounts in **bold text** – 2022 Budget Request

Expense amounts in shaded text – Previously Committed Funding

2022 Capital Project Detail Report

Project Title: Wayfinding Signage Phase 2 - Production and Installation

Project Number: 001071

Department: Economic & Creative Development

Summary: The Wayfinding Signage Phase 2 is the implementation of the Phase 1 work completed in 2021 and consists of the complete design, and initial fabrication, and installation of a new system of signs that will create a greater level of legibility with a unified look and character for the downtown, and tourism assets across the City, which will in turn assist residents and visitors in finding parking and tourism-related activities and businesses. This project is proposed to be funded from MAT revenues.

Rationale: Completing an updated wayfinding signage system is a key recommendation stemming from both the Tourism Master Plan and Downtown Parking strategy and a prioritized action to be undertaken as part of the implementation of both strategies. In 2021, Council approved the completion of Phase 1, which is the planning and design concept of the program. Phase 2 will provide the overall design and initial fabrication and installation.

Improving directional signage for both parking and tourism assets and amenities will provide a positive user experience for residents that is intended to drive increased parking lot utilization and associated revenues, as well as increased visitor engagement and fiscal spend in the downtown.

<u>PROJECT EXPENDITURE AND FUNDING</u>												
<u>Expenditure (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Study - Request	\$0	\$300	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$300
Total	\$0	\$300	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$300
<u>Funding (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Contribution from Tourism Reserve	\$0	\$300	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$300
Total	\$0	\$300	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$300

2022 Capital Project Detail Report

Project Title: 79 Bell Farm Facility Refurbishment

Project Number: 000955

Department: Facilities Department

Summary: This project involves the replacement and restoration of several interior and exterior base building components of 79 Bell Farm Road.

Rationale: 79 Bell Farm Road houses Barrie Police Service training and support services. These services were intended to be relocated at the new Barrie Simcoe Emergency Services Campus (BSESC). This understanding meant 79 Bell Farm would be a surplus facility, and as a result required maintenance was deferred. However, due to budget constraints, the portion of the project to house these services at the BSESC was eliminated from scope. As a result of this new direction and deferred maintenance, the facility requires much needed refurbishment to mechanical, electrical and building finishes components.

PROJECT EXPENDITURE AND FUNDING												
<u>Expenditure (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Construction - Request	\$450	\$100	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$550
Total	\$450	\$100	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$550
<u>Funding (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Contribution from Tax Capital Reserve	\$450	\$100	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$550
Total	\$450	\$100	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$550

Expense amounts in **bold text** – 2022 Budget Request

Expense amounts in shaded text – Previously Committed Funding

2022 Capital Project Detail Report

Project Title: 79 Bell Farm Space Renovation

Project Number: 001073

Department: Facilities Department

Summary: This project involves space renovations to classrooms and offices to accommodate growth of services for Barrie Police Services training at 79 Bell Farm.

Rationale: 79 Bell Farm Road houses Barrie Police Service training and support services. Minor space re-purposing and interior renovations are required to accommodate the growth of Barrie Police Service classroom training and office space. The current layouts and configurations require modifications and renewal to properly support BPS training requirements.

<u>PROJECT EXPENDITURE AND FUNDING</u>												
<u>Expenditure (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	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
<u>Funding (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	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

2022 Capital Project Detail Report

Project Title: Allandale Recreation Centre Large Pool Heating System Replacement

Project Number: FC1238

Department: Facilities Department

Summary: Design funding for the replacement of the end of life pool heating system and related components at the Allandale Recreation Centre.

Rationale: The Allandale Recreation Centre large pool heating systems are now over 15 years old and require replacement due to decreased functionality and increased maintenance costs. Technological and energy efficiency updates available through this replacement will provide probable savings to the Corporation in the long term. A detailed design and performance plan will be completed in 2021 and construction requested in 2022 with the appropriate dollar value.

PROJECT EXPENDITURE AND FUNDING

Expenditure (in 000's):

	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Design - Request	\$50	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$50
Construction - Request	\$0	\$450	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$450
Total	\$50	\$450	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$500

Funding (in 000's):

	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Contribution from Cash-In-Lieu Parkland Reserve	\$50	\$450	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$500
Contribution from Tax Capital Reserve	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total	\$50	\$450	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$500

Expense amounts in **bold text** – 2022 Budget Request

Expense amounts in shaded text – Previously Committed Funding

2022 Capital Project Detail Report

Project Title: Barrie Molson Centre Sound System Replacement

Project Number: FC1247

Department: Facilities Department

Summary: The Barrie Molson Centre is home to the OHL's Barrie Colts Hockey Team. As part of the lease agreement the BMC is to provide an adequate sound system for the arena and its events. The speakers and sound system is nearing the end of its useful life, and the quality of sound is becoming increasingly poor. A replacement of the sound system is necessary.

Rationale: Over the past few years, the Barrie Molson Centre sound system has been patched and modified in an attempt to maintain its performance and clarity. This project would remove the outdated 22 year old system and replace it with a new modern system capable of hosting a variety of events, most notably the Barrie Colts hockey team. If left as is, the sound system may fail, resulting in reduced enjoyment and potentially reduced attendance until replaced. A failure would also constitute a breach of services agreed to with the building's major tenant.

<u>PROJECT EXPENDITURE AND FUNDING</u>												
<u>Expenditure (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Capital Purchase - Request	\$0	\$275	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$275
Total	\$0	\$275	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$275
<u>Funding (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Contribution from Tax Capital Reserve	\$0	\$275	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$275
Total	\$0	\$275	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$275

Expense amounts in **bold text** – 2022 Budget Request

Expense amounts in shaded text – Previously Committed Funding

2022 Capital Project Detail Report

Project Title: BFES Station 6 New Building Development

Project Number: FC1084

Department: Facilities Department

Summary: The development of a new Barrie Fire & Emergency Service Station 6 to serve the Hewitt's Secondary Plan area. A staff report will be prepared that will identify further details including schedule, costs, and scope.

Rationale: The City as per Council direction will strive to develop/provide essential services in advance of build-out of future development areas. Station 6 that is planned to be located in the Mapleview Rd. and Prince William Way area will service the Hewitt's Secondary Plan Area. The Barrie Fire and Emergency Service has to have its services in place prior to the start of building to be able to service the planned developments. The existing stations cannot meet the needs of the annexed land area. A staff report will be prepared that will identify further details including schedule, capital and operating costs, and scope. Capital costs include obtaining property, design, construction, utilities, and fit-out. The Fire Master Plan - Update 2014- 2023 was prepared in response to the ongoing review of the Plan and due to the 2010 Annexation of southerly lands. One of the Intermediate Term Goals (3-5 Years) 2016-2018 identified is to construct Station 6.

PROJECT EXPENDITURE AND FUNDING												
Expenditure (in 000's):												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Design - Request	\$250	\$250	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$500
Execute - Request	\$60	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$60
Property - Request	\$600	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$600
Construction - Request	(\$1,784)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	(\$1,784)
Capital Purchase - Request	\$1,150	\$2,000	\$400	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,550
Construction - Forecast	\$0	\$0	\$2,300	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,300
Capital Purchase - Forecast	\$0	\$0	\$225	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$225
Total	\$276	\$2,250	\$2,925	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$5,451
Funding (in 000's):												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Debenture Proceeds - DCs	\$0	\$1,500	\$2,300	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,800
Contribution from DC Protection Reserve	\$276	\$750	\$625	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,651
Total	\$276	\$2,250	\$2,925	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$5,451

Expense amounts in **bold text** – 2022 Budget Request

Expense amounts in shaded text – Previously Committed Funding

2022 Capital Project Detail Report

Project Title: BPS - 110 Fairview - Air Conditioning in Fleet Garage

Project Number: 001010

Department: Facilities Department

Summary: This project involves the supply and installation of Air Conditioning to the workspace of the Barrie Police Service (BPS) fleet garage (Building C) at 110 Fairview.

Rationale: The BPS fleet garage houses staff, supplies and equipment that service and maintain the BPS vehicle fleet. The garage bays and workspace where vehicles are serviced is not currently air conditioned. Staff spend the majority of their workday in this space and have communicated their difficulty working in such warm conditions and has become a healthy and safety concern identified by BPS. The proposed air conditioning system would serve the garage bays, allowing staff to work comfortably and more productively. Staff are unable to utilize other methods of 'free cooling' to condition the space, as BPS has identified security concerns with doing so. The garage houses vehicles that may be involved in active investigations, and must keep all doors closed to restrict entry and maintain a secure perimeter. This requirement prevents the garage doors from remaining open to provide fresh air.

PROJECT EXPENDITURE AND FUNDING												
<u>Expenditure (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Construction - Request	\$0	\$50	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$50
Total	\$0	\$50	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$50
<u>Funding (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Contribution from Tax Capital Reserve	\$0	\$50	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$50
Total	\$0	\$50	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$50

Expense amounts in **bold text** – 2022 Budget Request

Expense amounts in shaded text – Previously Committed Funding

2022 Capital Project Detail Report

Project Title: Climate Change Mitigation and Energy Efficiency Action Fund

Project Number: 001064

Department: Facilities Department

Summary: The Climate Change Mitigation and Energy Efficiency Action program will fund energy efficiency and greenhouse gas (GHG) emissions mitigation activities over a three year period (2022 - 2024). The funding will support energy efficiency projects to assist in achieving the targets outlined in the Conservation and Demand Management (CDM) Plan. Additionally, the program will support the delivery of GHG emission reduction projects in an effort to meet federal reduction targets and soon to be established corporate reduction targets. The funding will also be utilized to support capacity building and finance feasibility studies and strategy development that further climate change mitigation, energy efficiency and sustainability objectives of the corporation. This funding will generate operational cost savings from the implementation of energy efficiency projects and GHG emission reduction through the delivery of climate change mitigation initiatives.

Rationale: The Climate Change Mitigation and Energy Efficiency Action program will fund energy efficiency and greenhouse gas (GHG) emissions mitigation activities over a three year period (2022 - 2024). The funding will support energy efficiency projects to assist in achieving the targets outlined in the Conservation and Demand Management (CDM) Plan. Staff are planning to develop a corporate net zero emissions strategy and the program will support the delivery of GHG emission reduction projects in an effort to meet federal reduction targets and soon to be established corporate reduction targets. The funding will also be utilized to support capacity building and finance feasibility studies and strategy development that further climate change mitigation, energy efficiency and sustainability objectives of the corporation. This funding will generate operational cost savings from the implementation of energy efficiency projects and GHG emission reduction through the delivery of climate change mitigation initiatives.

As a whole the Energy Management Branch provided a return of investment (ROI) of 12% to the corporation through the delivery period of the first CDM plan (2014 - 2018). These energy savings were in part driven by multi-year capital funding projects that allowed Staff to target energy efficiency projects that had a minimum ROI of 10%. For this funding program, projects targeting energy efficiency will continue to require a minimum ROI of 10%, while initiatives that reduce GHG emissions will utilize a cost per tonne of GHG emissions metric. Utilizing these metrics to identify and implement projects allows staff to target initiatives that provide the greatest payback and largest GHG emission reduction.

Capital investment in energy efficiency activities provide a return on investment and are known to reduce operating costs. This fund will continue to support Energy Management conservation activities to reduce the operating impact of utility inflationary cost pressures and moderate the effect of growth in the City's infrastructure and building portfolios. Funding from this program that targets energy efficiency will require a minimum ROI of 10%.

This program will also fund climate change mitigation action to reduce greenhouse gas emissions. The introduction of the federal carbon tax is increasing fossil fuel sourced energy dramatically. In the case of natural gas, the commodity price is scheduled to increase 123% between 2020 and 2030. Investing in projects that reduce the reliance of fossil fuels will reduce greenhouse gas emissions, but also buffer against the impact of rising carbon prices. Furthermore, significant government funding streams have recently been introduced that support the delivery of climate mitigation measures for municipalities. These grants often require matching funding and this program will allow the City to maximize these revenue streams to offset the cost of project implementation.

PROJECT EXPENDITURE AND FUNDING												
Expenditure (in 000's):												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Capital Purchase - Request	\$0	\$350	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$350

Expense amounts in **bold text** – 2022 Budget Request

Expense amounts in shaded text – Previously Committed Funding

Total	\$0	\$350	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$350
Funding (in 000's):												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Contribution from Federal Gas Tax Reserve	\$0	\$350	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$350
Total	\$0	\$350	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$350

Expense amounts in **bold text** – 2022 Budget Request

Expense amounts in shaded text – Previously Committed Funding

2022 Capital Project Detail Report

Project Title: Collier Street Parkade Sprinkler Replacement Program

Project Number: FC1260

Department: Facilities Department

Summary: Replacement of cast iron sprinkler system piping in the Collier Street parkade with galvanized piping.

Rationale: Over the last several years, sections of the existing sprinkler piping and sprinkler heads have been replaced on an as required basis. Because the building is an exposed building with all levels open to the elements, and salt is imported into the building via vehicle traffic, deterioration of the building elements is accelerated. In addition, the piping of the sprinkler system consists of iron pipe which is to be replaced every 15 years. Replacing the piping with galvanized piping would greatly increase the life of the system, require much less repair and maintenance. This project would replace the remainder of the cast iron sprinkler piping with galvanized pipe along with associated heads and trace heating equipment.

PROJECT EXPENDITURE AND FUNDING												
<u>Expenditure (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Construction - Request	\$125	\$125	\$125	\$125	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$500
Total	\$125	\$125	\$125	\$125	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$500
<u>Funding (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Contribution from Tax Capital Reserve	\$125	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$125
Contribution from Parking Capital Reserve	\$0	\$125	\$125	\$125	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$375
Total	\$125	\$125	\$125	\$125	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$500

Expense amounts in **bold text** – 2022 Budget Request

Expense amounts in shaded text – Previously Committed Funding

2022 Capital Project Detail Report

Project Title: Dorian Parker Community Centre Parking Lot

Project Number: 000377

Department: Facilities Department

Summary: This project involves the installation of an asphalt parking surface at the Dorian Parker Centre.

Rationale: The well used parking lot at the Dorian Parker Centre also serves the adjacent Sunnidale Park. The current parking lot is composed of a gravel and crushed stone surface. There is no drainage system in place and as a result, there are several large and unsafe depressions in the parking surface. The lack of drainage also causes unsafe conditions when freezing in the winter. A 2019 study completed by Read Jones Christoffersen, recommends the installation of an asphalt surface, proper drainage system, suitable subgrade, and curbing system. If left as is, there is significant risk to slips and falls, as well as damage to vehicles using the parking lot.

PROJECT EXPENDITURE AND FUNDING												
<u>Expenditure (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Design - Request	\$0	\$35	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$35
Construction - Request	\$0	\$480	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$480
Total	\$0	\$515	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$515
<u>Funding (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Contribution from Tax Capital Reserve	\$0	\$515	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$515
Total	\$0	\$515	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$515

Expense amounts in **bold text** – 2022 Budget Request

Expense amounts in shaded text – Previously Committed Funding

2022 Capital Project Detail Report

Project Title: Dorian Parker Exterior Washroom

Project Number: 001100

Department: Facilities Department

Summary: This project involves the installation of a permanent exterior washroom at Sunnisdale Park adjacent to the Dorian Parker Centre for year round use.

Rationale: The availability of a washroom for visitors of Sunnisdale Park is a continuous request from the community. The installation of a permanent, year round, self-sanitizing, accessible washroom is proposed to serve visitors. It is proposed to install a premanufactured washroom unit and tie into existing services of the Dorian Parker Centre as a cost effective and viable long term solution to this community need.

<u>PROJECT EXPENDITURE AND FUNDING</u>												
<u>Expenditure (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Construction - Request	\$0	\$40	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$40
Total	\$0	\$40	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$40
<u>Funding (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Contribution from Cash-In-Lieu Parkland Reserve	\$0	\$40	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$40
Total	\$0	\$40	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$40

Expense amounts in **bold text** – 2022 Budget Request

Expense amounts in shaded text – Previously Committed Funding

2022 Capital Project Detail Report

Project Title: East Bayfield Community Centre Flat Roof Replacement

Project Number: 001065

Department: Facilities Department

Summary: This project involves the removal and replacement of entire sections of the East Bayfield Community Centre gravel surface built up roof. This project will also address damaged insulation, flashing and misc. metals based on recommendations from consulting reports.

Rationale: Significant sections of the gravel surface built up roofing has failed at the Holly Community Centre. Leaks have become more common with patching required on a regular basis. Roof reviews utilizing thermal imaging have identified areas of roofing that need to be replaced completely. This project will address major roof concerns that could cause future damage and disruption to services if not fixed. This project will only address areas of roof that are in poor condition and have failed. The scope of work was informed through a 2019 Roof Condition Assessment Report.

<u>PROJECT EXPENDITURE AND FUNDING</u>												
<u>Expenditure (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Construction - Request	\$0	\$1,500	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,500
Total	\$0	\$1,500	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,500
<u>Funding (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Contribution from Cash-In-Lieu Parkland Reserve	\$0	\$1,500	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,500
Total	\$0	\$1,500	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,500

Expense amounts in **bold text** – 2022 Budget Request

Expense amounts in shaded text – Previously Committed Funding

2022 Capital Project Detail Report

Project Title: Environmental Center Automatic Weigh Scale and Traffic Lane

Project Number: 000993

Department: Facilities Department

Summary: A third weigh scale is required at the Environmental Centre to alleviate City staff and approved contractors waiting in long lineups with patrons and to save time and money for City Staff and Contractors that make daily drops. The weigh scale would be fully automated requiring no additional staff compliment. A third access road would be required in order to maximize the costs savings and remove all health and safety risks.

Rationale: The Environmental Centre currently serves an average of 400 people per day, with peak Saturdays of over 700 people per day. Within this lineup, an average of approximately 60 minutes per trip, City staff and City contractors are paid to wait their turn. The proposed capital improvement would see an automated scale system and additional traffic lane to specifically handle City staff and contractors. This project would solve two problems. First, it would remove most oversize vehicles from the public lineup creating smaller wait times and a more pleasant public experience, but also the save the time and money it takes City staff and contractors to wait for their turn to cross the weigh scale.

PROJECT EXPENDITURE AND FUNDING												
Expenditure (in 000's):												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
PreDesign - Request	\$0	\$350	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$350
Design - Forecast	\$0	\$0	\$400	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$400
Construction - Forecast	\$0	\$0	\$2,500	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,500
Total	\$0	\$350	\$2,900	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,250
Funding (in 000's):												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Contribution from Tax Capital Reserve	\$0	\$350	\$2,900	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,250
Total	\$0	\$350	\$2,900	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,250

Expense amounts in **bold text** – 2022 Budget Request

Expense amounts in shaded text – Previously Committed Funding

2022 Capital Project Detail Report

Project Title: Environmental Centre Security Upgrade Program

Project Number: 001074

Department: Facilities Department

Summary: The existing Environmental Centre site has some local CCTV (closed circuit television) camera's. This project would provide additional infrastructure to be able to monitor perimeter illegal dumping, customer health and safety and other activities in real time. In addition, this program would see the addition of new camera's to cover existing blind spots and increase the quality and resolution of existing camera's to be able to provide important information in the case of an emergency or illegal activity.

Rationale: The existing CCTV network at the Environmental Centre is static and outdated. There is no current ability to live monitor and be proactive, instead the current system is only able to playback a recorded feed from a limited timeframe and the quality is poor giving very few if any viable details. With trespassing, illegal dumping and other illegal activities of concern in the area, this project aims to enhance the quality and range of the existing security system as well as provide the ability to be live monitored in the future.

PROJECT EXPENDITURE AND FUNDING												
<u>Expenditure (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Execute - Request	\$0	\$140	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$140
Execute - Forecast	\$0	\$0	\$0	\$100	\$100	\$0	\$0	\$0	\$0	\$0	\$0	\$200
Total	\$0	\$140	\$0	\$100	\$100	\$0	\$0	\$0	\$0	\$0	\$0	\$340
<u>Funding (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Contribution from Tax Capital Reserve	\$0	\$140	\$0	\$100	\$100	\$0	\$0	\$0	\$0	\$0	\$0	\$340
Total	\$0	\$140	\$0	\$100	\$100	\$0	\$0	\$0	\$0	\$0	\$0	\$340

Expense amounts in **bold text** – 2022 Budget Request

Expense amounts in shaded text – Previously Committed Funding

2022 Capital Project Detail Report

Project Title: Facility Condition Assessment Program

Project Number: 001058

Department: Facilities Department

Summary: A Facility Condition Assessment (FCA) Program is required to develop and maintain accurate information of the condition, and capital repair costs of the City's facility assets. The goal of the assessments are to determine the condition of the building elements and to provide information to gain an understanding of the twenty (20) year capital requirements, Current Replacement Value (CRV) and Facility Condition Index (FCI) in order to continue to operate the building in a good state of repair.

Rationale: The FCA's will be completed on an annual basis, focusing on a group of facilities within a specific portfolio (Recreation, Emergency Services, Environmental, Operations, Corporate, Marina, Library). The information summarized in these FCA's is critical in informing the Capital plan and forecasting anticipated replacements and their cost.

<u>PROJECT EXPENDITURE AND FUNDING</u>												
<u>Expenditure (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Study - Request	\$0	\$75	\$75	\$75	\$75	\$0	\$0	\$0	\$0	\$0	\$0	\$300
Total	\$0	\$75	\$75	\$75	\$75	\$0	\$0	\$0	\$0	\$0	\$0	\$300
<u>Funding (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Contribution from Federal Gas Tax Reserve	\$0	\$56	\$56	\$56	\$56	\$0	\$0	\$0	\$0	\$0	\$0	\$225
Contribution from DC Public Works Fac & Fleet Res	\$0	\$19	\$19	\$19	\$19	\$0	\$0	\$0	\$0	\$0	\$0	\$75
Total	\$0	\$75	\$75	\$75	\$75	\$0	\$0	\$0	\$0	\$0	\$0	\$300

Expense amounts in **bold text** – 2022 Budget Request

Expense amounts in shaded text – Previously Committed Funding

2022 Capital Project Detail Report

Project Title: Fire Headquarters Carpet Replacement

Project Number: 001087

Department: Facilities Department

Summary: Replacement of carpets throughout the main floor of Fire Headquarters.

Rationale: The carpet on the main floor of Fire Headquarters is at the end of its useful life, thinning fraying and damaged in main walking areas, and if not replaced, there will be increased risk of trip hazards to public and staff. Given the age and deteriorated condition of the floors, other lifecycle strategies (status quo, do nothing, and/or replace sections) are not expected to significantly extend the existing remaining life of the flooring. Risk assumed by the City will increase as physical condition continues to deteriorate and probability of failure becomes greater. The second-floor carpets have previously been replaced, and the proposed replacement on the main floor will restore the required levels of service throughout the facility.

PROJECT EXPENDITURE AND FUNDING												
<u>Expenditure (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Construction - Request	\$0	\$40	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$40
Total	\$0	\$40	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$40
<u>Funding (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Contribution from Tax Capital Reserve	\$0	\$40	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$40
Total	\$0	\$40	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$40

Expense amounts in **bold text** – 2022 Budget Request

Expense amounts in shaded text – Previously Committed Funding

2022 Capital Project Detail Report

Project Title: Fire Headquarters Exterior Structure Renewal

Project Number: 001088

Department: Facilities Department

Summary: Replacement of exterior deck boards, guardrails, and rooftop mechanical bay screening at Fire Headquarters.

Rationale: The exterior deck boards, guardrails, and rooftop mechanical bay screening at the Fire Headquarters are at the end of their useful life and require replacement. If not replaced, there will be increased risk of failure and trip hazards to staff and public. The deck boards and railings on the lower-level patio and second story deck are aged and worn, creating an uneven walking surface, and the architectural screen surrounding the rooftop mechanical equipment has become unsightly and is nearing end of life.

Given their age and deteriorated condition of these items, other lifecycle strategies (status quo, do nothing, and/or replace sections) are not expected to significantly extend the existing remaining life of the deck, railings and screening. Risk assumed by the City will increase as physical condition continues to deteriorate and probability of failure becomes greater. The proposed replacement will restore the required levels of service and safety of the facility.

PROJECT EXPENDITURE AND FUNDING												
<u>Expenditure (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Construction - Request	\$0	\$70	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$70
Total	\$0	\$70	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$70
<u>Funding (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Contribution from Tax Capital Reserve	\$0	\$70	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$70
Total	\$0	\$70	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$70

Expense amounts in **bold text** – 2022 Budget Request

Expense amounts in shaded text – Previously Committed Funding

2022 Capital Project Detail Report

Project Title: Fire Station 2 Conceptualization Study

Project Number: 001096

Department: Facilities Department

Summary: As Barrie Fire's oldest station, Fire Station 2 is in need of significant repairs and is at the end of its useful life. Before further repairs are completed, it is recommended that a new feasibility study be conducted to determine if it is more economically feasible to update the current building, or, to consider rebuilding and relocating Fire Station 2.

Rationale: As Barrie Fire's oldest station, Fire Station 2 is in need of significant repairs and is at the end of its useful life. Some of the components requiring attending include the surrounding site and landscaping, the mechanical and electrical systems, the interior finishes, and outdated accessibility upgrades. These components need repair due to premature deterioration, lack of regularly scheduled maintenance and end of normal service life. A 2018 Feasibility study was previously conducted, however, these significant repairs have not been complete as recommended and the facility continues to age, as fire's needs also change. Before further repairs are completed, it is recommended that a new feasibility study be conducted to build upon the 2018 study to determine if it is more economically feasible to repair, maintain, and update the current building, or, to consider rebuilding and relocating Fire Station 2. Considerations should also be made to review if the current location of Station 2 is ideal to best service the City and also if there are opportunities to incorporate the permanent training facility as identified in the 2016-2025 Fire Master Plan. The recommendations made in the 2018 Feasibility Study were necessary to bring the building into a state-of-good repair and restore the required levels of service. Significant aspect of the report have been deferred and have become problematic due to an increase in energy costs, maintenance costs and usability resulting in an increased risk to occupants and users of the building. Given the age and deteriorated condition of the facility, other lifecycle strategies (status quo, do nothing, and/or repair or renovate) are not expected to significantly extend the existing remaining life of the facility and this request for a renewed Feasibility Study will further investigate the viability of a new station as well as other opportunities that may arise with a new station build. Risk assumed by the City will increase as physical condition continues to deteriorate, the city continues to grow, and probability of failure becomes greater.

PROJECT EXPENDITURE AND FUNDING												
<u>Expenditure (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Study - Request	\$0	\$50	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$50
Total	\$0	\$50	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$50
<u>Funding (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Contribution from Tax Capital Reserve	\$0	\$50	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$50
Total	\$0	\$50	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$50

Expense amounts in **bold text** – 2022 Budget Request

Expense amounts in shaded text – Previously Committed Funding

2022 Capital Project Detail Report

Project Title: Fisher Auditorium Redevelopment

Project Number: FC1138

Department: Facilities Department

Summary: Feasibility of redeveloping the Fisher Auditorium at the former Barrie Central Collegiate Institute (BCCI) into a stand-alone city theatre asset

Rationale: Feasibility study work currently underway as directed by council.

<u>PROJECT EXPENDITURE AND FUNDING</u>												
<u>Expenditure (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Design - Request	\$0	\$200	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$200
Construction - Request	\$882	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$882
Design - Forecast	\$0	\$0	\$300	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$300
Construction - Forecast	\$0	\$0	\$0	\$0	\$2,500	\$10,000	\$10,000	\$3,000	\$0	\$0	\$0	\$25,500
Total	\$882	\$200	\$300	\$0	\$2,500	\$10,000	\$10,000	\$3,000	\$0	\$0	\$0	\$26,882
<u>Funding (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Province of Ontario Grant Revenue	\$0	\$0	\$75	\$0	\$300	\$450	\$600	\$75	\$0	\$0	\$0	\$1,499
Government of Canada Grant Revenue	\$0	\$0	\$100	\$0	\$400	\$600	\$800	\$100	\$0	\$0	\$0	\$1,999
Contribution from Reinvestment Reserve	\$532	\$200	\$125	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$858
Contribution from Strategic Priority Res.	\$350	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$350
Contribution from Theatre Reserve	\$0	\$0	\$0	\$0	\$1,800	\$8,950	\$8,601	\$2,825	\$0	\$0	\$0	\$22,176
Total	\$882	\$200	\$300	\$0	\$2,500	\$10,000	\$10,000	\$3,000	\$0	\$0	\$0	\$26,882

Expense amounts in **bold text** – 2022 Budget Request

Expense amounts in shaded text – Previously Committed Funding

2022 Capital Project Detail Report

Project Title: Furniture and Space Upgrades Program

Project Number: 001059

Department: Facilities Department

Summary: This Capital Program is intended to support unplanned furniture and space upgrades throughout the City.

Rationale: As the City continues to grow, its services and spaces must evolve as well. This program will support furniture and space upgrades required for aging furniture and redesign of office space to create required efficiencies for new and existing staff.

PROJECT EXPENDITURE AND FUNDING												
<u>Expenditure (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Capital Purchase - Request	\$0	\$75	\$75	\$75	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$225
Total	\$0	\$75	\$75	\$75	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$225
<u>Funding (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Contribution from Tax Capital Reserve	\$0	\$75	\$75	\$75	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$225
Total	\$0	\$75	\$75	\$75	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$225

Expense amounts in **bold text** – 2022 Budget Request

Expense amounts in shaded text – Previously Committed Funding

2022 Capital Project Detail Report

Project Title: Holly Community Centre Ice Plant Compressor 3 Replacement

Project Number: 000275

Department: Facilities Department

Summary: This project involves the end of life replacement of the ice plant Compressor #3 at the Holly Community Centre.

Rationale: This compressor is 1 of 3 that serves the CIMCO ice plant at Holly CC. This system allows the facility to create ice on the two ice pads. The 75 HP Bitzer compressor is 16 years old and original to the building. It is at the end of its useful life and in need of replacement. Although there are 3 compressors that work in tandem, should this compressor fail, extended additional load on the remaining compressors can cause premature burnout, and will extend the time required to make ice.

<u>PROJECT EXPENDITURE AND FUNDING</u>												
<u>Expenditure (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Construction - Request	\$0	\$65	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$65
Total	\$0	\$65	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$65
<u>Funding (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Contribution from Cash-In-Lieu Parkland Reserve	\$0	\$65	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$65
Total	\$0	\$65	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$65

Expense amounts in **bold text** – 2022 Budget Request

Expense amounts in shaded text – Previously Committed Funding

2022 Capital Project Detail Report

Project Title: Landfill Household Hazardous Recycling Depot

Project Number: ES1050

Department: Facilities Department

Summary: Replace the Household Hazardous Waste Satellite Facility Trailer with a permanent household hazardous waste structure at the Barrie Landfill Site 272 Ferndale Drive North to reduce safety and compliance risk. The scope of proposed works would include the construction of a modular building with a gas monitoring system and secondary containment.

Rationale: At the Barrie Landfill Site (272 Ferndale Drive North) there is currently a Household Hazardous Waste Satellite Facility (HHWSF) Trailer located at the Recycling Depot on site. A consultant’s review of the Household Hazardous Waste Program identified the need to replace the existing trailer as it is well past its useful life and poses a safety and compliance risk. The intent of the project would be to replace the HHWSF trailer with a permanent household hazardous waste depot. The scope of proposed works would include the construction of a modular building with a gas monitoring system and secondary containment.

PROJECT EXPENDITURE AND FUNDING												
Expenditure (in 000's):												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Construction - Request	\$800	\$200	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,000
Total	\$800	\$200	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,000
Funding (in 000's):												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Province of Ontario Grant Revenue	\$56	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$56
Contribution from Federal Gas Tax Reserve	\$0	\$200	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$200
Contribution from Tax Capital Reserve	\$744	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$744
Total	\$800	\$200	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,000

Expense amounts in **bold text** – 2022 Budget Request

Expense amounts in shaded text – Previously Committed Funding

2022 Capital Project Detail Report

Project Title: Main Library Garbage Bin Replacement

Project Number: 001030

Department: Facilities Department

Summary: The exterior dumpster located in the southeast corner of the parking lot is a traditional bin on casters which does not have a well sealing lid and is very unsightly. The dumpster continuously has bad odors and is hot spot for illegal dumping. With the upcoming landscaping project that will improve the aesthetic appeal of the area around the library, it would be prudent to replace the dumpster bin with something more aesthetically pleasing and more efficient at containing the bad odors.

Rationale: A new well sealed dumpster will be innkeeping with the ambience of the library and will be pleasing to the patrons that visit the library. Staff are proposing that an earthbin be utilized which has the ability of storing more garbage thus reducing the required number of pick ups. The earthbin can be found at earthbin.com

<u>PROJECT EXPENDITURE AND FUNDING</u>												
<u>Expenditure (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Capital Purchase - Request	\$0	\$25	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$25
Total	\$0	\$25	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$25
<u>Funding (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Contribution from Tax Capital Reserve	\$0	\$25	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$25
Total	\$0	\$25	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$25

Expense amounts in **bold text** – 2022 Budget Request

Expense amounts in shaded text – Previously Committed Funding

2022 Capital Project Detail Report

Project Title: Marina Administration Building Refurbishment & Expansion

Project Number: FC1233

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												
<u>Expenditure (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Design - Request	\$50	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$50
Construction - Request	\$0	\$597	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$597
Total	\$50	\$597	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$647
<u>Funding (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Contribution from Marina Reserve	\$50	\$597	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$647
Total	\$50	\$597	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$647

Expense amounts in **bold text** – 2022 Budget Request

Expense amounts in shaded text – Previously Committed Funding

2022 Capital Project Detail Report

Project Title: Marina 'I' and 'J' dock wood decking replacement

Project Number: 001092

Department: Facilities Department

Summary: The marina I and J docks require new composite decking. The existing decking is at the end of its life cycle and requires replacing.

Rationale: The marina I and J docks require new composite decking. The existing decking is at the end of its life cycle and requires replacing.

PROJECT EXPENDITURE AND FUNDING

Expenditure (in 000's):

	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Construction - Request	\$0	\$75	\$75	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$150
Total	\$0	\$75	\$75	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$150

Funding (in 000's):

	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Contribution from Marina Reserve	\$0	\$75	\$75	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$150
Total	\$0	\$75	\$75	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$150

Expense amounts in **bold text** – 2022 Budget Request

Expense amounts in shaded text – Previously Committed Funding

2022 Capital Project Detail Report

Project Title: Marina 'L' Dock Repair and Replacement

Project Number: 001091

Department: Facilities Department

Summary:

Rationale:

<u>PROJECT EXPENDITURE AND FUNDING</u>												
<u>Expenditure (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Construction - Request	\$0	\$50	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$50
Construction - Forecast	\$0	\$0	\$0	\$300	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$300
Total	\$0	\$50	\$0	\$300	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$350
<u>Funding (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Contribution from Marina Reserve	\$0	\$50	\$0	\$300	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$350
Total	\$0	\$50	\$0	\$300	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$350

Expense amounts in **bold text** – 2022 Budget Request

Expense amounts in shaded text – Previously Committed Funding

2022 Capital Project Detail Report

Project Title: McClaren Art Center Window Replacement Program

Project Number: 001046

Department: Facilities Department

Summary: The large windows at the McClaren Art Center are at the end of their life cycle. Many of the seals on the windows have failed and the windows require replacing. Staff are requesting funds for a window replacement project to replace windows on an as needed basis over 4 years starting in 2022.

Rationale:

<u>PROJECT EXPENDITURE AND FUNDING</u>												
<u>Expenditure (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Construction - Request	\$0	\$50	\$50	\$50	\$50	\$0	\$0	\$0	\$0	\$0	\$0	\$200
Total	\$0	\$50	\$50	\$50	\$50	\$0	\$0	\$0	\$0	\$0	\$0	\$200
<u>Funding (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Contribution from Tax Capital Reserve	\$0	\$50	\$50	\$50	\$50	\$0	\$0	\$0	\$0	\$0	\$0	\$200
Total	\$0	\$50	\$50	\$50	\$50	\$0	\$0	\$0	\$0	\$0	\$0	\$200

Expense amounts in **bold text** – 2022 Budget Request

Expense amounts in shaded text – Previously Committed Funding

2022 Capital Project Detail Report

Project Title: McClaren Arts Center Floor Refinishing

Project Number: 001044

Department: Facilities Department

Summary: The wood floors on the second floor of the McClaren Arts Center have been noted as being in very poor condition, requiring refinishing or replacement. Refinishing if the existing wood floor would bring new life to the floor and increase the aesthetics within building. A new vibrant floor would be appealing to those that rent the space.

Rationale:

<u>PROJECT EXPENDITURE AND FUNDING</u>												
<u>Expenditure (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Construction - Request	\$0	\$50	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$50
Total	\$0	\$50	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$50
<u>Funding (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Contribution from Tax Capital Reserve	\$0	\$50	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$50
Total	\$0	\$50	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$50

2022 Capital Project Detail Report

Project Title: McClaren Arts Centre RTU Replacement and optimization

Project Number: 001026

Department: Facilities Department

Summary: The existing RTU at McClaren Arts Centre has reached the end of its life cycle. The RTU is a 70 ton unit which is 21 years old. Over the last several years, a significant amount of operating dollars have been spent repairing the unit. In addition, it is believed that the unit is oversized for the space that it serves. In combination with a replacement, staff would retain a consultant to verify the required size and look at more efficient options.

Rationale: The RTU is at the end of its life cycle, and to avoid spending a significant amount of operating dollars on replacing or repairing parts, a more efficient system would eliminate the operating dollars spent and save money on the operating costs.

<u>PROJECT EXPENDITURE AND FUNDING</u>												
<u>Expenditure (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Construction - Request	\$0	\$350	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$350
Total	\$0	\$350	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$350
<u>Funding (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Contribution from Tax Capital Reserve	\$0	\$350	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$350
Total	\$0	\$350	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$350

2022 Capital Project Detail Report

Project Title: Operations Centre Master Plan Implementation

Project Number: FC1124

Department: Facilities Department

Summary: The 50 year old R.A. Archer Operations Centre requires major redevelopment to replace obsolete infrastructure, maximize operational efficiencies and support expanded Roads, Parks, Fleet and Traffic operations for the Hewitt and Salem lands.

Rationale: The Operations Master Plan Project originated in 2015 with an identified need for growth to accommodate the Hewitt and Salem Secondary Plan lands as well as replace aged, inefficient infrastructure on the current 165 Ferndale Drive site. A Master Plan for the City's Roads, Parks, Fleet and Traffic Operations was undertaken and presented to Council in 2016 (FCT003-16) which established the future service delivery model. In 2017, a subsequent study was completed to identify an appropriate parcel of land in the Salem and Hewitt secondary plan lands to fulfill the proposed service delivery model. In June 2018 a report was delivered to the Infrastructure, Investment and Development Services Committee (IIDSC) with motion 18-G-158 providing approval to continue the implementation of the Operations Master Plan. While the original Master Plan report identified a major renovation of the R.A. Archer Centre, the 2018 IIDSC report updated this to a full replacement following a review of the logistics and cost associated with renovating the existing structure. Subsequent to that report, the City has invested as little as possible on the existing facility.

The existing R.A. Archer Operations Centre was built almost 50 years ago when the city was a fraction of its current size. The master plan completed in 2016 looked at several options available to support city growth and concluded that the Ferndale site itself is well placed geographically for continued operations if supported by an operations yard in the Salem area. Core Roads, Parks and Fleet operations will continue to be based out of Ferndale while the south operations yard will provide a local base to house winter control materials and equipment such as sidewalk plows needed to support the Salem and Hewitt communities.

This year staff have completed the design for a much needed Sand / Salt dome that will also house the City's winter roads control vehicles and materials and the 2020 budget request will fund the construction of this building as well as the reconfiguration of site elements to support future redevelopment. Staff are also in the midst of finalizing an updated Operations Master Plan Feasibility Study that will address operational efficiencies, site logistics, security and propose the phased replacement of failed on site infrastructure while maintaining all essential City services to its residents. This project will carry out the entire Operations Master Plan including both a redevelopment of 165 Ferndale Drive as well as the development of a new campus style, south end yard.

PROJECT EXPENDITURE AND FUNDING

Expenditure (in 000's):

	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
PreDesign - Request	\$200	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$200
Design - Request	\$1,050	\$2,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,050
Construction - Request	\$6,700	\$3,000	\$14,000	\$4,500	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$28,200
PreDesign - Forecast	\$0	\$0	\$0	\$500	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$500
Total	\$7,950	\$5,000	\$14,000	\$5,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$31,950

Funding (in 000's):

Expense amounts in **bold text** – 2022 Budget Request

Expense amounts in shaded text – Previously Committed Funding

	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Debenture Proceeds - DCs	\$2,685	\$2,500	\$7,000	\$2,500	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$14,685
Debenture Proceeds - Tax	\$5,265	\$2,500	\$7,000	\$2,500	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$17,265
Total	\$7,950	\$5,000	\$14,000	\$5,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$31,950

Expense amounts in **bold text** – 2022 Budget Request

Expense amounts in shaded text – Previously Committed Funding

2022 Capital Project Detail Report

Project Title: Painswick Library Metal Roof Repair

Project Number: 001110

Department: Facilities Department

Summary: Painswick library roof has repeatedly leaked and although the facility is relatively new it is no longer under warranty. Repeated leaks have resulted in increased facility operational costs and has negatively affected library operations.

Rationale: In order to address the ongoing roof leaks at the painswick library, the installation of a new roofing system over the existing is the most cost affective solution, and elements the risk of exposing the building and its interior finishes to damages caused by water infiltration during a full scale replacement. The option presented is the most cost affective with minimal risk.

<u>PROJECT EXPENDITURE AND FUNDING</u>												
<u>Expenditure (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Design - Request	\$0	\$35	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$35
Construction - Request	\$0	\$250	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$250
Total	\$0	\$285	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$285
<u>Funding (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Contribution from Tax Capital Reserve	\$0	\$285	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$285
Total	\$0	\$285	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$285

2022 Capital Project Detail Report

Project Title: Painswick Library Parking Lot and Landscaping Repairs

Project Number: 001072

Department: Facilities Department

Summary: Cracking of the asphalt parking lot has increased. In order to stop the rate of deterioration/cracking, the parking lot should be shaved and repaved.

Rationale: In order to stop the rate of deterioration/cracking, the parking lot should be shaved and repaved. Yearly maintenance of the parking lot will reduce the rate of deterioration therefore prolonging the life of the parking lot and avoiding the cost of early or full replacement

<u>PROJECT EXPENDITURE AND FUNDING</u>												
<u>Expenditure (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Capital Purchase - Request	\$0	\$10	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$10
Capital Purchase - Forecast	\$0	\$0	\$150	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$150
Total	\$0	\$10	\$150	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$160
<u>Funding (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Contribution from Cash-In-Lieu Parkland Reserve	\$0	\$10	\$150	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$160
Total	\$0	\$10	\$150	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$160

Expense amounts in **bold text** – 2022 Budget Request

Expense amounts in shaded text – Previously Committed Funding

2022 Capital Project Detail Report

Project Title: Sadlon Arena - Roof Repairs

Project Number: FC1254

Department: Facilities Department

Summary: This project involves the removal and replacement of the existing modified bitumen roof membrane at deteriorated and failing sections of the facility.

Rationale: The existing modified bitumen roof membrane on the lower portions of the facility is failing and overdue for replacement. The roof membrane was installed in 1995 with a life expectancy of 20 years and has reached the end of its life cycle. In recent years, there have been leaks in this area. The roof membrane will continue to deteriorate as it continues to age it will develop leaks. Failure of the roof membrane becomes more of a risk year after year and can cause water leaks to damage the interior and exterior components and deteriorate the roof and surrounding materials. The cost impact of this damage would result in cancelled events which would mean a loss of revenue to the City. The replacement of the roof membrane will preserve the condition of the building, and result in reduced maintenance costs. The general scope and budget was recommended through a roof assessment completed by a consultant.

PROJECT EXPENDITURE AND FUNDING												
<u>Expenditure (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Construction - Request	\$425	\$250	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$675
Total	\$425	\$250	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$675
<u>Funding (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Contribution from Tax Capital Reserve	\$425	\$250	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$675
Total	\$425	\$250	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$675

2022 Capital Project Detail Report

Project Title: Sadlon Arena Fire Sprinkler System Replacement

Project Number: 001060

Department: Facilities Department

Summary: This project will replace the existing dry sprinkler system piping at the Sadlon Arena. The dry sprinkler system is the fire protection system serving the ice surface and spectator seating.

Rationale: The existing piping is original to the building and approximately 25 years old. The piping is approaching its end of useful life and in need of replacement. For several years, staff have been patching holes in the dry system, however, a replacement is required in order to maintain an adequate fire protection system for the arenas bowl area which includes the ice surface and spectator seating. There is significant risk to building occupants and City assets should failure of this system occur. Further, a non functioning fire protection system will require the immediate closure of the facility.

<u>PROJECT EXPENDITURE AND FUNDING</u>												
<u>Expenditure (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Construction - Request	\$0	\$200	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$200
Total	\$0	\$200	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$200
<u>Funding (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Contribution from Tax Capital Reserve	\$0	\$200	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$200
Total	\$0	\$200	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$200

Expense amounts in **bold text** – 2022 Budget Request

Expense amounts in shaded text – Previously Committed Funding

2022 Capital Project Detail Report

Project Title: Sadlon Arena Stage AV Equipment Improvements

Project Number: 001070

Department: Facilities Department

Summary: The project involves the installation of new audio visual (AV) equipment at the Sadlon Arena. This equipment will serve events and performances hosted at the Sadlon Arena.

Rationale: The Sadlon Arena hosts several performances and events annually. The current equipment is designed for large scale performances that would occupy the entirety of the arena bowl area of the facility. This new equipment is designed to attract smaller scale performances which would only require the use of half the arena bowl area. This equipment creates a more intimate atmosphere required for small performances and events. These improvements can increase facility bookings and revenue for the facility.

<u>PROJECT EXPENDITURE AND FUNDING</u>												
<u>Expenditure (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Capital Purchase - 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
<u>Funding (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	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

2022 Capital Project Detail Report

Project Title: Simcoe Foresters Museum Roof Replacement

Project Number: 001089

Department: Facilities Department

Summary: The roof of the Simcoe Foresters Museum building is in very poor condition and requires replacement. Staff are proposing to replace the roof with a metal or composite roof system that visually replicates the look of cedar shingles however it has superior protection and is not prone to deterioration like standard roofing applications.

Rationale: The expense of replacing the roof system is a minor cost in comparison to the cost of the damages caused by water leaking through the roof. In addition, a roof leak can cause damage to the contents of the museum which have an incredible heritage value. Keeping these artifacts safe from damage or deterioration is imperative to the City of Barrie in order to continue to provide the public an opportunity to visit and learn about the military heritage of Simcoe County and Canada.

PROJECT EXPENDITURE AND FUNDING

Expenditure (in 000's):

	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Design - Request	\$0	\$20	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$20
Construction - Request	\$0	\$115	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$115
Total	\$0	\$135	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$135

Funding (in 000's):

	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Contribution from Tax Capital Reserve	\$0	\$135	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$135
Total	\$0	\$135	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$135

Expense amounts in **bold text** – 2022 Budget Request

Expense amounts in shaded text – Previously Committed Funding

2022 Capital Project Detail Report

Project Title: SWTP - Solar PV Installation

Project Number: 001015

Department: Facilities Department

Summary: Installation of a roof-top solar PV system at the SWTP to generate electricity, offset hydro expenses and reduce greenhouse gas emission.

Rationale: Renewable energy generation is a key component for the City's efforts to achieve carbon neutrality. Installation of a solar PV system provides an economic return by reducing operating costs (\$110K+ annually) greenhouse gas emissions, while producing an IRR of 12% for the corporation.

<u>PROJECT EXPENDITURE AND FUNDING</u>												
<u>Expenditure (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Construction - Request	\$0	\$1,402	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,402
Total	\$0	\$1,402	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,402
<u>Funding (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Contribution from Water Capital Reserve	\$0	\$1,402	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,402
Total	\$0	\$1,402	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,402

2022 Capital Project Detail Report

Project Title: SWTP-Garage Floor Structural Rehabilitation and Prevention

Project Number: FC1256

Department: Facilities Department

Summary: Complete the design and construction for structural repairs to the garage floor concrete slab and structure at the Surface Water Treatment Plant. Once repairs are complete, install a protective traffic coating and under body vehicle wash to prolong the life expectancy of the concrete floor and structure as well as the city owned fleet that use the space.

Rationale: The existing concrete floor is rapidly deteriorating as there is no protective coating to prevent infiltration of water, salt, etc. Vehicles enter the garage year round producing melt water from the bottom of the vehicles. This meltwater contains many additives that are harmful to concrete and steel including salt, brine, and water itself. The concrete is starting to spall in spots and the structural rebar can already been seen in several areas rusting and showing signs of failure. This project will analyze the problematic areas, properly correct any damage, then install the proper traffic coatings and under body vehicle wash to renew the life of the concrete floor and structure as well as increase the life expectancy of the city owned fleet of vehicles that use the space.

PROJECT EXPENDITURE AND FUNDING												
<u>Expenditure (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Design - Request	\$0	\$300	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$300
Construction - Forecast	\$0	\$0	\$1,250	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,250
Total	\$0	\$300	\$1,250	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,550
<u>Funding (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Contribution from Water Capital Reserve	\$0	\$300	\$1,250	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,550
Total	\$0	\$300	\$1,250	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,550

Expense amounts in **bold text** – 2022 Budget Request

Expense amounts in shaded text – Previously Committed Funding

2022 Capital Project Detail Report

Project Title: Transit Downtown Mini Hub

Project Number: FC1250

Department: Facilities Department

Summary: Minor modifications would be made to the existing curbside parking spots at Maple Avenue to accommodate a lay-by bus stop on the east and west side of the road as well as a heated shelter on the west side of Maple Avenue as the Minor Hub. In addition, automatic ticket machines would be located within the future permanent market for quick and convenient sales to all transit riders.

Rationale: As outlined in the Mobility Hub Feasibility Study completed by WSP and presented in staff report TPS004-19, the Allandale Hub Strategy included for a mini hub that would be located at 24 Maple Ave (Current Transit Terminal). Maintaining a downtown presence is important to the City of Barrie for the following reasons:

- a) Supports local businesses, downtown intensification, and the permanent market project by providing city-wide sustainable mobility.
- b) Enables a place for downtown residence to purchase tickets close to home or work.
- c) Provides a timed transfer location and thus enhanced mobility to downtown residents similar to what is offered today at the existing terminal.
- d) Limits the disruption to existing downtown riders.
- e) Provides a lay-by for routes to terminate downtown resulting in more efficient and flexible transit routing.

PROJECT EXPENDITURE AND FUNDING												
<u>Expenditure (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Construction - Request	\$50	\$284	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$334
Total	\$50	\$284	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$334
<u>Funding (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Province of Ontario Grant Revenue	\$17	\$92	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$109
Government of Canada Grant Revenue	\$20	\$111	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$131
Contribution from Tax Capital Reserve	\$13	\$81	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$95
Total	\$50	\$284	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$334

Expense amounts in **bold text** – 2022 Budget Request

Expense amounts in shaded text – Previously Committed Funding

2022 Capital Project Detail Report

Project Title: WWTF Building Envelope & Brick Repair Program

Project Number: FC1167

Department: Facilities Department

Summary: The Secondary Digester Tank at the Waste Water Treatment Facility has an insulated exterior wall assembly (façade) that has failed. The currently condition of the façade is severely deteriorated which poses a risk to health and safety of workers as well as the process within the tank. An emergency procurement request is underway in 2019 to address the immediate health and safety concern. A Capital Status Request will also be put forth in 2019 to complete a detailed design and cost analysis for a permanent solution. This request is to earmark funding for the full removal and replacement of the insulated exterior wall assembly on the Secondary Digester Tank.

Rationale: The secondary digester was constructed in 1977 (42 years old) and is the only secondary digester on site. The secondary digester tank forms part of the wastewater solids treatment process. The residual solids removed from the municipal wastewater stream are anaerobically digested through a two stage process in which the material is stabilized by eliminating/reducing pathogens, odour and organic mass. The first stage is the primary step where the primary digesters are heated to approximately 37 degrees C and mixed to initiate a high rate of stabilization and methane gas production. The second step flows through the secondary digester which a sealed unheated quiescent treatment tank where the material completes the stabilization process. The resulting bio-solids are gravity thickened prior to transfer to either agricultural land or the storage facility in Oro-Medonte. The insulated exterior wall assembly is crucial to keeping the sludge at 37 degrees C and maximizing the effectiveness of treatment process, especially during winter months. The drip edge and methods to prevent water infiltration have failed which has allowed water to penetrate through the insulated exterior wall assembly. The results are completely saturated insulation which will no longer provide an insulating factor, severely deteriorated brick ties and spalling bricks both of which pose a health and safety risk of falling bricks. Infrared scanning of the insulated exterior wall assembly has confirmed that the insulation behind the brick is completely saturated and no longer effective which is why a full removal and replacement is being recommended.

<u>PROJECT EXPENDITURE AND FUNDING</u>												
<u>Expenditure (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Construction - Request	\$120	\$500	\$200	\$200	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,020
Construction - Forecast	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total	\$120	\$500	\$200	\$200	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,020
<u>Funding (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Contribution from WW Capital Reserve	\$120	\$500	\$200	\$200	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,020
Total	\$120	\$500	\$200	\$200	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,020

Expense amounts in **bold text** – 2022 Budget Request

Expense amounts in shaded text – Previously Committed Funding

2022 Capital Project Detail Report

Project Title: WWTF Innovation Center

Project Number: FC1215

Department: Facilities Department

Summary: Replacement of the WWTF Administration building including laboratory and support space away from the plant inlet. This is required to be completed in advance of work scheduled to expand plant capacity, which is necessary to support city growth.

Rationale: The existing Administrative Building at the WWTF site was constructed in 1979 over top of existing concrete tanks at the head end of the wastewater inlet side of the existing treatment facility. It includes a laboratory and administrative space as well as a garage, fabrication and storage space. The existing structure is approximately 14,000 square feet including a temporary site trailer that will 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 resulting from city growth. As it is currently anticipated the plant will reach capacity by 2031, 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.

PROJECT EXPENDITURE AND FUNDING												
<u>Expenditure (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
PreDesign - Request	\$1,175	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,175
Design - Request	\$0	\$1,500	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,500
Construction - Request	\$0	\$4,500	\$6,000	\$2,750	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$13,250
Total	\$1,175	\$6,000	\$6,000	\$2,750	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$15,925
<u>Funding (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Debenture Proceeds - DCs	\$0	\$3,840	\$3,840	\$1,760	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$9,440
Contribution from DC WW Serv Facilities Reserve	\$728	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$728
Contribution from WW Capital Reserve	\$448	\$2,160	\$2,160	\$990	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$5,758
Total	\$1,175	\$6,000	\$6,000	\$2,750	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$15,925

Expense amounts in **bold text** – 2022 Budget Request

Expense amounts in shaded text – Previously Committed Funding

2022 Capital Project Detail Report

Project Title: 2021 Development Charge Study, Community Benefit Charge Strategy and By-law Updates

Project Number: FI1025

Department: Finance Department

Summary: The City will be looking to implement a Community Benefits Charge (CBC) to augment funding of growth related capital works. The City will require a CBC Strategy and a by-law. We plan to align this work with an update to the DC Background Study. By aligning these two projects, we will be able to take advantage of synergies.

Rationale: The City will be looking to implement a Community Benefits Charge (CBC) to augment funding of growth related capital works. The City will require a CBC Strategy and a by-law. We plan to align this work with an update to the DC Background Study. By aligning these two projects, we will be able to take advantage of synergies.

<u>PROJECT EXPENDITURE AND FUNDING</u>												
<u>Expenditure (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Study - Request	\$150	\$95	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$245
Total	\$150	\$95	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$245
<u>Funding (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Contribution from DC Administration Reserve	\$150	\$95	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$245
Total	\$150	\$95	\$0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$245

Expense amounts in **bold text** – 2022 Budget Request

Expense amounts in shaded text – Previously Committed Funding

2022 Capital Project Detail Report

Project Title: County of Simcoe Capital Program - Long Term Care & Senior Services

Project Number: FI1018

Department: Finance Department

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												
<u>Expenditure (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Service Partner - Request	\$494	\$588	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,082
Service Partner - Forecast	\$0	\$0	\$1,201	\$1,528	\$1,424	\$1,519	\$1,461	\$1,463	\$1,404	\$1,443	\$1,739	\$13,182
Total	\$494	\$588	\$1,201	\$1,528	\$1,424	\$1,519	\$1,461	\$1,463	\$1,404	\$1,443	\$1,739	\$14,265
<u>Funding (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Contribution from DC Long Term Care Reserve	\$0	\$66	\$144	\$188	\$187	\$186	\$185	\$183	\$182	\$181	\$173	\$1,675
Contribution from Simcoe County Capital Reserve	\$494	\$522	\$1,058	\$1,339	\$1,237	\$1,333	\$1,277	\$1,280	\$1,222	\$1,262	\$1,567	\$12,590
Total	\$494	\$588	\$1,201	\$1,528	\$1,424	\$1,519	\$1,461	\$1,463	\$1,404	\$1,443	\$1,739	\$14,265

2022 Capital Project Detail Report

Project Title: County of Simcoe Capital Program - Paramedic Services

Project Number: FI1019

Department: Finance Department

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												
<u>Expenditure (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Service Partner - Request	\$7,229	\$763	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$7,992
Service Partner - Forecast	\$0	\$0	\$1,272	\$1,411	\$1,246	\$1,259	\$1,463	\$1,148	\$1,675	\$2,013	\$1,966	\$13,454
Total	\$7,229	\$763	\$1,272	\$1,411	\$1,246	\$1,259	\$1,463	\$1,148	\$1,675	\$2,013	\$1,966	\$21,446
<u>Funding (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Contribution from DC Paramedics Reserve	\$3,238	\$152	\$374	\$383	\$446	\$399	\$583	\$536	\$578	\$526	\$603	\$7,819
Contribution from Simcoe County Capital Reserve	\$3,991	\$611	\$898	\$1,028	\$800	\$860	\$880	\$612	\$1,096	\$1,488	\$1,364	\$13,627
Total	\$7,229	\$763	\$1,272	\$1,411	\$1,246	\$1,259	\$1,463	\$1,148	\$1,675	\$2,013	\$1,966	\$21,446

2022 Capital Project Detail Report

Project Title: County of Simcoe Capital Program - Social Housing & Community Services

Project Number: FI1020

Department: Finance Department

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):												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Service Partner - Request	\$7,347	\$2,623	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$9,971
Service Partner - Forecast	\$0	\$0	\$3,527	\$4,257	\$4,797	\$5,574	\$5,481	\$5,585	\$5,477	\$5,398	\$5,040	\$45,137
Total	\$7,347	\$2,623	\$3,527	\$4,257	\$4,797	\$5,574	\$5,481	\$5,585	\$5,477	\$5,398	\$5,040	\$55,108
Funding (in 000's):												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Contribution from DC Social Housing Reserve	\$4,943	\$442	\$577	\$697	\$851	\$1,013	\$1,013	\$1,013	\$1,013	\$1,013	\$930	\$13,508
Contribution from Simcoe County Capital Reserve	\$2,404	\$2,181	\$2,950	\$3,560	\$3,946	\$4,561	\$4,468	\$4,572	\$4,464	\$4,385	\$4,111	\$41,600
Total	\$7,347	\$2,623	\$3,527	\$4,257	\$4,797	\$5,574	\$5,481	\$5,585	\$5,477	\$5,398	\$5,040	\$55,108

2022 Capital Project Detail Report

Project Title: ERP Sustainment Program

Project Number: CC1000

Department: Finance Department

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												
<u>Expenditure (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Execute - Request	\$2,250	\$350	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,600
Execute - Forecast	\$0	\$0	\$350	\$350	\$350	\$350	\$0	\$0	\$0	\$0	\$0	\$1,400
Total	\$2,250	\$350	\$350	\$350	\$350	\$350	\$0	\$0	\$0	\$0	\$0	\$4,000
<u>Funding (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Contribution from Tax Capital Reserve	\$1,238	\$193	\$193	\$193	\$193	\$193	\$0	\$0	\$0	\$0	\$0	\$2,200
Contribution from WW Capital Reserve	\$450	\$70	\$70	\$70	\$70	\$70	\$0	\$0	\$0	\$0	\$0	\$800
Contribution from Water Capital Reserve	\$450	\$70	\$70	\$70	\$70	\$70	\$0	\$0	\$0	\$0	\$0	\$800
Contribution from Parking Capital Reserve	\$113	\$18	\$18	\$18	\$18	\$18	\$0	\$0	\$0	\$0	\$0	\$200
Total	\$2,250	\$350	\$350	\$350	\$350	\$350	\$0	\$0	\$0	\$0	\$0	\$4,000

Expense amounts in **bold text** – 2022 Budget Request

Expense amounts in shaded text – Previously Committed Funding

2022 Capital Project Detail Report

Project Title: Stormwater Climate Action Fund

Project Number: FI1024

Department: Finance Department

Summary: Development of the Stormwater Climate Action Fund, including the technical analysis that will develop specific fees, a service level review for capital and operations as well as input from the City's Stormwater Asset Management Plan.

Rationale: This project is dedicated to the creation of a revenue stream to fund Stormwater infrastructure that is equitable to all residents, versus the traditional approach of using property tax that are based on assessed property value. Assessed property value poorly correlates to consumption (or demand) of stormwater infrastructure.

This steady revenue stream allows for more certainty when planning stormwater infrastructure improvements as well as providing flexibility to develop more efficient operation and maintenance programs of larger scope to leverage economies of scale. Which will in turn, mitigate flooding and public health and safety risks.

PROJECT EXPENDITURE AND FUNDING												
<u>Expenditure (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Study - Request	\$933	\$467	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,400
Total	\$933	\$467	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,400
<u>Funding (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Contribution from Tax Capital Reserve	\$933	\$467	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,400
Total	\$933	\$467	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,400

2022 Capital Project Detail Report

Project Title: APLI (Applications, Permits, Licenses and Inspections) Expansion - Phase 3

Project Number: CC1003

Department: Information Technology

Summary: Implementation of the planned phase III of the existing Applications, Permits, Licensing, Inspections project (APLI), involving a roll out of the Accela system, and process re-engineering for By-Law, Fire, Environmental Services, Real Estate, Culture and Clerks Services.

Rationale: IT1026

PROJECT EXPENDITURE AND FUNDING												
<u>Expenditure (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Execute - Request	\$0	\$340	\$340	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$680
Total	\$0	\$340	\$340	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$680
<u>Funding (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Contribution from Tax Capital Reserve	\$0	\$340	\$340	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$680
Total	\$0	\$340	\$340	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$680

Expense amounts in **bold text** – 2022 Budget Request

Expense amounts in shaded text – Previously Committed Funding

2022 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.

PROJECT EXPENDITURE AND FUNDING												
<u>Expenditure (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Plan - Request	\$225	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$225
Capital Purchase - Request	\$200	\$75	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$275
Capital Purchase - Forecast	\$0	\$0	\$75	\$50	\$50	\$60	\$0	\$0	\$0	\$0	\$0	\$235
Total	\$425	\$75	\$75	\$50	\$50	\$60	\$0	\$0	\$0	\$0	\$0	\$735
<u>Funding (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Contribution from Tax Capital Reserve	\$425	\$75	\$75	\$50	\$50	\$60	\$0	\$0	\$0	\$0	\$0	\$735
Total	\$425	\$75	\$75	\$50	\$50	\$60	\$0	\$0	\$0	\$0	\$0	\$735

Expense amounts in **bold text** – 2022 Budget Request

Expense amounts in shaded text – Previously Committed Funding

2022 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.

<u>PROJECT EXPENDITURE AND FUNDING</u>												
<u>Expenditure (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Capital Purchase - Request	\$300	\$1,320	\$300	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,920
Total	\$300	\$1,320	\$300	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,920
<u>Funding (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Contribution from Tax Capital Reserve	\$300	\$1,320	\$300	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,920
Total	\$300	\$1,320	\$300	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,920

Expense amounts in **bold text** – 2022 Budget Request

Expense amounts in shaded text – Previously Committed Funding

2022 Capital Project Detail Report

Project Title: CEM - System Integraions

Project Number: 001103

Department: Information Technology

Summary:

Rationale:

<u>PROJECT EXPENDITURE AND FUNDING</u>												
<u>Expenditure (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Capital Purchase - Request	\$0	\$235	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$235
Total	\$0	\$235	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$235
<u>Funding (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Contribution from Tax Capital Reserve	\$0	\$235	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$235
Total	\$0	\$235	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$235

Expense amounts in **bold text** – 2022 Budget Request

Expense amounts in shaded text – Previously Committed Funding

2022 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.

<u>PROJECT EXPENDITURE AND FUNDING</u>												
<u>Expenditure (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Execute - Request	\$95	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$95
Capital Purchase - Request	\$175	\$50	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$225
Capital Purchase - Forecast	\$0	\$0	\$50	\$150	\$150	\$150	\$150	\$200	\$200	\$0	\$0	\$1,050
Total	\$270	\$50	\$50	\$150	\$150	\$150	\$150	\$200	\$200	\$0	\$0	\$1,370
<u>Funding (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Contribution from Building Code Surplus Reserve	\$1	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1
Contribution from Tax Capital Reserve	\$268	\$50	\$50	\$150	\$150	\$150	\$150	\$200	\$200	\$0	\$0	\$1,368
Contribution from WW Capital Reserve	\$1	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1
Contribution from Water Capital Reserve	\$1	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1
Total	\$270	\$50	\$50	\$150	\$150	\$150	\$150	\$200	\$200	\$0	\$0	\$1,370

Expense amounts in **bold text** – 2022 Budget Request

Expense amounts in shaded text – Previously Committed Funding

2022 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.

<u>PROJECT EXPENDITURE AND FUNDING</u>												
<u>Expenditure (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Execute - Request	\$913	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$913
Capital Purchase - Request	\$611	\$50	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$661
Capital Purchase - Forecast	\$0	\$0	\$50	\$50	\$50	\$50	\$0	\$0	\$0	\$0	\$0	\$200
Total	\$1,525	\$50	\$50	\$50	\$50	\$50	\$0	\$0	\$0	\$0	\$0	\$1,775
<u>Funding (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Contribution from Building Code Surplus Reserve	\$1	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1
Contribution from Tax Capital Reserve	\$1,482	\$50	\$50	\$50	\$50	\$50	\$0	\$0	\$0	\$0	\$0	\$1,732
Contribution from WW Capital Reserve	\$16	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$16
Contribution from Water Capital Reserve	\$24	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$24
Total	\$1,524	\$50	\$50	\$50	\$50	\$50	\$0	\$0	\$0	\$0	\$0	\$1,774

Expense amounts in **bold text** – 2022 Budget Request

Expense amounts in shaded text – Previously Committed Funding

2022 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												
<u>Expenditure (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Execute - Request	\$1,132	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,132
Capital Purchase - Request	\$3,368	\$100	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,468
Capital Purchase - Forecast	\$0	\$0	\$650	\$575	\$300	\$500	\$50	\$50	\$0	\$0	\$0	\$2,125
Total	\$4,501	\$100	\$650	\$575	\$300	\$500	\$50	\$50	\$0	\$0	\$0	\$6,726
<u>Funding (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Contribution from Reserves	\$9	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$9
Contribution from Tax Capital Reserve	\$4,359	\$100	\$650	\$575	\$300	\$500	\$50	\$50	\$0	\$0	\$0	\$6,584
Contribution from WW Capital Reserve	\$67	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$67
Contribution from Water Capital Reserve	\$66	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$66
Total	\$4,501	\$100	\$650	\$575	\$300	\$500	\$50	\$50	\$0	\$0	\$0	\$6,726

Expense amounts in **bold text** – 2022 Budget Request

Expense amounts in shaded text – Previously Committed Funding

2022 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.

<u>PROJECT EXPENDITURE AND FUNDING</u>												
<u>Expenditure (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Plan - Request	\$200	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$200
Execute - Request	\$257	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$257
Capital Purchase - Request	\$232	\$130	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$362
Capital Purchase - Forecast	\$0	\$0	\$130	\$130	\$130	\$130	\$130	\$130	\$130	\$0	\$0	\$910
Total	\$688	\$130	\$130	\$130	\$130	\$130	\$130	\$130	\$130	\$0	\$0	\$1,728
<u>Funding (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Contribution from Tax Capital Reserve	\$673	\$130	\$130	\$130	\$130	\$130	\$130	\$130	\$130	\$0	\$0	\$1,713
Contribution from WW Capital Reserve	\$6	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$6
Contribution from Water Capital Reserve	\$8	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$8
Total	\$687	\$130	\$130	\$130	\$130	\$130	\$130	\$130	\$130	\$0	\$0	\$1,727

Expense amounts in **bold text** – 2022 Budget Request

Expense amounts in shaded text – Previously Committed Funding

2022 Capital Project Detail Report

Project Title: Fire Record Management Systems Upgrade

Project Number: IT1057

Department: Information Technology

Summary: Barrie Fire and Emergency Services (BFES) requires an updated Records Management System (RMS) that supports modern and secure integration protocols to eliminate dual entry and maintenance between the RMS, Computer Aided Dispatch (CAD), Time Tracking, Inspections and Permitting systems. Having well integrated systems is a critical next step in digitalizing many of BFES's process.

Rationale: Barrie Fire and Emergency Services (BFES) requires an updated Records Management System (RMS) that supports modern and secure integration protocols to eliminate dual entry and maintenance between the RMS, Computer Aided Dispatch (CAD), Time Tracking, Inspections and Permitting systems. Having well integrated systems is a critical next step in digitalizing many of BFES's process.

Migration of the information in the legacy RMS is critical to the success of this project. Part of the funding will be used to create a temporary dedicate BFES resource focusing on data cleanup and migration of the 20+ years of records and information. This resource will be the project team's liaison into BFES and will pull in additional BFES subject matter experts as needed. It's anticipated the resource will be onboarded Q3 2021 and work through to the end of 2022. Project Management and IT Services will be completed with existing staff resources.

PROJECT EXPENDITURE AND FUNDING												
<u>Expenditure (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Capital Purchase - Request	\$200	\$115	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$315
Total	\$200	\$115	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$315
<u>Funding (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Contribution from Tax Capital Reserve	\$200	\$115	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$315
Total	\$200	\$115	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$315

Expense amounts in **bold text** – 2022 Budget Request

Expense amounts in shaded text – Previously Committed Funding

2022 Capital Project Detail Report

Project Title: IT Security Monitoring and Incident Management system

Project Number: IT1055

Department: Information Technology

Summary: Implementation of a SIEM solution.

Rationale: A centralized security monitoring solution provides a single pane view of incidents across the IT Landscape. Currently, each technology platform has built in security monitoring and mitigations abilities. However, as attacks become more sophisticated, so must our monitoring and mitigation abilities.

Centralized security monitoring, using Machine Learning, will monitor the multiple platforms and flag cross platform activities, that on their own, may not be a sign for concerns.

PROJECT EXPENDITURE AND FUNDING												
<u>Expenditure (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Capital Purchase - Request	\$200	\$50	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$250
Total	\$200	\$50	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$250
<u>Funding (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Contribution from Tax Capital Reserve	\$200	\$50	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$250
Total	\$200	\$50	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$250

2022 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												
<u>Expenditure (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Plan - Request	\$522	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$522
Execute - Request	\$240	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$240
Capital Purchase - Request	\$429	\$290	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$719
Capital Purchase - Forecast	\$0	\$0	\$290	\$290	\$290	\$290	\$290	\$290	\$290	\$0	\$0	\$2,030
Total	\$1,191	\$290	\$290	\$290	\$290	\$290	\$290	\$290	\$290	\$0	\$0	\$3,511
<u>Funding (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Contribution from Tax Capital Reserve	\$1,191	\$290	\$290	\$290	\$290	\$290	\$290	\$290	\$290	\$0	\$0	\$3,511
Total	\$1,191	\$290	\$290	\$290	\$290	\$290	\$290	\$290	\$290	\$0	\$0	\$3,511

Expense amounts in **bold text** – 2022 Budget Request

Expense amounts in shaded text – Previously Committed Funding

2022 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):												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Execute - Request	\$1,150	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,150
Capital Purchase - Request	\$2,637	\$765	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,402
Capital Purchase - Forecast	\$0	\$0	\$765	\$765	\$765	\$765	\$0	\$0	\$0	\$0	\$0	\$3,060
Total	\$3,787	\$765	\$765	\$765	\$765	\$765	\$0	\$0	\$0	\$0	\$0	\$7,612
Funding (in 000's):												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Contribution from Tax Capital Reserve	\$3,528	\$679	\$679	\$679	\$679	\$679	\$0	\$0	\$0	\$0	\$0	\$6,923
Contribution from WW Capital Reserve	\$90	\$30	\$30	\$30	\$30	\$30	\$0	\$0	\$0	\$0	\$0	\$240
Contribution from Water Capital Reserve	\$168	\$56	\$56	\$56	\$56	\$56	\$0	\$0	\$0	\$0	\$0	\$448
Total	\$3,786	\$765	\$765	\$765	\$765	\$765	\$0	\$0	\$0	\$0	\$0	\$7,611

Expense amounts in **bold text** – 2022 Budget Request

Expense amounts in shaded text – Previously Committed Funding

2022 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 lifecycling 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 lifecycling of radio system hardware and software, ensuring this vital communication environment is always available.

<u>PROJECT EXPENDITURE AND FUNDING</u>												
<u>Expenditure (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Execute - Request	\$2,060	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,060
Capital Purchase - Request	\$0	\$304	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$304
Execute - Forecast	\$0	\$0	\$240	\$240	\$240	\$240	\$0	\$0	\$0	\$0	\$0	\$960
Total	\$2,060	\$304	\$240	\$240	\$240	\$240	\$0	\$0	\$0	\$0	\$0	\$3,324
<u>Funding (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Local Board Contribution	\$602	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$602
Contribution from Police Srv Board Capital Reserve	\$220	\$100	\$120	\$120	\$120	\$120	\$0	\$0	\$0	\$0	\$0	\$800
Contribution from Tax Capital Reserve	\$1,113	\$100	\$120	\$120	\$120	\$120	\$0	\$0	\$0	\$0	\$0	\$1,693
Contribution from WW Capital Reserve	\$62	\$48	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$110
Contribution from Water Capital Reserve	\$62	\$56	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$118
Total	\$2,060	\$304	\$240	\$240	\$240	\$240	\$0	\$0	\$0	\$0	\$0	\$3,324

Expense amounts in **bold text** – 2022 Budget Request

Expense amounts in shaded text – Previously Committed Funding

2022 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												
<u>Expenditure (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Execute - Request	\$1,125	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,125
Capital Purchase - Request	\$2,866	\$850	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,716
Capital Purchase - Forecast	\$0	\$0	\$875	\$885	\$895	\$900	\$910	\$920	\$930	\$940	\$0	\$7,255
Total	\$3,990	\$850	\$875	\$885	\$895	\$900	\$910	\$920	\$930	\$940	\$0	\$12,095
<u>Funding (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Contribution from Building Code Surplus Reserve	\$13	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$13
Contribution from Tax Capital Reserve	\$3,969	\$850	\$875	\$885	\$895	\$900	\$910	\$920	\$930	\$940	\$0	\$12,074
Contribution from WW Capital Reserve	\$5	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$5
Contribution from Water Capital Reserve	\$3	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3
Contribution from Parking Capital Reserve	\$1	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1
Total	\$3,990	\$850	\$875	\$885	\$895	\$900	\$910	\$920	\$930	\$940	\$0	\$12,095

Expense amounts in **bold text** – 2022 Budget Request

Expense amounts in shaded text – Previously Committed Funding

2022 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												
<u>Expenditure (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Execute - Request	\$1,500	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,500
Capital Purchase - Request	\$2,741	\$620	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,361
Capital Purchase - Forecast	\$0	\$0	\$635	\$600	\$596	\$596	\$0	\$0	\$0	\$0	\$0	\$2,427
Total	\$4,241	\$620	\$635	\$600	\$596	\$596	\$0	\$0	\$0	\$0	\$0	\$7,288
<u>Funding (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Contribution from Tax Capital Reserve	\$4,075	\$574	\$589	\$550	\$550	\$550	\$0	\$0	\$0	\$0	\$0	\$6,888
Contribution from WW Capital Reserve	\$60	\$16	\$16	\$18	\$16	\$16	\$0	\$0	\$0	\$0	\$0	\$142
Contribution from Water Capital Reserve	\$105	\$30	\$30	\$32	\$30	\$30	\$0	\$0	\$0	\$0	\$0	\$257
Total	\$4,240	\$620	\$635	\$600	\$596	\$596	\$0	\$0	\$0	\$0	\$0	\$7,287

Expense amounts in **bold text** – 2022 Budget Request

Expense amounts in shaded text – Previously Committed Funding

2022 Capital Project Detail Report

Project Title: Dunlop Street Bridge Sanitary - Sarjeant Drive to Anne Street

Project Number: EN1469

Department: Infrastructure Department

Summary: This project is the relocation of the 750mm sanitary sewer as part of the Dunlop Street Interchange Replacement, from Sarjeant Drive to Anne Street.

Rationale: The MTO is replacing the Dunlop Street Interchange (EN1306); the works will include a wider bridge platform with upgraded infrastructure to accommodate the planned growth to 2041. To facilitate the MTO project, the City is required to relocate the existing trunk sanitary sewer that is currently located at the proposed bridge abutments before 2024.

Currently, the sanitary runs parallel to the highway, crosses Dunlop Street west of the bridge, followed by crossing Hwy 400 south of the bridge to the outlet located at Hart Drive; both of these crossings interfere with MTO's proposed interchange design. This project will include the design and construction to relocate the 750 mm diameter trunk sewer to cross the highway north of the bridge with the Dunlop Street crossing located east of the proposed bridge and connect to the existing Hart Drive outlet.

PROJECT EXPENDITURE AND FUNDING

Expenditure (in 000's):

	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Design - Request	\$8	\$1,000	\$1,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,008
Utilities - Request	\$0	\$250	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$250
Construction - Request	\$0	\$1,210	\$4,000	\$5,500	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$10,710
Total	\$8	\$2,460	\$5,000	\$5,500	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$12,968

Funding (in 000's):

	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Debenture Proceeds - DCs	\$0	\$1,437	\$3,250	\$3,575	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$8,262
Contribution from DC WW Collection FMB Reserve	\$5	\$163	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$148
Contribution from WW Capital Reserve	\$3	\$861	\$1,750	\$1,925	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$4,539
Total	\$8	\$2,460	\$5,000	\$5,500	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$12,968

2022 Capital Project Detail Report

Project Title: Watermain Renewal Program

Project Number: EN1294

Department: Infrastructure Department

Summary: Renewal of watermains that pose a significant risk to the City of Barrie that otherwise are not apart of larger right-of-way reconstruction projects or that hold a strategic value in relation to other surrounding projects.

Rationale: As the City continues to address major infrastructure needs of some of our oldest infrastructure through stand alone right of way reconstruction projects, neighbourhood reconstruction projects, and renewal programs such as road resurfacing, cathodic protection, and sewer rehabilitation, the need still exists to address failing and aging watermains throughout the City. By addressing these watermains through the appropriate renewal efforts, the City will be restoring levels of service, reducing risk, and lower unexpected and costly reactive maintenance and repairs.

<u>PROJECT EXPENDITURE AND FUNDING</u>												
<u>Expenditure (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Design - Request	\$437	\$300	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$737
Construction - Request	\$3,238	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,238
Design - Forecast	\$0	\$0	\$250	\$250	\$250	\$250	\$250	\$250	\$250	\$250	\$0	\$2,000
Construction - Forecast	\$0	\$0	\$2,655	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$10,655
Total	\$3,675	\$300	\$2,905	\$1,250	\$1,250	\$1,250	\$1,250	\$1,250	\$1,250	\$1,250	\$1,000	\$16,630
<u>Funding (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Debenture Proceeds - Water	\$1,020	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,020
Contribution from Water Capital Reserve	\$2,655	\$300	\$2,905	\$1,250	\$1,250	\$1,250	\$1,250	\$1,250	\$1,250	\$1,250	\$1,000	\$15,610
Total	\$3,675	\$300	\$2,905	\$1,250	\$1,250	\$1,250	\$1,250	\$1,250	\$1,250	\$1,250	\$1,000	\$16,630

2022 Capital Project Detail Report

Project Title: Anne Street Right of Way Expansion - Wellington to Edgehill (outside of CAH limits)

Project Number: EN1323

Department: Infrastructure Department

Summary: This project includes additional road improvements beyond MTO's controlled access highway (CAH) limits associated with the Anne Street Highway 400 crossing replacement. The objective is to extend the 5 lane cross-section, cycling lanes and sidewalks to the south leg of the intersection of Anne Street / Edgehill Drive and to south of the intersection of Anne Street / Donald Street, including the redesign of this intersection to remove the directional island, and associated works. MTO is undertaking the work and this represents the City's contribution.

Rationale: MTO is presently undertaking detailed design for this project and is planning to initiate construction in 2021. 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):

	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Design - Request	\$145	\$210	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$355
Property - Request	(\$150)	\$192	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$42
Construction - Request	\$300	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$300
Utilities - Forecast	\$0	\$0	\$307	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$307
Construction - Forecast	\$0	\$0	\$0	\$1,552	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,552
Total	\$295	\$402	\$307	\$1,552	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,555

Funding (in 000's):

	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Contribution from DC Roads Reserve	\$192	\$261	\$199	\$1,009	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,661
Contribution from Tax Capital Reserve	\$103	\$141	\$107	\$543	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$894
Total	\$295	\$402	\$307	\$1,552	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,555

2022 Capital Project Detail Report

Project Title: Anne Street Right of Way Expansion - Wellington to Edgehill (within CAH limits)

Project Number: EN1322

Department: Infrastructure Department

Summary: The project is the City's contribution toward the Ministry of Transportation's planned reconstruction and widening of the Anne Street Highway 400 crossing within the controlled access highway limits (from Wellington Street to Edgehill Drive). This project is required to occur with EN1323 Anne Street Right of Way Expansion - Wellington to Edgehill (outside of CAH limits).

Rationale: MTO is reconstructing the Anne Street crossing to accommodate the planned expansion of Highway 400 to 10 lanes. The City's TMP identified the need for an additional turning lane, cycling lanes and sidewalks. The City has committed to build the additional infrastructure with 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	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Design - Request	\$266	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$266
Construction - Request	\$83	\$500	\$3,073	\$3,073	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$6,730
Total	\$349	\$500	\$3,073	\$3,073	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$6,995

Funding (in 000's):

	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Debenture Proceeds - DCs	\$0	\$325	\$1,998	\$1,998	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$4,320
Contribution from DC Roads Reserve	\$227	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$227
Contribution from Tax Capital Reserve	\$122	\$175	\$1,076	\$1,076	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,448
Total	\$349	\$500	\$3,073	\$3,073	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$6,995

2022 Capital Project Detail Report

Project Title: Bayview Drive New Transmission Watermain & Road Expansion - Little Avenue to Big Bay Point Road

Project Number: EN1288

Department: Infrastructure Department

Summary: Reconstruction and widening of Bayview Drive to 3-lanes, bike lanes, sidewalk on the west side and replacement of an existing transmission watermain between Little Avenue and Big Bay Point Road .

Rationale: The Multi-Modal Active Transportation Master Plan identified the need to widen the existing 2-lane rural cross-section to 3-lanes. A Schedule C Environment Assessment has identified the need for 3-lanes, bike lanes and sidewalk as the preferred alternative. Widening of this link will reinforce the transportation network supporting the Harvie Road / Big Bay Point Road Highway Crossing.

The existing 300mm trunk watermain has been identified for replacement due to corrosion and upsizing requirements to accommodate intensification and growth in the Secondary Plan Lands.

The road widening project is identified in the Council endorsed Multi-Modal Active Transportation Master Plan. The replacement transmission watermain is identified in the Council endorsed Water Storage and Distribution Master Plan.

PROJECT EXPENDITURE AND FUNDING

Expenditure (in 000's):

	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Design - Request	\$2,989	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,989
Property - Request	\$0	\$205	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$205
Construction - Request	\$868	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$868
Utilities - Forecast	\$0	\$0	\$477	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$477
Construction - Forecast	\$0	\$0	\$0	\$3,260	\$4,337	\$1,167	\$0	\$0	\$0	\$0	\$0	\$8,764
Total	\$3,857	\$205	\$477	\$3,260	\$4,337	\$1,167	\$0	\$0	\$0	\$0	\$0	\$13,303

Funding (in 000's):

	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Contribution from DC Reserves Tax	\$921	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$921
Contribution from DC Reserves Water	\$87	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$87
Contribution from DC Roads Reserve	\$1,429	\$100	\$310	\$358	\$2,819	\$759	\$0	\$0	\$0	\$0	\$0	\$5,775
Contribution from DC Water Dist FMB Reserve	\$112	\$10	\$0	\$509	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$630

Contribution from DC WW Collection FMB Reserve	\$0	\$12	\$0	\$656	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$668
Contribution from Tax Capital Reserve	\$1,056	\$54	\$167	\$193	\$1,518	\$408	\$0	\$0	\$0	\$0	\$0	\$3,396
Contribution from WW Capital Reserve	\$0	\$16	\$0	\$869	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$886
Contribution from Water Capital Reserve	\$252	\$13	\$0	\$675	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$940
Total	\$3,857	\$205	\$477	\$3,260	\$4,337	\$1,167	\$0	\$0	\$0	\$0	\$0	\$13,303

2022 Capital Project Detail Report

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

Project Number: EN1164

Department: Infrastructure 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	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Environmental Assessment - Request	\$83	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$83
Design - Request	\$357	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$357
Property - Request	\$585	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$585
Utilities - Request	\$449	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$449
Construction - Request	\$2,354	\$5,797	\$1,475	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$9,626
Total	\$3,828	\$5,797	\$1,475	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$11,100

Funding (in 000's):

	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Debenture Proceeds - DCs	\$0	\$3,768	\$959	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$4,727
Contribution from Development Charge Reserves	\$54	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$54
Contribution from DC Reserves Tax	\$461	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$461
Contribution from DC Roads Reserve	\$990	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$990
Contribution from DC Stormwater FMB Reserve	\$281	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$281

Expense amounts in bold text – 2022 Budget Request

Expense amounts in shaded text – Previously Committed Funding

Contribution from DC Water Dist FMB Reserve	\$648	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$648
Contribution from DC WW Collection FMB Reserve	\$29	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$29
Contribution from Tax Capital Reserve	\$962	\$2,029	\$516	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,507
Contribution from WW Capital Reserve	\$16	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$16
Contribution from Water Capital Reserve	\$387	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$387
Total	\$3,828	\$5,797	\$1,475	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$11,100

2022 Capital Project Detail Report

Project Title: Big Bay Point New Transmission Watermain – Old City Boundary to Collector 11 (Developer)

Project Number: EN1259

Department: Infrastructure Department

Summary: Installation of a new watermain from the former City limits to Collector 11 to support the anticipated Phase 1 growth in the Hewitt’s Secondary Plan area.

Rationale: Proposed development south of Big Bay Point Road in the Hewitt's Secondary Plan area requires urbanizing Big Bay Point Road and increasing the road to three or five lanes. A trunk watermain is needed to provide potable water and fire protection in phase 1 of the Hewitt's Secondary Plan from Collector 11 to Street N. The Transportation MP recommended that Big Bay Point Road be urbanized and widened to 5 lanes to former Barrie Boundary. Funding for the watermain project is 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	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Environmental Assessment - Request	\$4	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$4
Design - Request	\$468	\$91	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$559
Property - Request	(\$161)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	(\$161)
Utilities - Request	(\$9)	\$256	\$50	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$297
Construction - Request	\$9	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$9
Construction - Forecast	\$0	\$0	\$1,178	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,178
Total	\$311	\$347	\$1,228	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,886
Funding (in 000's):												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Developer Front Ending (Annex) - Developer Build	\$270	\$347	\$1,228	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,846
Contribution from Tax Capital Reserve	\$40	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$40
Total	\$311	\$347	\$1,228	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,886

2022 Capital Project Detail Report

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

Project Number: EN1324

Department: Infrastructure 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):												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Design - Request	\$260	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$260
Utilities - Request	\$0	\$15	\$5	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$20
Construction - Request	\$0	\$977	\$655	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,632
Total	\$260	\$992	\$660	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,912
Funding (in 000's):												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Contribution from Tax Capital Reserve	\$260	\$992	\$660	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,912
Total	\$260	\$992	\$660	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,912

2022 Capital Project Detail Report

Project Title: Big Bay Point Road Booster Station VFD Upgrade

Project Number: EN1150

Department: Infrastructure Department

Summary: Replace existing pump starters with Variable Frequency Drives (VFDs), retrofit pump motors, revise SCADA programming, and replace existing pumps and generator (provisional) at the Big Bay Point Booster Pumping Station.

Rationale: The existing mechanical equipment is nearing the end of useful service life providing an opportunity to evaluate potential upgrades. The recommended upgrades include replacement of current pump starters with Variable Frequency Drives (VFDs), retrofit pump motors, revision of Supervisory Control and Data Acquisition (SCADA) programming of pump motors, and replacement of the existing pumps and generator (provisional). The proposed upgrades will increase energy efficiency, flow control and overall booster station operability.

<u>PROJECT EXPENDITURE AND FUNDING</u>												
<u>Expenditure (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Design - Request	\$855	\$100	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$955
Construction - Request	(\$623)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	(\$623)
Total	\$232	\$100	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$332
<u>Funding (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Contribution from Water Capital Reserve	\$232	\$100	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$332
Total	\$232	\$100	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$332

2022 Capital Project Detail Report

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

Project Number: EN1286

Department: Infrastructure 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 was reconstructed as part of the Harvie Hwy 400 Crossing works.

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 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. Elements of the improvements were constructed as part of the Harvie Crossing tender.

PROJECT EXPENDITURE AND FUNDING

Expenditure (in 000's):

	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Design - Request	\$958	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$958
Property - Request	\$132	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$132
Utilities - Request	\$1,372	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,372
Construction - Request	\$5,272	\$3,950	\$3,000	\$140	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$12,361
Total	\$7,735	\$3,950	\$3,000	\$140	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$14,824

Funding (in 000's):

	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Debenture Proceeds - DCs	\$813	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$813
Contribution from DC Reserves Tax	\$814	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$814
Contribution from DC Roads Reserve	\$2,250	\$2,113	\$1,950	\$91	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$5,511
Contribution from DC Stormwater FMB Reserve	\$1,106	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$834
Contribution from DC Water Dist FMB Reserve	\$90	\$432	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$735

Contribution from DC WW Collection FMB Reserve	\$8	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$8
Contribution from Tax Capital Reserve	\$2,566	\$1,172	\$1,050	\$49	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$4,837
Sundry Revenue	\$35	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$35
Contribution from Water Capital Reserve	\$52	\$233	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$285
Total	\$7,735	\$3,950	\$3,000	\$140	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$14,824

2022 Capital Project Detail Report

Project Title: Biosolids Facility Roof Coating Rehabilitation

Project Number: 001077

Department: Infrastructure Department

Summary: The proposed rehabilitation work is required to maintain and extend the service life of the facility structures and involves various structural repairs and rehabilitation at the Bio Solids Facility (BSF).

Rationale: During a recent Condition Assessment (2021), it was found that the roof over tanks, pump room and exterior insulation and finish system required structural repair and rehabilitation for cracks, holes, and spalling of roof slabs, replacement of leaking joint of tunnel roof extension, repair of detached insulation of pump room roof slab, repair of holes in exterior insulation and finish system of biosolids tanks, and waterproofing restoration of roof slabs.

<u>PROJECT EXPENDITURE AND FUNDING</u>												
<u>Expenditure (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Design - Request	\$0	\$200	\$275	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$475
Construction - Forecast	\$0	\$0	\$368	\$1,103	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,470
Total	\$0	\$200	\$643	\$1,103	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,945
<u>Funding (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Contribution from WW Capital Reserve	\$0	\$200	\$643	\$1,103	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,945
Total	\$0	\$200	\$643	\$1,103	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,945

2022 Capital Project Detail Report

Project Title: Bishop Drive Trunk Sanitary Sewer Expansion - Ferndale to Patterson

Project Number: EN1132

Department: Infrastructure Department

Summary: The existing trunk sanitary sewer from Ferndale Drive east located under Bishop Drive through easements to Patterson Road has capacity limitations. Several flow diversions upstream of Bishop Drive provide an economical solution and flow reduction which avoids replacing the sewer on Bishop Drive.

Rationale: The flow diversions need to be completed to minimize the likelihood of sewer back up into residential properties. The upstream flow diversions proposed will be a cost-effective long-term approach that will maintain levels of service and decrease the risk of sewer backups.

PROJECT EXPENDITURE AND FUNDING												
<u>Expenditure (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Design - Request	\$505	\$60	\$50	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$615
Utilities - Request	\$0	\$17	\$492	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$509
Construction - Request	(\$42)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	(\$42)
Construction - Forecast	\$0	\$0	\$1,285	\$1,000	\$227	\$0	\$0	\$0	\$0	\$0	\$0	\$2,512
CSR - Request	\$23	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$23
Total	\$485	\$77	\$1,827	\$1,000	\$227	\$0	\$0	\$0	\$0	\$0	\$0	\$3,615
<u>Funding (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Contribution from Development Charge Reserves	\$16	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$16
Contribution from DC Reserves Wastewater	\$2	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2
Contribution from DC WW Collection FMB Reserve	\$86	\$33	\$786	\$430	\$98	\$0	\$0	\$0	\$0	\$0	\$0	\$1,432
Contribution from WW Capital Reserve	\$381	\$44	\$1,041	\$570	\$129	\$0	\$0	\$0	\$0	\$0	\$0	\$2,165
Total	\$485	\$77	\$1,827	\$1,000	\$227	\$0	\$0	\$0	\$0	\$0	\$0	\$3,615

2022 Capital Project Detail Report

Project Title: Bryne Drive (North) New Road Construction - Harvie Rd to Essa Rd

Project Number: EN1278

Department: Infrastructure Department

Summary: Construction of the unopened portion of Bryne Drive to 5-lanes, bike lanes and sidewalks between Harvie Road and south of Essa Road. This link will help direct traffic to the new Harvie Crossing of Hwy 400 and away from the Essa and Mapleview Interchanges.

Rationale: The Transportation Master Plan 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 Essa to Harvie is needed to reduce traffic congestion at the Essa and Mapleview interchanges by redirecting east / west traffic to the Harvie Road / Big Bay Point Road Highway Crossing.

The City completed a Schedule C Environmental Assessment to determine the preferred alternative for implementation. The project is also identified in the Council endorsed 2013 Transportation Master Plan.

A segment of Bryne immediately north of Harvie was constructed as part of the Harvie Crossing in 2019 and 2020.

PROJECT EXPENDITURE AND FUNDING

Expenditure (in 000's):

	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Design - Request	\$1,141	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,141
Property - Request	\$7,901	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$7,901
Utilities - Request	\$0	\$538	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$538
Construction - Request	\$729	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$729
Construction - Forecast	\$0	\$0	\$402	\$2,776	\$4,448	\$2,448	\$1,521	\$0	\$0	\$0	\$0	\$11,596
Total	\$9,771	\$538	\$402	\$2,776	\$4,448	\$2,448	\$1,521	\$0	\$0	\$0	\$0	\$21,905

Funding (in 000's):

	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Debenture Proceeds - DCs	\$5,136	\$350	\$305	\$1,979	\$2,891	\$1,591	\$988	\$0	\$0	\$0	\$0	\$13,241
Debenture Proceeds - Tax	\$2,765	\$188	\$97	\$797	\$1,557	\$857	\$532	\$0	\$0	\$0	\$0	\$6,794
Contribution from DC Reserves Tax	\$422	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$422
Contribution from Federal Gas Tax Reserve	\$364	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$364
Contribution from DC Roads Reserve	\$237	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$237

Expense amounts in bold text – 2022 Budget Request

Expense amounts in shaded text – Previously Committed Funding

Contribution from Tax Capital Reserve	\$846	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$846
Total	\$9,771	\$538	\$402	\$2,776	\$4,448	\$2,448	\$1,521	\$0	\$0	\$0	\$0	\$21,905

2022 Capital Project Detail Report

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

Project Number: EN1277

Department: Infrastructure Department

Summary: The connecting section of Bryne Drive is required to accommodate growth and the increased traffic demand created by the Harvie/Big Bay Point overpass. This link will facilitate more development and alleviate traffic congestion in the City's south end.

This work includes:

- construction of new urban 5-lane road between south of Harvie Rd and just north of Caplan Avenue
- 4 travel lanes with a centre paved median
- local servicing (water, sanitary, storm)
- On-road buffered bike lanes
- sidewalk installation on both sides
- Realigned intersection with Bryne Drive and old Bryne Dr
- Drainage and stormwater management improvements

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 Mapleview 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

The segment of Bryne immediately south of Harvie was constructed as part of the Harvie Crossing works.

<u>PROJECT EXPENDITURE AND FUNDING</u>												
<u>Expenditure (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Design - Request	\$1,045	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,045
Property - Request	\$1,433	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,433
Utilities - Request	\$958	\$600	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,558
Construction - Request	\$667	\$1,808	\$4,567	\$2,400	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$9,442
Total	\$4,104	\$2,408	\$4,567	\$2,400	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$13,478
<u>Funding (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Debenture Proceeds - DCs	\$0	\$1,667	\$3,151	\$1,560	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$6,378

Expense amounts in bold text – 2022 Budget Request

Expense amounts in shaded text – Previously Committed Funding

Contribution from DC Reserves Tax	\$555	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$555
Contribution from DC Roads Reserve	\$1,620	\$390	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,010
Contribution from DC Water Dist FMB Reserve	\$48	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$48
Contribution from DC WW Collection FMB Reserve	\$48	\$141	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$189
Contribution from Tax Capital Reserve	\$1,832	\$210	\$1,416	\$840	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$4,298
Total	\$4,104	\$2,408	\$4,567	\$2,400	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$13,478

2022 Capital Project Detail Report

Project Title: Bunkers Creek Culverts and Watercourse Improvements - Innisfil to Lakeshore

Project Number: EN1274

Department: Infrastructure Department

Summary: Conveyance improvements from West of Bradford Street to Lakeshore drive convey 1:100-year return event flows. Rehabilitation of the culvert crossing at Innisfil.

Rationale: The 2019 Master Drainage Plan recommended these improvements as Projects 45, and 46. This project is in accordance with By-law 90-92: The City is to progressively acquire land or easements for drains, watercourses, and storage areas crossing or upon private property where it is considered in the City's interest to do so. The Drainage Master Plan recommends replacing the existing culverts at Bradford street to convey the design flood frequency criteria of 1:100 Year flows. The City has undertaken stream upgrades on the Bunkers Creek North East Branch, which has increased the flow conveyance from Highway 400 through to the Boys Street outlet, just upstream of the Innisfil Street Crossing. The scope of this project is to design, acquire and construct a creek channel and floodway across privately owned lands from Bradford Street to Lakeshore Drive.

The low flow channel of Reach Bu-16 downstream of Bradford Street has less capacity than 1:2-year return frequency storm peak flow. The natural watercourse enhancement will increase conveyance capacity, habitat and canopy.

This project must proceed ahead of Bunkers Creek Conveyance Improvements - Hwy 400 to Anne Street being completed as part of EN1264 - Dunlop Street Right of Way Expansion - Sarjeant to Anne (outside of CAH limits).

PROJECT EXPENDITURE AND FUNDING

Expenditure (in 000's):

	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Design - Request	\$644	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$644
Property - Request	\$0	\$3,813	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,813
Utilities - Request	\$0	\$65	\$1,500	\$500	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,065
Construction - Request	\$0	\$700	\$1,750	\$250	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,700
Construction - Forecast	\$0	\$0	\$1,100	\$5,750	\$5,900	\$0	\$0	\$0	\$0	\$0	\$0	\$12,750
Total	\$644	\$4,578	\$4,350	\$6,500	\$5,900	\$0	\$0	\$0	\$0	\$0	\$0	\$21,972

Funding (in 000's):

	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Debenture Proceeds - DCs	\$0	\$2,060	\$1,733	\$2,588	\$2,655	\$0	\$0	\$0	\$0	\$0	\$0	\$9,035
Contribution from DC Reserves Tax	\$115	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$115
Contribution from DC Roads Reserve	\$4	\$0	\$180	\$180	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$364

Expense amounts in bold text – 2022 Budget Request

Expense amounts in shaded text – Previously Committed Funding

Contribution from DC Stormwater FMB Reserve	\$40	\$0	\$23	\$158	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$220
Contribution from DC Water Dist FMB Reserve	\$0	\$0	\$23	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$23
Contribution from Tax Capital Reserve	\$476	\$2,518	\$2,365	\$3,575	\$3,245	\$0	\$0	\$0	\$0	\$0	\$0	\$12,179
Contribution from Water Capital Reserve	\$10	\$0	\$28	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$38
Total	\$644	\$4,578	\$4,350	\$6,500	\$5,900	\$0	\$0	\$0	\$0	\$0	\$0	\$21,972

2022 Capital Project Detail Report

Project Title: Codrington BPS - PRV relocation and replacement

Project Number: 001102

Department: Infrastructure Department

Summary: Design and construction of a new PRV near the Codrington Booster Pump Station to address operational issues and improve water supply to pressure Zone 2N

Rationale: The Codrington BPS supplies water from pressure Zone 1 to Pressure Zone 2 North (2N). With growth pressures and existing operational issues limiting supply from Well #13, it is important that the City develop supply options for 2N. This project will increase capacity and add operational flexibility to supply 2N.

<u>PROJECT EXPENDITURE AND FUNDING</u>												
<u>Expenditure (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Design - Request	\$0	\$100	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$100
Construction - Request	\$0	\$100	\$885	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$985
Total	\$0	\$200	\$885	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,085
<u>Funding (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Contribution from Water Capital Reserve	\$0	\$200	\$885	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,085
Total	\$0	\$200	\$885	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,085

2022 Capital Project Detail Report

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

Project Number: EN1453

Department: Infrastructure 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 watermains, storm sewer and sanitary sewers were all installed between 1946 and 1965 and all require replacement. The pavement structure has also reached its maximum potential life and requires replacement during construction.

PROJECT EXPENDITURE AND FUNDING												
<u>Expenditure (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
PreDesign - Request	\$45	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$45
Design - Request	\$413	\$413	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$825
Utilities - Forecast	\$0	\$0	\$150	\$710	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$860
Construction - Forecast	\$0	\$0	\$0	\$1,472	\$2,824	\$2,742	\$0	\$0	\$0	\$0	\$0	\$7,039
Total	\$458	\$413	\$150	\$2,182	\$2,824	\$2,742	\$0	\$0	\$0	\$0	\$0	\$8,769
<u>Funding (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Developer Contributions	\$0	\$0	\$1	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1
Contribution from Tax Capital Reserve	\$334	\$289	\$149	\$1,409	\$2,051	\$1,969	\$0	\$0	\$0	\$0	\$0	\$6,201
Contribution from WW Capital Reserve	\$62	\$62	\$0	\$366	\$366	\$366	\$0	\$0	\$0	\$0	\$0	\$1,223
Contribution from Water Capital Reserve	\$62	\$62	\$0	\$407	\$407	\$407	\$0	\$0	\$0	\$0	\$0	\$1,344
Total	\$458	\$413	\$150	\$2,182	\$2,824	\$2,742	\$0	\$0	\$0	\$0	\$0	\$8,769

2022 Capital Project Detail Report

Project Title: Duckworth Street New Transmission Watermain and ROW Expansion - Bell Farm to St. Vincent

Project Number: EN1166

Department: Infrastructure Department

Summary: Reconstruction of Duckworth Street from Bell Farm Road to St. Vincent Street including property acquisition for widening of the right-of-way, utility relocations, road & sidewalk reconstruction, buffered bike lanes, installation of new transmission watermain, replacement of distribution watermain and water services, replacement of sanitary sewer and sanitary laterals, replacement of storm sewer system, upgrades to streetlighting system, replacement of the traffic signal systems at Duckworth/Codrington, at Duckworth/Wellington/Steel, at Duckworth/Grove, and at Duckworth/Rose/Bernick.

Rationale: The existing road surface has failed, and with the increased growth of Georgian College and RVH there will be additional traffic volume on Duckworth Street. Phases 3 & 4 of the Class EA process were completed in 2015, and provided recommendations for road improvements and lane configurations which includes buffered bicycle lanes. The Water Storage and Distribution Master Plan prepared by Amec in 2013 identified the need for a 300mm watermain on Duckworth Street from Bell Farm Road to St Vincent Street for Zone 2N reinforcement. Replacement of all existing municipal infrastructure (e.g., watermain, sanitary & storm sewers) is to be undertaken as part of this project in order to bundle the infrastructure components and thereby reduce capital and operating costs in the long term, minimize disruption to the community, and limit environmental damages from unnecessary construction.

PROJECT EXPENDITURE AND FUNDING

Expenditure (in 000's):

	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Design - Request	\$411	\$75	\$15	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$501
Property - Request	\$450	\$70	\$6	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$526
Utilities - Request	\$750	\$1,300	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,050
Construction - Request	\$4,294	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$4,294
Utilities - Forecast	\$0	\$0	\$1,346	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,346
Construction - Forecast	\$0	\$0	\$3,338	\$6,447	\$2,111	\$0	\$0	\$0	\$0	\$0	\$0	\$11,897
Total	\$5,905	\$1,445	\$4,706	\$6,447	\$2,111	\$0	\$0	\$0	\$0	\$0	\$0	\$20,614

Funding (in 000's):

	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Debenture Proceeds - DCs	\$0	\$845	\$2,762	\$3,754	\$1,372	\$0	\$0	\$0	\$0	\$0	\$0	\$8,734
Contribution from Development Charge Reserves	\$204	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$204
Contribution from DC Reserves Tax	\$1,752	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,752

Expense amounts in bold text – 2022 Budget Request

Expense amounts in shaded text – Previously Committed Funding

Contribution from DC Reserves Water	\$873	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$873
Contribution from DC Roads Reserve	\$0	\$94	\$14	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$108
Contribution from Tax Capital Reserve	\$1,653	\$506	\$1,197	\$1,562	\$739	\$0	\$0	\$0	\$0	\$0	\$0	\$5,657
Contribution from WW Capital Reserve	\$892	\$0	\$442	\$499	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,833
Contribution from Water Capital Reserve	\$531	\$0	\$291	\$632	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,454
Total	\$5,905	\$1,445	\$4,706	\$6,447	\$2,111	\$0	\$0	\$0	\$0	\$0	\$0	\$20,614

2022 Capital Project Detail Report

Project Title: Dunlop Street Interchange Replacement - Sarjeant Drive to Anne Street

Project Number: EN1306

Department: Infrastructure Department

Summary: Replacement of the Dunlop Street Interchange (City's contribution to the MTO for additional widening), associated road improvement beyond MTO project limits.

Rationale: The MTO is replacing the Dunlop Street Interchange; this presents a unique opportunity for the City to cooperatively work with the MTO to construct additional infrastructure required to accommodate planned growth to 2041 in a manner that will reduce costs by pursuing a strategy that only includes key infrastructure elements that must be constructed with the MTO's planned project (wider highway crossing structure), while deferring elements that can be delayed (full corridor widening and intersection improvements at Dunlop Street and Anne Street).

Given the excessive skew of Dunlop Street relative to Highway 400 and considerable property constraints impacting interchange ramp geometry, deferring the widening of the structure would result in prohibitive costs that would likely eliminate the future ability to widen the highway crossing structure.

PROJECT EXPENDITURE AND FUNDING												
Expenditure (in 000's):												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Environmental Assessment - Request	\$205	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$205
Design - Request	\$812	\$500	(\$200)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,112
Property - Request	\$0	\$451	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$451
Utilities - Forecast	\$0	\$0	\$0	\$0	\$0	\$0	\$1,781	\$0	\$0	\$0	\$0	\$1,781
Construction - Forecast	\$0	\$0	\$0	\$0	\$6,000	\$6,000	\$6,000	\$3,113	\$0	\$0	\$0	\$21,113
Total	\$1,017	\$951	(\$200)	\$0	\$6,000	\$6,000	\$7,781	\$3,113	\$0	\$0	\$0	\$24,661
Funding (in 000's):												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Contribution from DC Roads Reserve	\$661	\$618	(\$130)	\$0	\$3,900	\$3,900	\$5,058	\$2,023	\$0	\$0	\$0	\$16,030
Contribution from DC WW Collection FMB Reserve	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Contribution from Tax Capital Reserve	\$356	\$333	(\$70)	\$0	\$2,100	\$2,100	\$2,723	\$1,090	\$0	\$0	\$0	\$8,631
Contribution from WW Capital Reserve	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total	\$1,017	\$951	(\$200)	\$0	\$6,000	\$6,000	\$7,781	\$3,113	\$0	\$0	\$0	\$24,661

2022 Capital Project Detail Report

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

Project Number: EN1071

Department: Infrastructure 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, watermains, 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	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Design - Request	\$762	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$762
Property - Request	\$4,300	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$4,300
Construction - Request	\$15,363	\$4,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$19,363
Total	\$20,426	\$4,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$24,426

Funding (in 000's):

	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Government of Canada Grant Revenue	\$3,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,000
Contribution from Federal Gas Tax Reserve	\$6,078	\$282	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$6,360
Contribution from Tax Capital Reserve	\$10,259	\$1,873	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$12,132
Contribution from WW Capital Reserve	\$605	\$1,099	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,704

Expense amounts in bold text – 2022 Budget Request

Expense amounts in shaded text – Previously Committed Funding

Contribution from Water Capital Reserve	\$483	\$746	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,229
Total	\$20,426	\$4,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$24,426

2022 Capital Project Detail Report

Project Title: Dyments Creek Culvert Expansion - Bradford St.

Project Number: EN1168

Department: Infrastructure Department

Summary: Replacement and expansion of the Dyments Creek culvert on Bradford Street. The project will include channel improvements upstream and downstream of the culvert, localized utility relocations as well as road and boulevard reinstatement.

Rationale: The existing conveyance capacity of the Dyments Creek at Bradford Street culvert crossing is a 5 year storm event. The Dyments Creek Storm Master Plan identified the need to upgrade the culvert to ensure conveyance of major storm events and to reduce flooding on private property, the City Wastewater Treatment Facility and the Bradford Street corridor.

<u>PROJECT EXPENDITURE AND FUNDING</u>												
<u>Expenditure (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Design - Request	\$954	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$954
Property - Request	\$0	\$1,347	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,347
Utilities - Request	\$35	\$25	\$1,406	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,465
Construction - Forecast	\$0	\$0	\$3,660	\$5,720	\$5,328	\$0	\$0	\$0	\$0	\$0	\$0	\$14,708
Total	\$988	\$1,372	\$5,065	\$5,720	\$5,328	\$0	\$0	\$0	\$0	\$0	\$0	\$18,474
<u>Funding (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Contribution from Development Charge Reserves	\$212	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$212
Contribution from Federal Gas Tax Reserve	\$0	\$755	\$2,405	\$2,761	\$2,706	\$0	\$0	\$0	\$0	\$0	\$0	\$8,627
Contribution from DC Roads Reserve	\$3	\$0	\$318	\$322	\$187	\$0	\$0	\$0	\$0	\$0	\$0	\$830
Contribution from DC Stormwater FMB Reserve	\$144	\$618	\$2,007	\$2,299	\$2,238	\$0	\$0	\$0	\$0	\$0	\$0	\$7,305
Contribution from DC Water Dist FMB Reserve	\$0	\$0	\$70	\$71	\$41	\$0	\$0	\$0	\$0	\$0	\$0	\$182
Contribution from Tax Capital Reserve	\$630	\$0	\$171	\$173	\$101	\$0	\$0	\$0	\$0	\$0	\$0	\$1,076
Contribution from Water Capital Reserve	\$0	\$0	\$93	\$94	\$55	\$0	\$0	\$0	\$0	\$0	\$0	\$242
Total	\$988	\$1,372	\$5,065	\$5,720	\$5,328	\$0	\$0	\$0	\$0	\$0	\$0	\$18,474

Expense amounts in bold text – 2022 Budget Request

Expense amounts in shaded text – Previously Committed Funding

2022 Capital Project Detail Report

Project Title: Dyments Creek New Storm Pond - North of Dunlop St. W

Project Number: EN1279

Department: Infrastructure Department

Summary: Construction of a new storm water management facility (pond) on Dyments Creek north west of the Dunlop Street West and Ferndale Drive intersection to provide storm water quantity and quality treatment to mitigate downstream flooding.

Rationale: All downstream road crossing projects are highly dependent upon the stormwater facility providing flow attenuation and reducing peak flow impacts. This will include flood protection for the City Wastewater Treatment Facility located at the outlet of Dyments Creek at Kempenfelt Bay, which would otherwise be vulnerable to flooding impacts resulting in MOE Non Compliance issues. Dyments Creek currently experiences a variety of issues including flooding through several areas of the watershed resulting in both loss of use of property and property damage, increased sedimentation and erosion problems leading to reduced conveyance capacities, a decline in water quality and the alteration of fish and wildlife habitat. The Dyments Creek Master Drainage Plan (2006) (MDP) was initiated to determine the conveyance improvements necessary to mitigate these issues. The study identified major peak flow conveyance deficiencies in the current creek infrastructure, and recommended strategic conveyance and stream water quality upgrades to support the present and future drainage servicing needs of the City and reduce flooding on private property. Flooding of approximately 30 buildings and private property throughout the watershed has been identified in the MDP. Stake holder meetings were held with City staff, Conservation Authority and property owners to discuss possible solutions and project opportunities through the Municipal Class EA Schedule "B" process. Solutions/recommendations have been adopted by Council and direction given to staff to proceed with implementation of the recommendations. The City is committed to meet all the requirements of the Lake Simcoe Protection Plan Policy 4.5 including determining and developing effective SWM works that will reduce negative impacts of stormwater on the environment. The Dyments Creek MDP and Class EA documents are available in the Engineering Department on the 6th Floor of City Hall.

PROJECT EXPENDITURE AND FUNDING

Expenditure (in 000's):

	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Design - Request	\$292	\$125	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$417
Property - Request	\$0	\$125	\$1,725	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,850
Utilities - Forecast	\$0	\$0	\$25	\$650	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$675
Construction - Forecast	\$0	\$0	\$0	\$2,303	\$2,953	\$714	\$0	\$0	\$0	\$0	\$0	\$5,970
CSR - Request	\$92	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$92
Total	\$384	\$250	\$1,750	\$2,953	\$2,953	\$714	\$0	\$0	\$0	\$0	\$0	\$9,004

Funding (in 000's):

	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Contribution from Federal Gas Tax Reserve	\$232	\$0	\$0	\$1,267	\$1,624	\$393	\$0	\$0	\$0	\$0	\$0	\$3,515

Contribution from DC Stormwater FMB Reserve	\$59	\$113	\$788	\$1,329	\$1,329	\$321	\$0	\$0	\$0	\$0	\$0	\$3,938
Contribution from Tax Capital Reserve	\$94	\$138	\$963	\$358	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,552
Total	\$384	\$250	\$1,750	\$2,953	\$2,953	\$714	\$0	\$0	\$0	\$0	\$0	\$9,004

2022 Capital Project Detail Report

Project Title: End of Life Pavement Replacement Program

Project Number: EN1308

Department: Infrastructure 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.

PROJECT EXPENDITURE AND FUNDING												
Expenditure (in 000's):												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Design - Request	\$70	\$55	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$125
Construction - Request	\$2,650	\$1,125	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,775
Design - Forecast	\$0	\$0	\$30	\$30	\$30	\$30	\$30	\$30	\$30	\$30	\$30	\$270
Construction - Forecast	\$0	\$0	\$625	\$625	\$625	\$625	\$625	\$625	\$625	\$625	\$625	\$5,625
Total	\$2,720	\$1,180	\$655	\$655	\$655	\$655	\$655	\$655	\$655	\$655	\$655	\$9,795
Funding (in 000's):												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Contribution from Federal Gas Tax Reserve	\$2,400	\$1,125	\$625	\$625	\$625	\$625	\$625	\$625	\$625	\$625	\$625	\$9,150
Contribution from Tax Capital Reserve	\$320	\$55	\$30	\$30	\$30	\$30	\$30	\$30	\$30	\$30	\$30	\$645
Total	\$2,720	\$1,180	\$655	\$655	\$655	\$655	\$655	\$655	\$655	\$655	\$655	\$9,795

2022 Capital Project Detail Report

Project Title: Essa Road Holding Strategy - Maplevue Drive West to CR27

Project Number: 001083

Department: Infrastructure Department

Summary: Construction of a pavement holding strategy on Essa Road between Maplevue Drive West and County Road 27 with separated active transportation lanes between Maplevue to Mayburn and paved shoulders from Mayburn to Salem.

Rationale: Essa Road from Maplevue Drive West to CR27 requires immediate rehabilitation work. The schedule for the proposed expansion, reconstruction and urbanization within the same limits is delayed due to delayed development within the Salem Secondary Plan area. An asphalt overlay/pulverize and pave strategy will address problems on the surface of the roadway by providing a quality top layer of asphalt pavement. This will be a cost-effective short-term (10-12 year) approach that will improve levels of service.

PROJECT EXPENDITURE AND FUNDING

Expenditure (in 000's):

	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Design - Request	\$0	\$276	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$276
Construction - Request	\$0	\$1,000	\$1,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,000
Construction - Forecast	\$0	\$0	\$800	\$81	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$881
Total	\$0	\$1,276	\$1,800	\$81	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,157

Funding (in 000's):

	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Contribution from Tax Capital Reserve	\$0	\$1,276	\$1,800	\$81	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,157
Total	\$0	\$1,276	\$1,800	\$81	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,157

2022 Capital Project Detail Report

Project Title: Essa Road Right of Way Expansion - Bryne to Fairview

Project Number: EN1392

Department: Infrastructure 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 and outside the Ministry's controlled access highway (CAH) limits. The objective is to extend improvements to the Essa Road/Ardagh Drive and Essa Road/Fairview Road intersections.

Improvements include:

- Widening Essa Road from 4 lanes to 6 from Bryne/Ardagh to Fairview
- Sidewalk on the south side and multiuse trail on the north side
- Improved drainage infrastructure
- Street lighting
- Traffic Signals

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 while ensuring improvements are extended to logical termination points. This approach results in significant cost avoidance as compared to completing the identified works as a separate project.

<u>PROJECT EXPENDITURE AND FUNDING</u>												
<u>Expenditure (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Design - Request	\$985	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$985
Utilities - Request	\$797	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$797
Construction - Request	\$1,192	\$1,036	\$3,646	\$3,646	\$2,822	\$894	\$0	\$0	\$0	\$0	\$0	\$13,235
Total	\$2,975	\$1,036	\$3,646	\$3,646	\$2,822	\$894	\$0	\$0	\$0	\$0	\$0	\$15,017
<u>Funding (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Debenture Proceeds - DCs	\$0	\$668	\$2,365	\$2,365	\$1,831	\$581	\$0	\$0	\$0	\$0	\$0	\$7,811
Contribution from DC Roads Reserve	\$1,933	\$5	\$5	\$5	\$3	\$0	\$0	\$0	\$0	\$0	\$0	\$1,951
Contribution from Tax Capital Reserve	\$1,041	\$362	\$1,276	\$1,276	\$988	\$313	\$0	\$0	\$0	\$0	\$0	\$5,256
Total	\$2,975	\$1,036	\$3,646	\$3,646	\$2,822	\$894	\$0	\$0	\$0	\$0	\$0	\$15,017

2022 Capital Project Detail Report

Project Title: Eugenia Street ROW Reconstruction and New Transmission Watermain - Berczy to Duckworth

Project Number: EN1319

Department: Infrastructure Department

Summary: Reconstruction of Eugenia Street including road reconstruction, transmission watermain installation, sanitary sewer replacement and upgrading to current City standards, sanitary lateral replacement to property line, storm sewer replacement and installation, sidewalk replacement and installation, and streetlight upgrades.

Rationale: There are two primary drivers for this project: the first is that the subsurface infrastructure along Eugenia St. (and surrounding neighbourhoods) is approaching its maximum potential life (MPL) and experiencing age-related deterioration, along with physical failure (watermain/sewer breaks, sanitary intrusions, etc.). Subsurface assets beneath Eugenia St. are rated fair to poor and do not meet current design standards for capacity, safety, and performance. The road surface is rated poor to very poor and there is a lack of sidewalks along Eugenia St. which poses accessibility concerns for City residents. 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. Secondly, future growth and intensification forecasting has shown the need to increase the water capacity and supply network security of pressure zone 2N. Installing a 300mm transmission watermain along Eugenia St. will better connect the 2N pressure zone to the existing network, meet the potable water and fire flow capacity requirements for safe growth, and provide the level of service residents expect.

<u>PROJECT EXPENDITURE AND FUNDING</u>												
<u>Expenditure (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Design - Request	\$625	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$625
Utilities - Request	\$0	\$10	\$0	\$750	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$760
Construction - Forecast	\$0	\$0	\$0	\$2,964	\$3,000	\$480	\$0	\$0	\$0	\$0	\$0	\$6,444
Total	\$625	\$10	\$0	\$3,714	\$3,000	\$480	\$0	\$0	\$0	\$0	\$0	\$7,829
<u>Funding (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Contribution from Tax Capital Reserve	\$385	\$10	\$0	\$2,884	\$1,965	\$314	\$0	\$0	\$0	\$0	\$0	\$5,559
Contribution from WW Capital Reserve	\$113	\$0	\$0	\$474	\$503	\$80	\$0	\$0	\$0	\$0	\$0	\$1,170
Contribution from Water Capital Reserve	\$127	\$0	\$0	\$356	\$532	\$85	\$0	\$0	\$0	\$0	\$0	\$1,100
Total	\$625	\$10	\$0	\$3,714	\$3,000	\$480	\$0	\$0	\$0	\$0	\$0	\$7,829

2022 Capital Project Detail Report

Project Title: Frozen Water Service Repair

Project Number: ES1022

Department: Infrastructure Department

Summary: Remediation of previously prioritized residential water services throughout the city that have been identified as subject to freezing. This involves excavation and replacement in accordance with current City Standards, including lowering, insulating, and rerouting water services below major infrastructure crossings to ensure they remain protected from freezing.

Rationale: This project is necessary to ensure continuous delivery of residential Drinking Water during periods of extended cold temperatures. It is in alignment with the Council approved Staff Report ENV003-15, 15-06-22. Following the completion of 2016 remediation works, 180 services in various locations throughout the City still require remediation works to ensure they're adequately protected from freezing.

<u>PROJECT EXPENDITURE AND FUNDING</u>												
<u>Expenditure (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Design - Request	\$0	\$50	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$50
Execute - Request	\$575	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$575
Construction - Request	\$1,600	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,600
Construction - Forecast	\$0	\$0	\$500	\$500	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,000
Total	\$2,175	\$50	\$500	\$500	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,225
<u>Funding (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Contribution from Water Capital Reserve	\$2,175	\$50	\$500	\$500	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,225
Total	\$2,175	\$50	\$500	\$500	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,225

2022 Capital Project Detail Report

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

Project Number: EN1355

Department: Infrastructure Department

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

Rationale: The watermains 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.

<u>PROJECT EXPENDITURE AND FUNDING</u>												
<u>Expenditure (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
PreDesign - Request	\$100	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$100
Design - Request	\$324	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$324
Utilities - Request	\$0	\$125	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$125
Construction - Forecast	\$0	\$0	\$2,500	\$556	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,056
Total	\$424	\$125	\$2,500	\$556	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,605
<u>Funding (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Contribution from Tax Capital Reserve	\$280	\$0	\$1,500	\$272	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,052
Contribution from Water Capital Reserve	\$144	\$125	\$1,000	\$284	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,553
Total	\$424	\$125	\$2,500	\$556	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,605

2022 Capital Project Detail Report

Project Title: Gunn Street ROW Replacement - Peel to St. Vincent

Project Number: EN1172

Department: Infrastructure Department

Summary: Replacement of the road and infrastructure on Gunn Street from Peel Street to St. Vincent Street, including road reconstruction, watermain replacement, sanitary sewer replacement, sanitary lateral replacement, storm sewer installation, sidewalk installation and replacement, and streetlight replacement.

Rationale: Gunn Street between Peel Street and St. Vincent Street is in very poor condition. The Right of Way was constructed between 1947 and 1958 and nearly every piece of infrastructure has experienced severe deterioration and no longer provides reliable service. Given the age and deteriorated condition of all infrastructure within this Right of Way, other lifecycle strategies (status quo, do nothing/run to failure, maintain differently, and/or rehabilitate) are not expected to significantly extend the existing remaining life of current assets. The proposed solution will ensure safe drinking water and adequate fire protection, adequate drainage and reduced risk of flooding, reliable wastewater collection, and improved road safety.

PROJECT EXPENDITURE AND FUNDING

Expenditure (in 000's):

	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Design - Request	\$500	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$500
Utilities - Request	\$450	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$450
Construction - Request	\$1,073	\$3,934	\$3,934	\$1,967	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$10,907
Total	\$2,023	\$3,934	\$3,934	\$1,967	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$11,857

Funding (in 000's):

	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Contribution from Development Charge Reserves	\$18	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$18
Contribution from DC Reserves Tax	\$18	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$18
Contribution from Federal Gas Tax Reserve	\$186	\$669	\$669	\$334	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,858
Contribution from DC Roads Reserve	\$10	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$10
Contribution from Tax Capital Reserve	\$1,240	\$1,691	\$1,691	\$846	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$5,469
Contribution from WW Capital Reserve	\$279	\$787	\$787	\$393	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,245
Contribution from Water Capital Reserve	\$274	\$787	\$787	\$393	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,240

Total	\$2,023	\$3,934	\$3,934	\$1,967	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$11,857
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2022 Capital Project Detail Report

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

Project Number: EN1396

Department: Infrastructure 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.

<u>PROJECT EXPENDITURE AND FUNDING</u>												
<u>Expenditure (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Design - Request	\$1,251	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,251
Property - Request	\$0	\$25	\$1,500	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,525
Utilities - Forecast	\$0	\$0	\$538	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$538
Construction - Forecast	\$0	\$0	\$0	\$2,004	\$4,008	\$8,015	\$6,011	\$0	\$0	\$0	\$0	\$20,038
Total	\$1,251	\$25	\$2,038	\$2,004	\$4,008	\$8,015	\$6,011	\$0	\$0	\$0	\$0	\$23,352
<u>Funding (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Contribution from DC Stormwater FMB Reserve	\$563	\$11	\$917	\$902	\$1,803	\$3,607	\$2,705	\$0	\$0	\$0	\$0	\$10,508
Contribution from Tax Capital Reserve	\$688	\$14	\$1,121	\$1,102	\$2,204	\$4,408	\$3,306	\$0	\$0	\$0	\$0	\$12,844
Total	\$1,251	\$25	\$2,038	\$2,004	\$4,008	\$8,015	\$6,011	\$0	\$0	\$0	\$0	\$23,352

2022 Capital Project Detail Report

Project Title: Johnson St. Well 13 - Feasibility Study, Rehabilitation and Replacement Options

Project Number: 001101

Department: Infrastructure Department

Summary: This project is to study the water quality problem at Well 13 and develop a solution. The project will look at options to rehabilitate the well and/or supplement supply to pressure zone 2N from another source.

Rationale: A solution to either rehabilitate existing operational problems at Well 13 or find an alternate source for water supply to pressure Zone 2 North (2N) must be developed. This project will investigate a full range of options and determine which option(s) will be the preferred approach. This project is critical to retain security and redundancy for 2N and allow for growth and intensification to proceed without the City taking on additional risk.

<u>PROJECT EXPENDITURE AND FUNDING</u>												
<u>Expenditure (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Study - Request	\$0	\$350	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$350
Total	\$0	\$350	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$350
<u>Funding (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Contribution from Tax Rate Stabilization Reserve	\$0	\$350	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$350
Total	\$0	\$350	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$350

2022 Capital Project Detail Report

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

Project Number: EN1269

Department: Infrastructure 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):

	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Design - Request	\$360	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$360
Property - Request	\$1,154	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,154
Construction - Request	\$4,383	\$1,347	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$5,730
Utilities - Forecast	\$0	\$0	\$0	\$0	\$993	\$0	\$0	\$0	\$0	\$0	\$0	\$993
Construction - Forecast	\$0	\$0	\$0	\$0	\$0	\$3,425	\$3,425	\$3,425	\$0	\$0	\$0	\$10,276
CSR - Request	\$183	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$183
Total	\$6,080	\$1,347	\$0	\$0	\$993	\$3,425	\$3,425	\$3,425	\$0	\$0	\$0	\$18,696

Funding (in 000's):

	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Debenture Proceeds - DCs	\$900	\$606	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,506
Contribution from DC Reserves Tax	\$393	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$393
Contribution from DC Stormwater FMB Reserve	\$2,154	\$0	\$0	\$0	\$447	\$1,541	\$1,541	\$1,541	\$0	\$0	\$0	\$7,225
Contribution from Tax Capital Reserve	\$2,633	\$741	\$0	\$0	\$546	\$1,884	\$1,884	\$1,884	\$0	\$0	\$0	\$9,572
Total	\$6,080	\$1,347	\$0	\$0	\$993	\$3,425	\$3,425	\$3,425	\$0	\$0	\$0	\$18,696

2022 Capital Project Detail Report

Project Title: Kidd's Creek marina sediment removal

Project Number: EN1474

Department: Infrastructure Department

Summary: Removal of sediment within the Marina at the mouth of Kidd's creek required for ECA compliance.

Rationale: Removal of sediment within the Marina at the mouth of Kidd's creek. Sediment is blocking fish passage, impacting the marina operations. The project is required for ECA compliance.

PROJECT EXPENDITURE AND FUNDING												
<u>Expenditure (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Design - Request	\$200	\$200	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$400
Construction - Request	\$0	\$1,035	\$2,100	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,135
Construction - Forecast	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total	\$200	\$1,235	\$2,100	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,535
<u>Funding (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Contribution from Tax Capital Reserve	\$200	\$1,235	\$2,100	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,535
Total	\$200	\$1,235	\$2,100	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,535

2022 Capital Project Detail Report

Project Title: Little Lake Sew Pump Station Upgrade

Project Number: EN1122

Department: Infrastructure Department

Summary: New valves, flowmeters, and appurtenances to be installed in the existing wet well. The non-operating twinned 450mm forcemain will be unplugged, cleaned out and tied-in to the wet well. Provision for future swab ports will be installed outside the wet well.

Rationale: A Value Engineering workshop and 3D modelling confirmed the feasibility of moving the functionality of the valve chamber to the wet well, as there was sufficient space in the wet well to relocate the valves, flowmeters, and other components to the wet well. This change to the design will result in significant savings to the project.

PROJECT EXPENDITURE AND FUNDING												
<u>Expenditure (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Construction - Request	\$1,338	\$1,500	\$1,208	\$800	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$4,846
Total	\$1,338	\$1,500	\$1,208	\$800	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$4,846
<u>Funding (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Debenture Proceeds - Tax	\$1,038	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,038
Contribution from DC WW Collection FMB Reserve	\$0	\$645	\$519	\$344	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,508
Contribution from WW Capital Reserve	\$300	\$855	\$688	\$456	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,229
Total	\$1,338	\$1,500	\$1,208	\$800	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$4,846

2022 Capital Project Detail Report

Project Title: Lovers Creek Channel Rehabilitation - Adjacent to Brunton Park

Project Number: EN1285

Department: Infrastructure Department

Summary: Channel realignment with slope stabilization and toe protection of Lover's Creek, adjacent to Brunton Park, is required to prevent erosion of the existing creek bank and siltation in the creek. The project scope includes excavation of the valley slope to a stable inclination, channel realignment, complete armor protection of the channel toe-of slope, and the purchase of land required to accomodate proposed construction and realignment.

Rationale: The Lover's Creek main channel is eroding the toe of the valley slope east of Brunton Park as it moves through a sharp bend. As a safety precaution, the City installed a chain link fence in 2006 along the top of the valley slope to restrict public access to this area, however, the slope has continued to erode with storm events and has begun to encroach the fence. The proposed channel rehabilitation is required to mitigate public safety concerns and prevent further soil instability, slope failure, creek siltation and loss of table lands.

PROJECT EXPENDITURE AND FUNDING												
Expenditure (in 000's):												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Design - Request	\$280	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$280
Property - Request	\$260	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$260
Construction - Request	\$2,500	\$1,750	\$750	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$5,000
Total	\$3,040	\$1,750	\$750	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$5,540
Funding (in 000's):												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Contribution from Tax Capital Reserve	\$3,040	\$1,750	\$750	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$5,540
Total	\$3,040	\$1,750	\$750	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$5,540

2022 Capital Project Detail Report

Project Title: Lovers Creek Watershed, LV05 SWMF- Rehabilitation

Project Number: RP1154

Department: Infrastructure Department

Summary: Rehabilitation of LV5, a Stormwater Management Facility (SWMF) located between highway 400 and Bayview Drive, south of Costco.

Rationale: This SWMF is not functioning as designed due to major erosion along the inlet channel. Eroded material is collecting within the SWMF which was cleaned in 2015 and now needs to be cleaned again. In comparison, other SWMFs across the City do not require cleaning for up to 25 years. This project will ensure compliance with the Stormwater Management System Environmental Compliance Approval (ECA) with the Province. As a requirement of the ECA, the City is to act in resolving operational and maintenance noncompliance when identified. This project is deemed to be a required repair under the ECA.

PROJECT EXPENDITURE AND FUNDING												
<u>Expenditure (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Design - Request	\$150	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$150
Construction - Request	\$1,923	\$1,155	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,078
Total	\$2,073	\$1,155	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,228
<u>Funding (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Contribution from DC Stormwater FMB Reserve	\$865	\$520	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,385
Contribution from Tax Capital Reserve	\$1,208	\$635	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,843
Total	\$2,073	\$1,155	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,228

2022 Capital Project Detail Report

Project Title: LT14 (JC Massie Way) Emergency Storm Water Pond Repair

Project Number: EN1472

Department: Infrastructure Department

Summary: This storm water pond requires emergency repair due to a failure of the existing pond liner as well as significant storm damage to the pond berm wall. The pond is currently out of compliance with the City Environmental Compliance approval. Required for ECA compliance, currently being followed up and documented by the MECP District Office.

Rationale: This pond was constructed in 2014/2015. In 2019, the pond failed due to deficiencies with the pond liner and a complete failure of the berm wall. Full retrofit of the pond including the removal and replacement of the pond liner, removal and repair of the berm wall as well as some minor volume improvements and slope repairs is recommended. This is deemed an emergency repair and should be completed in 2021.

<u>PROJECT EXPENDITURE AND FUNDING</u>												
<u>Expenditure (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Construction - Request	\$2,000	\$800	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,800
Total	\$2,000	\$800	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,800
<u>Funding (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Contribution from Tax Capital Reserve	\$2,000	\$800	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,800
Total	\$2,000	\$800	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,800

2022 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: Infrastructure 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):

	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Design - Request	\$967	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$967
Property - Request	(\$362)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	(\$362)
Utilities - Request	\$103	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$103
Construction - Request	\$7,138	\$2,100	\$2,648	\$415	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$12,301
Total	\$7,846	\$2,100	\$2,648	\$415	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$13,010

Funding (in 000's):

	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Developer Front Ending (Annex) - Developer Build	\$7,285	\$1,820	\$2,251	\$353	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$11,708
Contribution from DC Roads Annex Reserve	\$41	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$41
Contribution from Tax Capital Reserve	\$521	\$280	\$397	\$62	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,261
Total	\$7,846	\$2,100	\$2,648	\$415	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$13,010

2022 Capital Project Detail Report

Project Title: Mapleview Dr E Road Expansion - East of Yonge to Prince William (City)

Project Number: EN1271

Department: Infrastructure 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, and an at-grade railway crossing.

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 grade separated crossing has been deferred and is subject to funding from Metrolinx. 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 Class Environmental Assessment was completed. The watermain is required to provide potable water and fire flow in Phase 1 of the Hewitt's Secondary Plan area. The Road widening will initially be implemented with an at-grade crossing.

PROJECT EXPENDITURE AND FUNDING

Expenditure (in 000's):

	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Design - Request	\$2,381	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,381
Property - Request	\$1,200	\$3,175	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$4,375
Utilities - Request	\$0	\$287	\$301	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$588
Construction - Forecast	\$0	\$0	\$0	\$3,859	\$5,445	\$3,859	\$2,272	\$0	\$0	\$0	\$0	\$15,434
Total	\$3,581	\$3,462	\$301	\$3,859	\$5,445	\$3,859	\$2,272	\$0	\$0	\$0	\$0	\$22,778

Funding (in 000's):

	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Debenture Proceeds - DCs	\$0	\$3,175	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,175
Contribution from DC Reserves Tax (Annex)	\$2,862	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,862
Contribution from DC Stormwater FMB Reserve	\$40	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$40
Contribution from DC Roads Annex Reserve	\$142	\$244	\$256	\$3,280	\$4,628	\$3,280	\$1,931	\$0	\$0	\$0	\$0	\$13,760
Contribution from Tax Capital Reserve	\$537	\$43	\$45	\$579	\$817	\$579	\$341	\$0	\$0	\$0	\$0	\$2,940
Total	\$3,581	\$3,462	\$301	\$3,859	\$5,445	\$3,859	\$2,272	\$0	\$0	\$0	\$0	\$22,778

2022 Capital Project Detail Report

Project Title: Mapleview Drive East Improvements - Country Lane to Yonge (City)

Project Number: EN1097

Department: Infrastructure Department

Summary: Widening of Mapleview Dr. E from Country Lane to Yonge to 5 lanes including: road widening and reconstruction; sanitary sewer and service installation; local storm sewer installation; water service installation; new transmission watermain (750 from Country Lane to Madeline, 600 from Madelaine to Yonge); multi-use asphalt trail on the north side; streetlight installation; and new traffic signal installation at Madelaine and at Dean.

Rationale: Mapleview Drive East between Country Lane and Yonge is deficient with respect to traffic capacity, sidewalks, bicycle transportation, streetlights, domestic watermain and storm sewers. There is a transmission watermain and a sanitary trunk sewer required on this section of Mapleview Drive East. The proposed work will increase traffic capacity and resolve transportation and other servicing deficiencies, thereby allowing the City to provide the expected levels of service to the community while reducing risk associated with physically deteriorated and under-capacity roads and subsurface infrastructure.

PROJECT EXPENDITURE AND FUNDING

Expenditure (in 000's):

	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Design - Request	\$884	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$884
Property - Request	\$400	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$400
Utilities - Request	\$1,100	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,100
Construction - Request	\$15,326	\$2,365	\$362	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$18,052
Total	\$17,709	\$2,365	\$362	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$20,436

Funding (in 000's):

	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Tax Additions	\$75	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$75
Debenture Proceeds - DCs	\$0	\$1,871	\$235	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,107
Debenture Proceeds - Tax	\$1,290	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,290
Local Improvements Revenue	\$100	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$100
Contribution from Development Charge Reserves	\$619	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$619
Contribution from DC Reserves Tax (Annex)	\$4,463	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$4,463

Contribution from DC Reserves Water (Annex)	\$4,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$4,000
Contribution from Federal Gas Tax Reserve	\$1,400	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,400
Contribution from DC Stormwater FMB Reserve	\$98	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$98
Contribution from DC Water Dist FMB Reserve	\$434	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$434
Contribution from DC WW Collection FMB Reserve	\$56	\$31	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$88
Contribution from DC Roads Annex Reserve	\$3,893	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,893
Contribution from Tax Capital Reserve	\$622	\$462	\$127	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,211
Contribution from WW Capital Reserve	\$655	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$655
Contribution from Water Capital Reserve	\$5	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$5
Total	\$17,709	\$2,365	\$362	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$20,436

2022 Capital Project Detail Report

Project Title: Mary Street ROW Replacement - Ross to Dunlop

Project Number: 000106

Department: Infrastructure Department

Summary: Full reconstruction of Mary Street from Ross St. to 80m north of Dunlop St. W. Full depth asphalt removal and replacement from 80m north of Dunlop St. W to Dunlop St. W.

Rationale: Infrastructure on Mary Street is experiencing age-related deterioration, is in poor condition, and approaching the end of their useful lives. This is coupled with capacity deficiencies, out-dated construction standards, and related work in the immediate area; Mary Street was identified for full right-of-way reconstruction. This renewal strategy is expected to be the most effective and cost efficient to restore and improve level of service to the area.

<u>PROJECT EXPENDITURE AND FUNDING</u>												
<u>Expenditure (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
PreDesign - Request	\$0	\$100	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$100
Design - Forecast	\$0	\$0	\$232	\$232	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$463
Utilities - Forecast	\$0	\$0	\$0	\$50	\$500	\$0	\$0	\$0	\$0	\$0	\$0	\$550
Construction - Forecast	\$0	\$0	\$0	\$0	\$2,450	\$425	\$0	\$0	\$0	\$0	\$0	\$2,875
Total	\$0	\$100	\$232	\$282	\$2,950	\$425	\$0	\$0	\$0	\$0	\$0	\$3,988
<u>Funding (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Contribution from Tax Capital Reserve	\$0	\$100	\$130	\$180	\$1,750	\$425	\$0	\$0	\$0	\$0	\$0	\$2,586
Contribution from WW Capital Reserve	\$0	\$0	\$51	\$51	\$600	\$0	\$0	\$0	\$0	\$0	\$0	\$701
Contribution from Water Capital Reserve	\$0	\$0	\$51	\$51	\$600	\$0	\$0	\$0	\$0	\$0	\$0	\$701
Total	\$0	\$100	\$232	\$282	\$2,950	\$425	\$0	\$0	\$0	\$0	\$0	\$3,988

2022 Capital Project Detail Report

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

Project Number: EN1251

Department: Infrastructure Department

Summary: Design and construction of a new highway interchange at McKay Road and widening of the structure to a 5-lane cross section including sidewalks and a cycle-track on the south side of the structure.

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 Mapleview Drive and Innisfil Beach Road, the Transportation Master Plan indicates that McKay is required to service growth in the area and is a critical infrastructure service growth in the Hewitt and salem secondary Planning areas.

The Transportation Master Plan recommends that with increased traffic volumes the construction of an interchange at McKay Road and widening of the crossing from two to five lanes with buffered bike lanes and sidewalks is needed .

The existing Mapleview Drive / Highway 400 interchange operates at a poor level of service and without the McKay Interchange, traffic congestion will worsen with growth.

The McKay Schedule C Class Environmental Assessment was completed in 2018.

PROJECT EXPENDITURE AND FUNDING												
<u>Expenditure (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Design - Request	\$2,485	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,485
Property - Request	\$10,000	\$2,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$12,000
Property - Forecast	\$0	\$0	\$0	\$0	\$7,000	\$0	\$0	\$0	\$0	\$0	\$0	\$7,000
Utilities - Forecast	\$0	\$0	\$0	\$0	\$0	\$945	\$0	\$0	\$0	\$0	\$0	\$945
Construction - Forecast	\$0	\$0	\$0	\$0	\$0	\$0	\$9,898	\$9,898	\$14,848	\$10,470	\$12,512	\$57,626
Total	\$12,485	\$2,000	\$0	\$0	\$7,000	\$945	\$9,898	\$9,898	\$14,848	\$10,470	\$12,512	\$80,056
<u>Funding (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Debenture Proceeds - DCs	\$0	\$1,700	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,700
Contribution from DC Reserves Tax (Annex)	\$1,592	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,592

Expense amounts in bold text – 2022 Budget Request

Expense amounts in shaded text – Previously Committed Funding

Contribution from DC Reserves Water (Annex)	\$32	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$32
Contribution from DC Stormwater FMB Reserve	\$1,006	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,006
Contribution from DC Roads Annex Reserve	\$7,987	\$0	\$0	\$0	\$5,950	\$803	\$8,414	\$8,414	\$12,620	\$8,899	\$10,635	\$63,722
Contribution from Tax Capital Reserve	\$1,868	\$300	\$0	\$0	\$1,050	\$142	\$1,485	\$1,485	\$2,227	\$1,570	\$1,877	\$12,004
Total	\$12,485	\$2,000	\$0	\$0	\$7,000	\$945	\$9,898	\$9,898	\$14,848	\$10,470	\$12,512	\$80,056

2022 Capital Project Detail Report

Project Title: McKay Road ROW Expansion - Reid Drive to West of Highway 400 (Developer)

Project Number: EN1257

Department: Infrastructure Department

Summary: 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 west of HWY 400.

Rationale: 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.

PROJECT EXPENDITURE AND FUNDING												
<u>Expenditure (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Design - Request	\$4,710	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$4,710
Property - Request	\$4,994	\$0	\$321	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$5,315
Utilities - Request	\$734	\$609	\$1,583	\$883	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,808
Construction - Request	\$11,212	\$6,665	\$6,820	\$4,470	\$3,271	\$0	\$0	\$0	\$0	\$0	\$0	\$32,437
Total	\$21,650	\$7,273	\$8,724	\$5,352	\$3,271	\$0	\$0	\$0	\$0	\$0	\$0	\$46,270
<u>Funding (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Developer Front Ending (Annex) - Developer Build	\$20,005	\$6,795	\$7,839	\$4,864	\$2,962	\$0	\$0	\$0	\$0	\$0	\$0	\$42,465
Debenture Proceeds - Tax	\$856	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$856
Contribution from DC Roads Annex Reserve	\$254	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$254
Contribution from Tax Capital Reserve	\$535	\$478	\$885	\$488	\$309	\$0	\$0	\$0	\$0	\$0	\$0	\$2,695
Total	\$21,650	\$7,273	\$8,724	\$5,352	\$3,271	\$0	\$0	\$0	\$0	\$0	\$0	\$46,270

2022 Capital Project Detail Report

Project Title: NRP- HNS Allandale A Neighbourhood Reconstruction

Project Number: EN1282

Department: Infrastructure 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 streetlighting 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												
<u>Expenditure (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
PreDesign - Request	\$70	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$70
Design - Request	\$1,302	\$361	\$361	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,023
Property - Request	\$650	\$450	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,100
Utilities - Forecast	\$0	\$0	\$500	\$1,814	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,314
Construction - Forecast	\$0	\$0	\$0	\$0	\$4,020	\$7,013	\$5,017	\$6,017	\$0	\$0	\$0	\$22,066
CSR - Request	\$1	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1
Total	\$2,023	\$811	\$861	\$1,814	\$4,020	\$7,013	\$5,017	\$6,017	\$0	\$0	\$0	\$27,574
<u>Funding (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Developer Contributions	\$0	\$0	\$0	\$0	\$22	\$6	\$0	\$0	\$0	\$0	\$0	\$28

Expense amounts in bold text – 2022 Budget Request

Expense amounts in shaded text – Previously Committed Funding

Contribution from Tax Capital Reserve	\$1,556	\$710	\$760	\$1,814	\$2,454	\$5,462	\$3,472	\$4,472	\$0	\$0	\$0	\$20,698
Contribution from WW Capital Reserve	\$240	\$58	\$58	\$0	\$883	\$883	\$883	\$883	\$0	\$0	\$0	\$3,885
Contribution from Water Capital Reserve	\$228	\$44	\$44	\$0	\$662	\$662	\$662	\$662	\$0	\$0	\$0	\$2,963
Total	\$2,023	\$811	\$861	\$1,814	\$4,020	\$7,013	\$5,017	\$6,017	\$0	\$0	\$0	\$27,574

2022 Capital Project Detail Report

Project Title: NRP- HNS Brock Park Neighbourhood Reconstruction

Project Number: EN1318

Department: Infrastructure Department

Summary: Reconstruction of right-of-way assets on Sanford St. (Vespra to Brock), Vespra St. (Innisfil to Bradford), Victoria St. (Innisfil to Bradford), John St. (Innisfil to Bradford), Frederick St. (Innisfil to end), and Innisfil St. (Vespra to 100m south of Fredrick) in the Brock Park Neighbourhood. This includes; road reconstruction, watermain replacement/ upgrade, sanitary sewer replacement/ upgrade, sanitary lateral replacement (to property line), storm sewer replacement/ upgrade, large diameter culvert replacement/ upgrade, sidewalk replacement/installation, and street light 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 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	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Design - Request	\$917	\$307	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,224
Utilities - Request	\$1,490	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,490
Construction - Request	\$0	\$3,852	\$3,685	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$7,537
Utilities - Forecast	\$0	\$0	\$0	\$871	\$871	\$0	\$0	\$0	\$0	\$0	\$0	\$1,742
Construction - Forecast	\$0	\$0	\$0	\$0	\$6,578	\$4,289	\$4,289	\$0	\$0	\$0	\$0	\$15,157
Total	\$2,407	\$4,159	\$3,685	\$871	\$7,449	\$4,289	\$4,289	\$0	\$0	\$0	\$0	\$27,150
Funding (in 000's):												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Contribution from Tax Capital Reserve	\$2,172	\$2,380	\$3,685	\$871	\$5,721	\$3,425	\$3,425	\$0	\$0	\$0	\$0	\$21,680
Contribution from WW Capital Reserve	\$175	\$823	\$0	\$0	\$827	\$414	\$414	\$0	\$0	\$0	\$0	\$2,652
Contribution from Water Capital Reserve	\$60	\$956	\$0	\$0	\$901	\$450	\$450	\$0	\$0	\$0	\$0	\$2,818

Expense amounts in bold text – 2022 Budget Request

Expense amounts in shaded text – Previously Committed Funding

Total	\$2,407	\$4,159	\$3,685	\$871	\$7,449	\$4,289	\$4,289	\$0	\$0	\$0	\$0	\$27,150
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2022 Capital Project Detail Report

Project Title: NRP- HNS Queens Park A1 Neighbourhood Reconstruction

Project Number: EN1280

Department: Infrastructure 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	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
PreDesign - Request	\$70	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$70
Design - Request	\$615	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$615
Utilities - Request	\$1,566	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,566
Construction - Request	\$0	\$4,629	\$1,717	\$1,044	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$7,390
Total	\$2,251	\$4,629	\$1,717	\$1,044	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$9,641

Funding (in 000's):

	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Contribution from Tax Capital Reserve	\$2,108	\$2,629	\$886	\$1,044	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$6,667
Contribution from WW Capital Reserve	\$69	\$1,000	\$406	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,475
Contribution from Water Capital Reserve	\$74	\$1,000	\$425	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,498

Expense amounts in bold text – 2022 Budget Request

Expense amounts in shaded text – Previously Committed Funding

Total	\$2,251	\$4,629	\$1,717	\$1,044	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$9,641
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2022 Capital Project Detail Report

Project Title: NRP- Wellington D1 Neighbourhood Reconstruction

Project Number: EN1238

Department: Infrastructure 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.

PROJECT EXPENDITURE AND FUNDING												
Expenditure (in 000's):												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
PreDesign - Request	\$70	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$70
Design - Request	\$566	\$242	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$807
Utilities - Request	\$900	\$375	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,275
Construction - Forecast	\$0	\$0	\$3,381	\$3,381	\$1,168	\$0	\$0	\$0	\$0	\$0	\$0	\$7,929
Total	\$1,536	\$617	\$3,381	\$3,381	\$1,168	\$0	\$0	\$0	\$0	\$0	\$0	\$10,081
Funding (in 000's):												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Contribution from Tax Capital Reserve	\$1,328	\$549	\$2,153	\$2,153	\$1,168	\$0	\$0	\$0	\$0	\$0	\$0	\$7,350
Contribution from WW Capital Reserve	\$112	\$39	\$668	\$668	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,486
Contribution from Water Capital Reserve	\$97	\$29	\$560	\$560	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,245
Total	\$1,536	\$617	\$3,381	\$3,381	\$1,168	\$0	\$0	\$0	\$0	\$0	\$0	\$10,081

Expense amounts in bold text – 2022 Budget Request

Expense amounts in shaded text – Previously Committed Funding

2022 Capital Project Detail Report

Project Title: PRV Chamber Replacement Program

Project Number: EN1252

Department: Infrastructure 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												
<u>Expenditure (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Design - Request	\$342	\$137	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$479
Construction - Request	\$2,781	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,781
Construction - Forecast	\$0	\$0	\$220	\$1,491	\$1,000	\$0	\$0	\$0	\$0	\$0	\$0	\$2,711
Total	\$3,123	\$137	\$220	\$1,491	\$1,000	\$0	\$0	\$0	\$0	\$0	\$0	\$5,971
<u>Funding (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Contribution from Water Capital Reserve	\$3,123	\$137	\$220	\$1,491	\$1,000	\$0	\$0	\$0	\$0	\$0	\$0	\$5,971
Total	\$3,123	\$137	\$220	\$1,491	\$1,000	\$0	\$0	\$0	\$0	\$0	\$0	\$5,971

2022 Capital Project Detail Report

Project Title: Puget Street ROW Replacement and Drainage Upgrades - Steel to End

Project Number: 000111

Department: Infrastructure Department

Summary: Complete reconstruction of Puget Street from Steel Street to Shanty Bay Road along with storm sewer upgrades and sidewalk installation from Shanty Bay Road to the end.

Rationale: Infrastructure on Puget Street is experiencing age-related deterioration, is in poor condition, and approaching the end of their useful lives. This is coupled with capacity deficiencies and out-dated construction standards. Puget Street was identified for full right-of-way reconstruction. This renewal strategy is expected to be the most effective and cost efficient to restore and improve level of service to the area.

PROJECT EXPENDITURE AND FUNDING												
<u>Expenditure (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
PreDesign - Request	\$0	\$165	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$165
Design - Forecast	\$0	\$0	\$435	\$436	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$871
Utilities - Forecast	\$0	\$0	\$0	\$0	\$850	\$0	\$0	\$0	\$0	\$0	\$0	\$850
Construction - Forecast	\$0	\$0	\$0	\$0	\$0	\$1,988	\$4,758	\$1,134	\$0	\$0	\$0	\$7,880
Total	\$0	\$165	\$435	\$436	\$850	\$1,988	\$4,758	\$1,134	\$0	\$0	\$0	\$9,766
<u>Funding (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Contribution from Tax Capital Reserve	\$0	\$165	\$305	\$305	\$850	\$988	\$3,576	\$952	\$0	\$0	\$0	\$7,141
Contribution from WW Capital Reserve	\$0	\$0	\$65	\$65	\$0	\$500	\$591	\$91	\$0	\$0	\$0	\$1,313
Contribution from Water Capital Reserve	\$0	\$0	\$65	\$65	\$0	\$500	\$591	\$91	\$0	\$0	\$0	\$1,313
Total	\$0	\$165	\$435	\$436	\$850	\$1,988	\$4,758	\$1,134	\$0	\$0	\$0	\$9,766

2022 Capital Project Detail Report

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

Project Number: EN1398

Department: Infrastructure 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												
<u>Expenditure (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
PreDesign - Request	\$1	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1
Design - Request	\$717	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$717
Utilities - Request	\$0	\$150	\$600	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$750
Construction - Forecast	\$0	\$0	\$0	\$1,809	\$3,624	\$1,000	\$0	\$0	\$0	\$0	\$0	\$6,433
Total	\$718	\$150	\$600	\$1,809	\$3,624	\$1,000	\$0	\$0	\$0	\$0	\$0	\$7,901
<u>Funding (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Contribution from Tax Capital Reserve	\$473	\$150	\$600	\$702	\$2,423	\$1,000	\$0	\$0	\$0	\$0	\$0	\$5,348
Contribution from WW Capital Reserve	\$124	\$0	\$0	\$548	\$594	\$0	\$0	\$0	\$0	\$0	\$0	\$1,266
Contribution from Water Capital Reserve	\$120	\$0	\$0	\$559	\$607	\$0	\$0	\$0	\$0	\$0	\$0	\$1,286

Total	\$717	\$150	\$600	\$1,809	\$3,624	\$1,000	\$0	\$0	\$0	\$0	\$0	\$7,900
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2022 Capital Project Detail Report

Project Title: Road Resurfacing Program

Project Number: EN1289

Department: Infrastructure 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.

PROJECT EXPENDITURE AND FUNDING												
Expenditure (in 000's):												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Design - Request	\$950	\$300	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,250
Construction - Request	\$19,972	\$5,500	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$25,472
Design - Forecast	\$0	\$0	\$325	\$375	\$400	\$400	\$400	\$400	\$400	\$400	\$400	\$3,500
Construction - Forecast	\$0	\$0	\$6,500	\$7,500	\$8,000	\$8,000	\$8,000	\$8,000	\$8,000	\$8,000	\$8,000	\$70,000
Total	\$20,922	\$5,800	\$6,825	\$7,875	\$8,400	\$8,400	\$8,400	\$8,400	\$8,400	\$8,400	\$8,400	\$100,222
Funding (in 000's):												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Contribution from Federal Gas Tax Reserve	\$19,887	\$5,500	\$6,500	\$7,500	\$8,000	\$8,000	\$8,000	\$8,000	\$8,000	\$8,000	\$8,000	\$95,387
Contribution from Tax Capital Reserve	\$1,035	\$300	\$325	\$375	\$400	\$400	\$400	\$400	\$400	\$400	\$400	\$4,835
Total	\$20,922	\$5,800	\$6,825	\$7,875	\$8,400	\$8,400	\$8,400	\$8,400	\$8,400	\$8,400	\$8,400	\$100,222

2022 Capital Project Detail Report

Project Title: Salem Road New Transmission Watermain and Road Expansion - County Road 27 to Dunn (Developer)

Project Number: EN1276

Department: Infrastructure Department

Summary: Construction of a trunk watermain from County Road 27 to Essa Rd. Expansion of the Salem Road right of way including widening of the road from two to three lanes from Country Road 27 to Essa Rd; inclusion of a roundabout at Salem and Essa.

Rationale: The City of Barrie Growth Studies and Transportation Master Plan identified Salem Road 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 be implemented. Salem Road is a rural road in poor condition, and anticipated traffic volume increases associated with Phase 1 development in the secondary plan area have resulted in a need to proactively address capacity issues. Transportation improvements are included in both the Infrastructure Implementation Plan and the MOU with developers in the secondary plan area, as well as the Transportation Master Plan. Road widening will increase traffic capacity, and construction of the sidewalks adjacent to developing areas will allow for safer and accessible movement of pedestrians. The Water Distribution Master Plan calls for additional potable water and fire protection to service growth related to 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):												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Design - Request	\$917	\$226	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,143
Property - Request	(\$537)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	(\$537)
Construction - Request	(\$201)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	(\$201)
Property - Forecast	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,667	\$1,667
Construction - Forecast	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$250	\$0	\$250
Total	\$178	\$226	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$250	\$1,667	\$2,321
Funding (in 000's):												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Developer Front Ending (Annex) - Developer Build	\$153	\$226	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$213	\$1,417	\$2,008
Debenture Proceeds - Tax	\$25	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$25
Contribution from Tax Capital Reserve	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$38	\$250	\$288
Total	\$178	\$226	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$250	\$1,667	\$2,321

2022 Capital Project Detail Report

Project Title: SalemRd New Watermain,NewTrunk Sanitary Sewer and ROW Expansion-Veterans to Saunders (City)

Project Number: EN1272

Department: Infrastructure Department

Summary: Construction of a new 5-lane Highway 400 crossing at Lockhart Road / Salem Road, including reconstruction and widening to 5-lanes, buffered bike lanes, sidewalks, and construction of a new transmission watermain between Veterans Drive and Bayview Drive.

Rationale: The MMATMP identified the need to widen the existing 2-lane rural cross-section to 5-lanes, buffered bike lanes, sidewalks and construct a new highway crossing. A Schedule C EA was completed as part of the Annexation Transportation EA Studies. The road widening and highway crossing is required to accommodate growth in the Annexed Lands.

The transmission watermain associated with new reservoir and pump station (separate project) is required to provide potable water, fire protection, system security and redundancy to service growth in the Annexed Lands.

The road widening and highway crossing project is identified in the Council endorsed MMATMP. The transmission watermain, reservoir/pump station is identified in the Council endorsed Water Storage Distribution Master Plan.

PROJECT EXPENDITURE AND FUNDING												
Expenditure (in 000's):												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Property - Request	\$1,067	(\$1,067)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PreDesign - Forecast	\$0	\$0	\$0	\$0	\$0	\$578	\$0	\$0	\$0	\$0	\$0	\$578
Design - Forecast	\$0	\$0	\$0	\$0	\$0	\$0	\$2,607	\$2,607	\$0	\$0	\$0	\$5,213
Property - Forecast	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,864	\$0	\$0	\$3,864
Utilities - Forecast	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$644	\$0	\$644
Construction - Forecast	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$13,688	\$13,688
Total	\$1,067	(\$1,067)	\$0	\$0	\$0	\$578	\$2,607	\$2,607	\$3,864	\$644	\$13,688	\$23,987
Funding (in 000's):												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Contribution from DC Reserves Water (Annex)	\$1,067	(\$1,067)	\$0	\$0	\$0	\$56	\$252	\$252	\$0	\$0	\$1,323	\$1,882
Contribution from DC Stormwater FMB Reserve	\$0	\$0	\$0	\$0	\$0	\$178	\$801	\$801	\$0	\$0	\$4,204	\$5,983
Contribution from DC Roads Annex Reserve	\$0	\$0	\$0	\$0	\$0	\$266	\$1,201	\$1,201	\$3,284	\$547	\$6,306	\$12,806

Contribution from Tax Capital Reserve	\$0	\$0	\$0	\$0	\$0	\$78	\$353	\$353	\$580	\$97	\$1,855	\$3,316
Total	\$1,067	(\$1,067)	\$0	\$0	\$0	\$578	\$2,607	\$2,607	\$3,864	\$644	\$13,688	\$23,987

2022 Capital Project Detail Report

Project Title: Sewer Rehabilitation Program

Project Number: EN1184

Department: Infrastructure 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. A program of sanitary rehabilitation using trenchless technologies will minimize capital costs by reducing road restoration requirements and will also reduce future operational costs and staff time associated with repeated maintenance activities or emergency repairs.

<u>PROJECT EXPENDITURE AND FUNDING</u>												
<u>Expenditure (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Design - Request	\$105	\$25	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$130
Construction - Request	\$1,350	\$300	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,650
Design - Forecast	\$0	\$0	\$25	\$25	\$25	\$25	\$25	\$25	\$25	\$25	\$25	\$225
Construction - Forecast	\$0	\$0	\$300	\$300	\$300	\$300	\$300	\$300	\$300	\$300	\$300	\$2,700
Total	\$1,455	\$325	\$325	\$325	\$325	\$325	\$325	\$325	\$325	\$325	\$325	\$4,705
<u>Funding (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Contribution from WW Capital Reserve	\$1,455	\$325	\$325	\$325	\$325	\$325	\$325	\$325	\$325	\$325	\$325	\$4,705
Total	\$1,455	\$325	\$325	\$325	\$325	\$325	\$325	\$325	\$325	\$325	\$325	\$4,705

2022 Capital Project Detail Report

Project Title: Sidewalk Infill Program

Project Number: EN1185

Department: Infrastructure Department

Summary: As part of the City’s objective of growing the active transportation modal share from 6% to 12%; the sidewalk infill program forms part of an overall effort in conjunction with the Cycle Barrie Infrastructure Program and major road reconstruction projects to implement active transportation on a broad basis. The sidewalk infill program focuses on the elimination of mid-block sidewalk terminations and sidewalk implementation where no sidewalks exists.

In addition to supporting active transportation, this project also helps to improve the efficiency of winter snow clearing operations by providing improved connectivity and eliminating dead ends.

Rationale: Sidewalks are an integral part of the community and allow people of all abilities to safely traverse the Right of Way. Under the Accessibility for Ontarians with Disabilities Act, specifically the Integrated Accessibility Standards Regulation (Ontario Regulation 191/11), municipalities are required to improve accessibility in both new and existing areas as of January 1st, 2015. The secondary significant benefit of this program is that these projects are relatively low cost allowing numerous projects throughout the City to be completed on a yearly basis. The infill program will also generate operational efficiencies in snow removal, and will reduce public health and safety risks by providing well-connected active transportation networks.

<u>PROJECT EXPENDITURE AND FUNDING</u>												
<u>Expenditure (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Design - Request	\$168	\$245	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$413
Construction - Request	\$1,250	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,250
Design - Forecast	\$0	\$0	\$50	\$50	\$50	\$50	\$50	\$0	\$0	\$0	\$0	\$250
Construction - Forecast	\$0	\$0	\$650	\$450	\$450	\$450	\$450	\$0	\$0	\$0	\$0	\$2,450
Total	\$1,418	\$245	\$700	\$500	\$500	\$500	\$500	\$0	\$0	\$0	\$0	\$4,363
<u>Funding (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Contribution from Development Charge Reserves	\$64	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$64
Contribution from DC Reserves Tax	\$1,205	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,205
Contribution from DC Roads Reserve	\$48	\$233	\$665	\$475	\$475	\$475	\$475	\$0	\$0	\$0	\$0	\$2,845
Contribution from Tax Capital Reserve	\$101	\$12	\$35	\$25	\$25	\$25	\$25	\$0	\$0	\$0	\$0	\$248

Total	\$1,418	\$245	\$700	\$500	\$500	\$500	\$500	\$0	\$0	\$0	\$0	\$4,363
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2022 Capital Project Detail Report

Project Title: Sophia Creek Culvert Expansion - Grove, 130m East of Davidson

Project Number: EN1186

Department: Infrastructure Department

Summary: Replacement and expansion of the Sophia Creek Culvert on Grove Street, approximately 130m East of Davidson Street. The project includes localized sanitary sewer replacement and road reinstatement.

Rationale: The culvert replacement is required to minimize the likelihood of culvert failure which could result in flooding and damage to both public and private property. The culvert replacement will maintain existing conditions, minimize the likelihood of flooding and decrease the risk assumed by the City.

<u>PROJECT EXPENDITURE AND FUNDING</u>												
<u>Expenditure (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Design - Request	\$189	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$189
Utilities - Request	\$465	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$465
Construction - Request	\$1,144	\$826	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,970
CSR - Request	\$35	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$35
Total	\$1,833	\$826	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,659
<u>Funding (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Contribution from Development Charge Reserves	\$21	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$21
Contribution from DC Reserves Tax	\$9	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$9
Contribution from Federal Gas Tax Reserve	\$808	\$399	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,207
Contribution from DC Roads Reserve	\$164	\$45	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$209
Contribution from DC Stormwater FMB Reserve	\$459	\$327	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$786
Contribution from Tax Capital Reserve	\$372	\$55	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$427
Contribution from WW Capital Reserve	\$1	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1
Total	\$1,833	\$826	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,659

2022 Capital Project Detail Report

Project Title: Sophia Creek Owen Tributary storm outlet from Memorial Square

Project Number: EN1463

Department: Infrastructure Department

Summary: Sophia Creek Owen Street tributary storm sewer trunk outlet 2400 mm x 1500 mm concrete box culvert extension from Memorial Square to Kempenfelt Bay.

Rationale: The Sophia Creek Master Drainage Plan MDP EA update Problem/Opportunity Statement identified downstream of Peel Street, runoff from minor and major storm events will surcharge the trunk storm sewer and flood private and municipal property along Sophia Street from Peel to Bayfield, Owen, Clapperton and Bayfield Street from Sophia Street to Kempenfelt Bay. The flooding has caused historic damage to both private and municipal property and is a concern for public safety. The MDP is recommending the addition of tributary trunk storm sewers along Clapperton and Owen Streets to supplement the Bayfield Street trunk sewer.

These drainage works support the storm trunk sewer works constructed in Memorial Square 2018 (EN1111), Dunlop Street renewal 2019 (EN1167) and future Development and renewal works along Owen Street from Dunlop to Sophia Street including renewal project HNS The Grove A1 Neighbourhood Reconstruction. Projects 000798, 000046, and 000864 depend on this project being completed first.

PROJECT EXPENDITURE AND FUNDING												
Expenditure (in 000's):												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
PreDesign - Request	\$56	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$56
Design - Request	\$0	\$300	\$480	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$780
Utilities - Forecast	\$0	\$0	\$361	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$361
Construction - Forecast	\$0	\$0	\$0	\$1,374	\$2,600	\$400	\$0	\$0	\$0	\$0	\$0	\$4,374
Total	\$56	\$300	\$841	\$1,374	\$2,600	\$400	\$0	\$0	\$0	\$0	\$0	\$5,571
Funding (in 000's):												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Contribution from Tax Capital Reserve	\$56	\$300	\$841	\$1,374	\$2,600	\$400	\$0	\$0	\$0	\$0	\$0	\$5,571
Total	\$56	\$300	\$841	\$1,374	\$2,600	\$400	\$0	\$0	\$0	\$0	\$0	\$5,571

2022 Capital Project Detail Report

Project Title: Sophia Trunk Storm Sewers - Clapperton, Owen & Sophia (Dunlop to Peel)

Project Number: EN1464

Department: Infrastructure Department

Summary: Construction of new trunk storm sewers to convey the 100 year controlled storm flows from Sophia Creek at Peel Street along Sophia St. and south along Owen and Clapperton to Dunlop. In addition to addressing the storm conveyance needs, aging infrastructure within the project limits will be reconstructed as part of this project.

Rationale: Storm sewer improvements are needed to convey the 100 year controlled storm flows on Sophia Creek from Peel Street along Sophia St. and south along Owen and Clapperton to Dunlop. Under existing conditions there is significant flooding through downtown Barrie during major rainfall events. Currently, rainfall events greater than the 1:5 year storm are conveyed overland to Lake Simcoe. The proposed storm sewer will convey the 1:100 year return interval rain event to Lake Simcoe, mitigating the risk of future flooding through downtown Barrie.

In addition to the storm conveyance needs, a large portion of the infrastructure within these streets is approaching or past its anticipated useful life.

PROJECT EXPENDITURE AND FUNDING												
Expenditure (in 000's):												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
PreDesign - Request	\$319	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$319
Design - Request	\$0	\$511	\$511	\$681	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,704
Utilities - Forecast	\$0	\$0	\$200	\$1,491	\$200	\$0	\$0	\$0	\$0	\$0	\$0	\$1,891
Construction - Forecast	\$0	\$0	\$0	\$0	\$3,354	\$7,547	\$3,420	\$5,973	\$0	\$0	\$0	\$20,294
Total	\$319	\$511	\$711	\$2,172	\$3,554	\$7,547	\$3,420	\$5,973	\$0	\$0	\$0	\$24,208
Funding (in 000's):												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Contribution from DC Stormwater FMB Reserve	\$0	\$135	\$135	\$180	\$626	\$1,074	\$1,440	\$2,120	\$0	\$0	\$0	\$5,710
Contribution from Tax Capital Reserve	\$319	\$288	\$488	\$1,874	\$1,238	\$4,346	\$1,980	\$2,792	\$0	\$0	\$0	\$13,324
Contribution from WW Capital Reserve	\$0	\$58	\$58	\$77	\$850	\$653	\$0	\$620	\$0	\$0	\$0	\$2,315
Contribution from Water Capital Reserve	\$0	\$31	\$31	\$41	\$841	\$1,474	\$0	\$441	\$0	\$0	\$0	\$2,859
Total	\$319	\$511	\$711	\$2,172	\$3,554	\$7,547	\$3,420	\$5,973	\$0	\$0	\$0	\$24,208

2022 Capital Project Detail Report

Project Title: Sunnidale Road Hwy 400 Crossing Reconstruction (within CAH limits)

Project Number: EN1316

Department: Infrastructure Department

Summary: The City's contribution toward the Ontario Ministry of Transportation's planned reconstruction of the Sunnidale Road Highway 400 crossing within the controlled access highway limits. This project includes construction of a new sanitary sewer to replace the existing sewer crossing Highway 400 at this location.

Rationale: The Sunnidale Road crossing requires reconstruction to support the planned expansion of Highway 400 to 10 lanes and address life-cycle requirements. The City has also identified additional improvements as per the Multi-modal Active Transportation Master Plan including bicycle lanes, sidewalks on both sides and wider sidewalks. The Ontario Ministry of Transportation will construct the additional improvements subject to cost sharing with the City. It is recommended that the City contribute to the Ministry of Transportation's planned works for the additional improvements as completing this work jointly maximizes cost efficiencies.

PROJECT EXPENDITURE AND FUNDING

Expenditure (in 000's):

	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Environmental Assessment - Request	\$56	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$56
Design - Request	\$309	\$20	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$329
Utilities - Request	\$12	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$12
Construction - Request	\$586	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$586
Design - Forecast	\$0	\$0	\$139	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$139
Construction - Forecast	\$0	\$0	\$0	\$1,000	\$2,753	\$0	\$0	\$0	\$0	\$0	\$0	\$3,753
Total	\$963	\$20	\$139	\$1,000	\$2,753	\$0	\$0	\$0	\$0	\$0	\$0	\$4,874

Funding (in 000's):

	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Contribution from DC Roads Reserve	\$0	\$13	\$90	\$650	\$1,789	\$0	\$0	\$0	\$0	\$0	\$0	\$2,542
Contribution from Tax Capital Reserve	\$213	\$7	\$48	\$350	\$964	\$0	\$0	\$0	\$0	\$0	\$0	\$1,582
Contribution from WW Capital Reserve	\$750	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$750
Total	\$963	\$20	\$139	\$1,000	\$2,753	\$0	\$0	\$0	\$0	\$0	\$0	\$4,874

2022 Capital Project Detail Report

Project Title: Sunnidale: Letitia-Wellington Transmission Watermain

Project Number: EN1013

Department: Infrastructure Department

Summary: Installation of a new transmission watermain to join the existing 500mm diameter watermain sections at Wellington Street and at Letitia Street, crossing Highway 400. Also included is the relocation of the domestic watermain and sanitary sewer currently within the bridge and the relocation of the storm sewer out of the current MTO Hwy 400 ROW.

Rationale: The new 600mm transmission watermain will provide security of supply to and from the Sunnidale Road reservoir to downtown Barrie. There are existing 500mm diameter watermain sections at Wellington and at Letitia ready to be interconnected. The 250 domestic watermain, storm and sanitary sewers require relocation around the proposed new structure.

MTO is proposing to reconstruct the Sunnidale Highway 400 Crossing starting in 2023.

PROJECT EXPENDITURE AND FUNDING

Expenditure (in 000's):

	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Design - Request	\$799	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$799
Property - Request	\$850	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$850
Utilities - Request	\$68	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$68
Construction - Request	\$3,722	\$2,885	\$2,023	\$979	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$9,610
Total	\$5,438	\$2,885	\$2,023	\$979	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$11,326

Funding (in 000's):

	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Debenture Proceeds - DCs	\$0	\$1,226	\$860	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,086
Contribution from Development Charge Reserves	(\$65)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	(\$65)
Contribution from DC Reserves Water	\$275	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$275
Contribution from DC Roads Reserve	\$0	\$0	\$0	\$421	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$421
Contribution from DC Stormwater FMB Reserve	\$123	\$15	\$10	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$147
Contribution from DC Water Dist FMB Reserve	\$1,458	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,458

Contribution from DC WW Collection FMB Reserve	\$193	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$193
Contribution from Tax Capital Reserve	\$222	\$20	\$13	\$558	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$814
Contribution from WW Capital Reserve	\$255	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$255
Contribution from Water Capital Reserve	\$2,978	\$1,625	\$1,140	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$5,742
Total	\$5,438	\$2,885	\$2,023	\$979	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$11,326

2022 Capital Project Detail Report

Project Title: SWTP Control System Upgrade

Project Number: EN1468

Department: Infrastructure Department

Summary: Replacement of the control system at the Surface Water Treatment Plant to align with industry standards and replace obsolete components.

The project is expected to take three (3) years to complete and will require dedicated resources.

Rationale: The Surface Water Treatment Plant (SWTP) as with all Membrane filtration plants, is reliant on computerized programmable logic controllers (PLCs) to continually control and actively assess the high level of treatment needed for the City’s potable water supply.

The PLCs, as with all computerized systems, have a limited life due to obsolescence, technological advancements, software improvements and diminishing technology service supports. Replacement of these systems is required before 2025, when the PLCs are expected to reach their end-of-life.

PROJECT EXPENDITURE AND FUNDING												
<u>Expenditure (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Design - Request	\$655	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$655
Construction - Request	\$247	\$2,224	\$2,471	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$4,942
Total	\$902	\$2,224	\$2,471	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$5,597
<u>Funding (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Contribution from Water Capital Reserve	\$902	\$2,224	\$2,471	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$5,597
Total	\$902	\$2,224	\$2,471	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$5,597

2022 Capital Project Detail Report

Project Title: Tiffin Street - Ferndale to Anne Street

Project Number: EN1016

Department: Infrastructure Department

Summary: Transmission watermain installation from Ferndale to Anne Street including roadway resurfacing.

Rationale: The transmission watermain is required to provide adequate fire flows as well as increase domestic supply. The proposed solution also improves the existing roadway condition and will be a cost-effective long-term approach that will help increase levels of service.

PROJECT EXPENDITURE AND FUNDING

Expenditure (in 000's):

	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Design - Request	\$432	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$432
Construction - Request	\$0	\$3,100	\$3,100	\$500	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$6,700
Total	\$432	\$3,100	\$3,100	\$500	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$7,132

Funding (in 000's):

	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Debenture Proceeds - DCs	\$0	\$1,333	\$1,333	\$215	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,881
Contribution from DC Reserves Water	\$64	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$64
Contribution from DC Water Dist FMB Reserve	\$147	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$147
Contribution from Tax Capital Reserve	\$0	\$114	\$1,140	\$171	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,425
Contribution from Water Capital Reserve	\$220	\$1,653	\$627	\$114	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,614
Total	\$432	\$3,100	\$3,100	\$500	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$7,132

2022 Capital Project Detail Report

Project Title: Toronto Street ROW Replacement - End to Ross

Project Number: EN1479

Department: Infrastructure Department

Summary: Due to financial constraints, it is recommended to complete a holding strategy on the roads in 2022 and address the full project scope in future capital plans. The full project in future years would include reconstruction of Toronto St from Ross St. to End, north of Grove St. West.

Rationale: Toronto St requires rehabilitation work in advance of the proposed full reconstruction of this road. The schedule for the proposed reconstruction work has been deferred in the Capital Plan due to financial constraints. The asphalt work will address problems on the surface of the roadway by providing a quality top layer of asphalt pavement. This will be a cost-effective short-term approach that will maintain levels of service and decrease the risk assumed by the City.

<u>PROJECT EXPENDITURE AND FUNDING</u>												
<u>Expenditure (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Construction - Request	\$0	\$550	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$550
Plan - Forecast	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$125	\$0	\$125
Design - Forecast	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$791	\$791
Total	\$0	\$550	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$125	\$791	\$1,466
<u>Funding (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Contribution from Tax Capital Reserve	\$0	\$550	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$125	\$483	\$1,158
Contribution from WW Capital Reserve	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$169	\$169
Contribution from Water Capital Reserve	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$139	\$139
Total	\$0	\$550	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$125	\$791	\$1,466

2022 Capital Project Detail Report

Project Title: Wastewater Peak Flow Attenuation Facility

Project Number: EN1390

Department: Infrastructure Department

Summary: Implementation of a peak flow attenuation facility to capture, temporarily store, and reduce peak flows 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	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Design - Request	\$1,220	\$1,346	\$1,009	\$200	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,776
Construction - Forecast	\$0	\$0	\$0	\$0	\$531	\$2,215	\$8,862	\$8,862	\$2,923	\$0	\$0	\$23,393
Total	\$1,220	\$1,346	\$1,009	\$200	\$531	\$2,215	\$8,862	\$8,862	\$2,923	\$0	\$0	\$27,169
Funding (in 000's):												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Contribution from DC WW Serv Facilities Reserve	\$404	\$552	\$414	\$82	\$218	\$908	\$3,633	\$3,633	\$1,199	\$0	\$0	\$11,043
Contribution from WW Capital Reserve	\$816	\$794	\$596	\$118	\$313	\$1,307	\$5,228	\$5,228	\$1,725	\$0	\$0	\$16,126
Total	\$1,220	\$1,346	\$1,009	\$200	\$531	\$2,215	\$8,862	\$8,862	\$2,923	\$0	\$0	\$27,169

2022 Capital Project Detail Report

Project Title: Water Meter Replacement Program

Project Number: 001062

Department: Infrastructure Department

Summary: Annual program to replace water meters and Smartpoints that send the meter readings via radio frequency and require replacement due to battery life.

Rationale: The City of Barrie currently has 44,980 water meter assets. Of these 44,980 water meters 28,437 are beyond their expected life cycle of 20 years. Once a water meter has gone beyond its recommended life cycle the accuracy of the water meter as a measuring device drops significantly to upwards of 40% "under registration" of volumes resulting in under billing. The requested funding of \$563,000.00 annually would allow for a meter and smartpoint replacement program to be initiated. This program would include addressing the current need for the replacement of expired water meters and the scheduling of water meter replacements as required into the future. Smartpoints will need to be replaced as they reach their end of life. Funds for the replacement of smartpoints will need to be increased inversely with the prorated warranty program.

PROJECT EXPENDITURE AND FUNDING												
<u>Expenditure (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Capital Purchase - Request	\$0	\$563	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$563
Capital Purchase - Forecast	\$0	\$0	\$666	\$729	\$792	\$855	\$918	\$981	\$1,044	\$1,107	\$1,170	\$8,258
Total	\$0	\$563	\$666	\$729	\$792	\$855	\$918	\$981	\$1,044	\$1,107	\$1,170	\$8,821
<u>Funding (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Contribution from Water Capital Reserve	\$0	\$563	\$666	\$729	\$792	\$855	\$918	\$981	\$1,044	\$1,107	\$1,170	\$8,821
Total	\$0	\$563	\$666	\$729	\$792	\$855	\$918	\$981	\$1,044	\$1,107	\$1,170	\$8,821

2022 Capital Project Detail Report

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

Project Number: EN1152

Department: Infrastructure 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												
<u>Expenditure (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Design - Request	\$90	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$90
Construction - Request	\$1,451	\$195	\$195	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,841
Total	\$1,541	\$195	\$195	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,931
<u>Funding (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Contribution from Water Rate Capital Holding Res	\$26	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$26
Contribution from Water Capital Reserve	\$1,515	\$195	\$195	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,905
Total	\$1,541	\$195	\$195	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,931

2022 Capital Project Detail Report

Project Title: Watermain Cathodic Protection Program

Project Number: EN1189

Department: Infrastructure Department

Summary: Installation of watermain cathodic protection on existing ductile iron watermains. The anodes will be connected to ductile iron watermains by insulated copper wires; the anodes will corrode, rather than the watermain to which they are attached, thereby extending the life of the watermain.

Rationale: Ductile iron watermains are more prone to corrosion than non-ferrous pipes. This results in damage to the pipe surface, including pitting, scaling, and other depressions, which eventually leads to cracks, holes and other physical failures. Such damage substantially reduces the maximum potential life of these mains, resulting in increased operational and emergency repair costs as well as service disruptions.

Cast Iron pipes, similarly prone to corrosion-related failure, can also be protected via cathodic protection; however it is not intended that these assets will receive such treatment as it is likely that the City will replace them before a return on investment for cathodic protection would be realized. This program is intended to apply cathodic protection to all ductile iron mains that are not otherwise proposed for replacement in other capital projects, and that fall within the recommended age (40 years or younger) to maximize the benefit of cathodic protection. Installation of cathodic protection is expected to increase the life of ductile iron watermains by up to 15 years.

<u>PROJECT EXPENDITURE AND FUNDING</u>												
<u>Expenditure (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Design - Request	\$160	\$40	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$200
Construction - Request	\$3,752	\$960	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$4,712
Design - Forecast	\$0	\$0	\$40	\$40	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$80
Construction - Forecast	\$0	\$0	\$960	\$960	\$960	\$0	\$0	\$0	\$0	\$0	\$0	\$2,880
Total	\$3,912	\$1,000	\$1,000	\$1,000	\$960	\$0	\$0	\$0	\$0	\$0	\$0	\$7,872
<u>Funding (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Contribution from Water Capital Reserve	\$3,912	\$1,000	\$1,000	\$1,000	\$960	\$0	\$0	\$0	\$0	\$0	\$0	\$7,872
Total	\$3,912	\$1,000	\$1,000	\$1,000	\$960	\$0	\$0	\$0	\$0	\$0	\$0	\$7,872

2022 Capital Project Detail Report

Project Title: Whiskey Creek Channel Reconstruction - Bayview to Lackies Bush

Project Number: 000070

Department: Infrastructure Department

Summary: Watercourse reconstruction for approximate 740 metres from Bayview, around 279 Bayview and connection to the watercourse in Lackies Bush. The project involved partial property acquisition of three properties.

Rationale: The channel at this location does not have sufficient capacity to convey major flow events. There have been two reported incidents of flood damages in the last ten years. The reconstructed channel would have higher conveyance capacity and reduce the potential for flooding.

PROJECT EXPENDITURE AND FUNDING

Expenditure (in 000's):

	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
PreDesign - Request	\$0	\$267	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$267
Design - Forecast	\$0	\$0	\$685	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$685
Property - Forecast	\$0	\$0	\$0	\$0	\$5,357	\$0	\$0	\$0	\$0	\$0	\$0	\$5,357
Utilities - Forecast	\$0	\$0	\$0	\$0	\$0	\$100	\$0	\$0	\$0	\$0	\$0	\$100
Construction - Forecast	\$0	\$0	\$0	\$0	\$0	\$0	\$3,052	\$3,052	\$0	\$0	\$0	\$6,104
Total	\$0	\$267	\$685	\$0	\$5,357	\$100	\$3,052	\$3,052	\$0	\$0	\$0	\$12,513

Funding (in 000's):

	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Contribution from DC Whiskey Creek - Pond Reserve	\$0	\$120	\$308	\$0	\$2,411	\$45	\$1,373	\$1,373	\$0	\$0	\$0	\$5,631
Contribution from Tax Capital Reserve	\$0	\$147	\$377	\$0	\$2,946	\$55	\$1,679	\$1,679	\$0	\$0	\$0	\$6,882
Total	\$0	\$267	\$685	\$0	\$5,357	\$100	\$3,052	\$3,052	\$0	\$0	\$0	\$12,513

2022 Capital Project Detail Report

Project Title: Whiskey Creek Culvert and Channel Improvements - The Blvd, Brennan to Lake

Project Number: 001020

Department: Infrastructure Department

Summary: Improved conveyance capacity of Whiskey Creek from The Boulevard to Brennan Avenue to reduce frequency of flooding. Project includes design from The Boulevard to Lake Simcoe and construction of the two culverts on Brennan and The Boulevard and watercourse improvements between the culverts.

Rationale: The lower section of Whiskey Creek, from The Boulevard to Lake Simcoe has limited stormwater flow conveyance capacity and is prone to flooding. This project improves the two culvert and linking watercourse to reduce the probability and consequence of flooding for both small frequent events and rare large floods.

PROJECT EXPENDITURE AND FUNDING

Expenditure (in 000's):

	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
PreDesign - Request	\$0	\$107	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$107
Design - Forecast	\$0	\$0	\$358	\$358	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$716
Property - Forecast	\$0	\$0	\$0	\$0	\$917	\$0	\$0	\$0	\$0	\$0	\$0	\$917
Utilities - Forecast	\$0	\$0	\$0	\$0	\$0	\$547	\$0	\$0	\$0	\$0	\$0	\$547
Construction - Forecast	\$0	\$0	\$0	\$0	\$0	\$0	\$1,571	\$3,928	\$2,357	\$0	\$0	\$7,855
Total	\$0	\$107	\$358	\$358	\$917	\$547	\$1,571	\$3,928	\$2,357	\$0	\$0	\$10,142

Funding (in 000's):

	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Contribution from DC Stormwater FMB Reserve	\$0	\$48	\$161	\$161	\$413	\$246	\$707	\$1,767	\$1,060	\$0	\$0	\$4,564
Contribution from Tax Capital Reserve	\$0	\$59	\$197	\$197	\$504	\$301	\$864	\$2,160	\$1,296	\$0	\$0	\$5,578
Total	\$0	\$107	\$358	\$358	\$917	\$547	\$1,571	\$3,928	\$2,357	\$0	\$0	\$10,142

2022 Capital Project Detail Report

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

Project Number: EN1431

Department: Infrastructure Department

Summary: Planning, design and construction to increase the plant capacity, from 76 MLD to 96 MLD, to meet the projected average daily wastewater flow for beyond Year 2031. The expansion stage will include upgrades and capacity expansion to the Raw Sewage Pumping Station and Headworks, Primary Treatment, Secondary Treatment, Biosolids Treatment and the Co-Generation Facility.

The technical studies and the Class EA to be initiated in 2021 will consist of gap analyses, capacity assessments, process deficiencies, site planning, operational work space planning and an optimized implementation plan for the MBR Upgrade in conjunction with the subsequent expansions to 96 MLD and 115MLD.

Rationale: The City has conducted a 2019 Wastewater Master Plan for the WwTF. The City is expected to reach a combined population of 460,000 in 2071 resulting in an increase of wastewater flow to the City's WwTF to 96 MLD by 2041 and 115 MLD by 2071. This will also result in an increase to the sludge production and the biosolids generation at the WwTF.

To address the growth projections as per the Master Plan, the WwTF will have to expand its capacity to meet the population growth. This project is key to the City's growth and regulatory compliance. The initial planning step would meet the Class EA requirements and develop an efficient strategy to implement the subsequent expansion following the MBR project.

<u>PROJECT EXPENDITURE AND FUNDING</u>												
<u>Expenditure (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Environmental Assessment - Request	\$0	\$145	\$649	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$794
Study - Request	\$1,600	\$657	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,257
Design - Forecast	\$0	\$0	\$2,497	\$3,745	\$3,745	\$2,932	\$0	\$0	\$0	\$0	\$0	\$12,919
Total	\$1,600	\$802	\$3,146	\$3,745	\$3,745	\$2,932	\$0	\$0	\$0	\$0	\$0	\$15,970
<u>Funding (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Contribution from DC WW Serv Facilities Reserve	\$1,024	\$785	\$3,146	\$3,745	\$3,745	\$2,932	\$0	\$0	\$0	\$0	\$0	\$15,377
Contribution from WW Capital Reserve	\$576	\$17	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$593
Total	\$1,600	\$802	\$3,146	\$3,745	\$3,745	\$2,932	\$0	\$0	\$0	\$0	\$0	\$15,970

2022 Capital Project Detail Report

Project Title: WwTF Chemical Building Upgrade

Project Number: EN1245

Department: Infrastructure Department

Summary: This project is to provide a temporary relocation of sodium hypochlorite storage from the existing Chemical Building at the Wastewater Treatment Facility to address health and safety requirements.

Rationale: Achieving regulatory compliance is increasingly difficult given the aging asset portfolio. The obligations include requirements related to fire and life safety requirements, hazardous substances, and environmental protection. Within the context of managing assets, the existing chemical building currently houses (on different levels) two incompatible chemicals without a scrubber for the off gases, and there is no odour control. The proposed study will recommend preferred location where one of the chemicals could be stored until the future MBR project is fully implemented.

<u>PROJECT EXPENDITURE AND FUNDING</u>												
<u>Expenditure (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
PreDesign - Request	\$50	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$50
Design - Request	\$164	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$164
Construction - Request	\$200	\$876	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,076
Total	\$414	\$876	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,290
<u>Funding (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Contribution from DC WW Serv Facilities Reserve	\$233	\$561	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$794
Contribution from WW Capital Reserve	\$181	\$315	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$496
Total	\$414	\$876	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,290

2022 Capital Project Detail Report

Project Title: WwTF Digester Capacity Expansion

Project Number: EN1438

Department: Infrastructure Department

Summary: Wastewater sludge digestion capacity expansion by adding a new Primary Digester # 4 (PD4).

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.

Currently there are three primary digesters (PDs) which are part of the overall biosolids treatment process. This project proposes a fourth primary digester(PD4) to be implemented as part of the overall program to implement the MBR upgrades.

The treated biosolids are applied as a nutrient and as soil conditioner on agricultural lands. As such, it is critical to provide an adequate treatment of the biosolids to meet NASM (non-agricultural source material) requirements under the Nutrient Management Act.

PROJECT EXPENDITURE AND FUNDING

Expenditure (in 000's):

	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Design - Request	\$1,300	\$1,110	\$733	\$633	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,775
Construction - Forecast	\$0	\$0	\$0	\$1,497	\$2,775	\$8,325	\$8,325	\$5,550	\$2,775	\$0	\$0	\$29,247
Total	\$1,300	\$1,110	\$733	\$2,130	\$2,775	\$8,325	\$8,325	\$5,550	\$2,775	\$0	\$0	\$33,022

Funding (in 000's):

	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Contribution from DC WW Serv Facilities Reserve	\$1,300	\$1,110	\$733	\$2,130	\$2,775	\$8,325	\$8,325	\$5,550	\$2,775	\$0	\$0	\$33,022
Total	\$1,300	\$1,110	\$733	\$2,130	\$2,775	\$8,325	\$8,325	\$5,550	\$2,775	\$0	\$0	\$33,022

2022 Capital Project Detail Report

Project Title: WwTF Electrical Substation and Transformer Upgrade

Project Number: EN1297

Department: Infrastructure Department

Summary: At the Wastewater Treatment Facility (WwTF), the project will replace the existing electrical infrastructure, including substation and transformers, and provide for the new electrical requirements associated with the Membrane Bio-Reactor (MBR) project. The new electrical infrastructure is to be designed and constructed as part of the MBR 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	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Design - Request	\$2,100	\$600	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,700
Construction - Request	\$0	\$0	\$2,967	\$3,709	\$4,450	\$4,009	\$0	\$0	\$0	\$0	\$0	\$15,134
Total	\$2,100	\$600	\$2,967	\$3,709	\$4,450	\$4,009	\$0	\$0	\$0	\$0	\$0	\$17,834

Funding (in 000's):

	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Contribution from DC WW Serv Facilities Reserve	\$1,146	\$384	\$1,899	\$2,373	\$2,848	\$2,565	\$0	\$0	\$0	\$0	\$0	\$11,215
Contribution from WW Capital Reserve	\$954	\$216	\$1,068	\$1,335	\$1,602	\$1,443	\$0	\$0	\$0	\$0	\$0	\$6,619
Total	\$2,100	\$600	\$2,967	\$3,709	\$4,450	\$4,009	\$0	\$0	\$0	\$0	\$0	\$17,834

2022 Capital Project Detail Report

Project Title: WwTF New Advanced Nutrient Removal

Project Number: EN1091

Department: Infrastructure Department

Summary: The MBR process implementation will address the phosphorous effluent limits as required under the Lake Simcoe Phosphorus Reduction Strategy. The system would be designed and implemented for 76 MLD capacity, with process upgrades to allow for future expansion. Electrical power system upgrades and flow attenuation tank are also required to implement the MBR system. The entire program of capital works will be delivered using Integrated Project Delivery (IPD).

Rationale: Implementation of the MBR process and associated upgrades is essential to meeting the requirements of Lake Simcoe Protection Act and servicing future growth. The WwTF is a live plant without any redundancy. The effluent quality must be maintained during construction while treatment processes are replaced. The proposed solution would be implemented by first retrofitting UNOX tanks with fine bubble aeration. Once UNOX conversion is completed, remaining secondary clarifiers tanks would be converted to fine bubble aeration while the RBC process is decommissioned to make room for the MBR process. Hydro supply upgrades and peak flow attenuation upgrades are also required. Once MBR is fully retrofitted with new UV irradiation system, the existing sand filtration system would be decommissioned.

PROJECT EXPENDITURE AND FUNDING												
Expenditure (in 000's):												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Design - Request	\$9,679	\$7,024	\$4,683	\$5,372	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$26,758
Construction - Forecast	\$0	\$0	\$0	\$7,889	\$14,779	\$14,779	\$14,779	\$27,976	\$27,976	\$27,976	\$4,526	\$140,679
Total	\$9,679	\$7,024	\$4,683	\$13,262	\$14,779	\$14,779	\$14,779	\$27,976	\$27,976	\$27,976	\$4,526	\$167,437
Funding (in 000's):												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Debenture Proceeds - DCs	\$990	\$2,920	\$1,422	\$7,857	\$9,458	\$9,458	\$9,458	\$17,905	\$17,905	\$17,905	\$2,896	\$98,175
Contribution from WW Capital Reserve	\$8,689	\$4,104	\$3,261	\$5,404	\$5,320	\$5,320	\$5,320	\$10,071	\$10,071	\$10,071	\$1,629	\$69,262
Total	\$9,679	\$7,024	\$4,683	\$13,262	\$14,779	\$14,779	\$14,779	\$27,976	\$27,976	\$27,976	\$4,526	\$167,437

2022 Capital Project Detail Report

Project Title: WwTF New Cogeneration and Biogas Treatment System

Project Number: EN1477

Department: Infrastructure Department

Summary: This study will include a condition assessment of the existing gas treatment system and a quality assessment of the biogas currently generated at the WwTF.

Rationale: The current biogas utilization at the WwTF is not optimized and a significant amount of biogas is flared as waste gas. A study was undertaken to identify available alternatives to optimize the energy recovery from the cogeneration system. A condition assessment of the existing biogas treatment system is required to ensure that the quality of biogas currently generated will meet the specifications of the proposed new cogeneration system. This will ensure longevity of the proposed new biogas system and minimize future maintenance costs.

<u>PROJECT EXPENDITURE AND FUNDING</u>												
<u>Expenditure (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Study - Request	\$80	\$220	\$200	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$500
Total	\$80	\$220	\$200	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$500
<u>Funding (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Contribution from DC WW Serv Facilities Reserve	\$80	\$220	\$200	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$500
Total	\$80	\$220	\$200	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$500

2022 Capital Project Detail Report

Project Title: WwTF Sludge Thickening System Process - Polymer System Replacement

Project Number: EN1237

Department: Infrastructure Department

Summary: Replacement of the existing Polymer System at the Wastewater Treatment Facility. The project includes design changes to the Sludge Thickening Room and the basement based on the feasibility study .The construction would include new tanks , mechanical, electrical, heating and ventilation upgrades, and ancillary work to make the system functional.

Rationale: The existing dry polymer batching system poses health and safety concerns to the operators and require them to wear their personal protective equipment when they make a new batch. There is not enough space to safely operate a forklift and heating and ventilation upgrades are required to bring the room up to code. Changing to a liquid polymer system will improve polymer delivery and reduce operating costs.

PROJECT EXPENDITURE AND FUNDING

Expenditure (in 000's):

	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Design - Request	\$421	\$100	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$521
Construction - Forecast	\$0	\$0	\$622	\$2,397	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,019
Total	\$421	\$100	\$622	\$2,397	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,540

Funding (in 000's):

	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Contribution from WW Capital Reserve	\$421	\$100	\$622	\$2,397	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,540
Total	\$421	\$100	\$622	\$2,397	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,540

2022 Capital Project Detail Report

Project Title: Handheld Ticket Writing Systems / Software

Project Number: 001093

Department: Legislative & Court Services

Summary: Requirement to replace Handheld Ticket Writing Systems both back office and in field units due to "end of life" with current system no longer supported by current vendor. Advised by current vendor, support for current Handheld Ticket Writer System has now reached "end of life" and will no longer be supported beyond 2021. Handheld Ticket Writers and back office software is require for processing of all parking infractions issued within the City. Over 50,000 parking infractions (tickets) are issued annually. Failure to procure new products will result in a loss of revenue to the Corporation.

Rationale: t is anticipated that a new system (both machine and software) would have a life cycle of approximately 7-10 years pending changes to the overall corporate operating systems or technology changes unknown at this time.

The current handhelds and software have been operational since the early 2000's with very minor upgrades over the years not resulting in any substantial costs to the corporation.

<u>PROJECT EXPENDITURE AND FUNDING</u>												
<u>Expenditure (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Capital Purchase - Request	\$0	\$220	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$220
Capital Purchase - Forecast	\$0	\$0	\$80	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$80
Total	\$0	\$220	\$80	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$300
<u>Funding (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Contribution from Tax Capital Reserve	\$0	\$220	\$80	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$300
Total	\$0	\$220	\$80	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$300

2022 Capital Project Detail Report

Project Title: 2022 Accessible Pedestrian Pushbutton

Project Number: 001098

Department: Operations

Summary: Additional locations identified under this program have been delayed due to COVID-19 and that Accessibility Advisory Committee not being able to meet in 2021 yet. It is expected that the prior to 2022 the AAC will have met and identified 4 locations for implementation.

Rationale: We are requesting funds within the 2022 Capital Budget each installation is \$16,500. Due to COVID-19 locations will be identified at a later date.

<u>PROJECT EXPENDITURE AND FUNDING</u>												
<u>Expenditure (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Capital Purchase - Request	\$0	\$83	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$83
Total	\$0	\$83	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$83
<u>Funding (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Contribution from Tax Capital Reserve	\$0	\$83	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$83
Total	\$0	\$83	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$83

2022 Capital Project Detail Report

Project Title: 2022 Streetlight Infill Program

Project Number: 001099

Department: Operations

Summary: Due to COVID-19, Traffic Services have not received any requests for 2022, however it is expected that by 2022 construction season it would be reasonable to expect 4-5 locations to be requested.

Rationale: In older neighbourhoods throughout Barrie, the streetlighting 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.

<u>PROJECT EXPENDITURE AND FUNDING</u>												
<u>Expenditure (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Capital Purchase - Request	\$0	\$65	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$65
Total	\$0	\$65	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$65
<u>Funding (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Contribution from Tax Capital Reserve	\$0	\$65	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$65
Total	\$0	\$65	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$65

2022 Capital Project Detail Report

Project Title: 2022 Traffic Signal Cabinet Replacement Program

Project Number: 001097

Department: Operations

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 back up 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.

PROJECT EXPENDITURE AND FUNDING												
<u>Expenditure (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Capital Purchase - Request	\$0	\$90	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$90
Total	\$0	\$90	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$90
<u>Funding (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Contribution from Tax Capital Reserve	\$0	\$90	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$90
Total	\$0	\$90	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$90

2022 Capital Project Detail Report

Project Title: Annual Parking Lot Improvement Program

Project Number: EN1266

Department: Operations

Summary: The Annual Parking Lot Improvement Program includes the expansion, upgrading, rehabilitation, and replacement of existing parking lot surfaces at City of Barrie parklands. The program aims to improve capacity issues, promote park and recreation activities, and improve deteriorating surfaces to better accommodate City of Barrie residents.

Rationale: With the continued growth of the City's population and on-going intensification plans, the use of recreational and public parks continues to increase. As such, current parking lot conditions no longer meet the physical condition or capacity requirements to provide residents with the levels of service they desire and also restrict City park and recreation activities because of this. The program aims to increase the quality and capacity of City owned parking lots which benefits the City socially through resident satisfaction while increasing revenues via the accommodation and promotion of outdoor recreation programs. As the City prioritizes and implements outdoor park sports fields and other amenities, future parking needs will continue to be investigated.

PROJECT EXPENDITURE AND FUNDING												
<u>Expenditure (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Design - Request	\$50	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$50
Construction - Request	\$380	\$50	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$430
Capital Purchase - Request	\$75	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$75
Construction - Forecast	\$0	\$0	\$50	\$50	\$50	\$50	\$50	\$50	\$50	\$0	\$0	\$350
Total	\$505	\$50	\$50	\$50	\$50	\$50	\$50	\$50	\$50	\$0	\$0	\$905
<u>Funding (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Contribution from Cash-In-Lieu Parkland Reserve	\$150	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$150
Contribution from Tax Capital Reserve	\$355	\$50	\$50	\$50	\$50	\$50	\$50	\$50	\$50	\$0	\$0	\$755
Total	\$505	\$50	\$50	\$50	\$50	\$50	\$50	\$50	\$50	\$0	\$0	\$905

2022 Capital Project Detail Report

Project Title: Automated Vehicle Location (AVL) Hardware Replacement

Project Number: 001104

Department: Operations

Summary: Replacement of Automated Vehicle Location (AVL) Hardware that is becoming obsolete and will not be supported by the vendor beyond June of 2022.

Rationale: Replacement of Automated Vehicle Location (AVL) Hardware that will not have technical support by the vendor beyond June of 2022. Existing AVL hardware (225 units) are becoming obsolete and require replacement with units that have current technology. Ontario municipalities are required to maintain roadways and sidewalks to the minimum maintenance standards defined in Ontario Regulation 239/02. AVL systems provide improved vehicle monitoring and tracking capabilities that can be used to demonstrate compliance with the regulation. AVL is used to track completion of winter maintenance routes, verify that contractors are meeting contractual obligations and to assist with managing effective deployment of resources. It is used to inform the public of progress in performing winter maintenance through the City's website (Barrie Plow Tracker). Salt usage/application rates, plow up/down are tracked through AVL and this information is critical in defense from claims against the City for damage to public property and personal injury. Excessive speeds, idling and driver behavior are tracked through AVL and are used for training purposes and to respond to public complaints.

PROJECT EXPENDITURE AND FUNDING												
Expenditure (in 000's):												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Capital Purchase - Request	\$0	\$225	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$225
Total	\$0	\$225	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$225
Funding (in 000's):												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Contribution from Tax Capital Reserve	\$0	\$225	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$225
Total	\$0	\$225	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$225

2022 Capital Project Detail Report

Project Title: Landfill Litter Fencing

Project Number: ES1059

Department: Operations

Summary: This work includes the installation of litter fencing along the northern slope of the active landfill cell to replace previously damaged fencing due to environmental winter conditions. The Legal Department has confirmed the damaged fence could not be covered by corporate insurance. Litter control is a legislative requirement under the Landfill site Environmental Compliance Approval #A250101.

Rationale: Solid Waste Operations is required to control litter under the existing Landfill Site Environmental Compliance Approval (ECA) #A250101. In December of 2019 a freezing rain event with heavy winds damaged the beams of an existing litter fence at the Landfill site that provided necessary litter capture along the northern slope of the active landfill cell.

This work will include the installation of litter fencing along the northern slope of the active landfill cell to effectively control litter. The Legal Department has confirmed the damaged fence could not be covered by corporate insurance.

Without proper control measures in place, Solid Waste Operations will continue to see increased labour costs as a result of litter picking as well as the potential for litter to mobilize and create off-site litter impacts in surrounding areas.

PROJECT EXPENDITURE AND FUNDING												
<u>Expenditure (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Capital Purchase - Request	\$100	\$50	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$150
Total	\$100	\$50	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$150
<u>Funding (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Contribution from Landfill Site Closure Reserve	\$100	\$50	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$150
Total	\$100	\$50	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$150

2022 Capital Project Detail Report

Project Title: Parks & Forestry Operations New Fleet to Service Growth

Project Number: 001108

Department: Operations

Summary: Additional Parks & Forestry Equipment & Vehicles to maintain existing service levels for new assets delivered through development and redevelopment activities. Specifically the funding is for new pick up trucks, trailers and lawn mowers.

Rationale: To meet existing service levels, maintenance capability must keep up with the addition of new assets (parks, playgrounds, trees, trails). Without adequate resources to achieve minimum maintenance requirements a reduction in service levels result creating increased risk through the inability to meet minimum legislated inspections and maintenance, increasing exposure to claims and decreasing customer/resident satisfaction.

As the City grows and develops, additional parks and open space (environmental protection) lands are that will become the maintenance responsibility of the Parks and Forestry Operations Branch. In addition to Parks in the Salem and Hewitts Secondary Plan Areas, new parks are being built within existing subdivisions within the built boundary, including Little Lake Park, Baywood/Mapleview Dr E Park, Pineview Park and Painswick Park.

Between 2020 and the end of 2022 in the built boundary there is anticipated to be an increase in maintained parkland of 19 hectares , 7 new playgrounds, 29 new shrub/perennial beds, 2,700 new street and park trees and 23 hectares of assumed forested / natural areas. Salem and Hewitts development is anticipated to add an additional 34 hectares of managed parkland, 161 hectares of natural heritage area, 8,300 street trees 15 km of primary trails, 100 new shrub/flower beds and 7 new playgrounds by 2026.

Growing the fleet inventory along with the infrastructure inventory will ensure the City can continue to provide service to existing residents and meet minimum maintenance standards.

PROJECT EXPENDITURE AND FUNDING												
Expenditure (in 000's):												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Capital Purchase - Request	\$0	\$133	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$133
Capital Purchase - Forecast	\$0	\$0	\$573	\$373	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$946
Total	\$0	\$133	\$573	\$373	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,079
Funding (in 000's):												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Contribution from DC Public Works Fac & Fleet Res	\$0	\$133	\$573	\$373	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,079
Total	\$0	\$133	\$573	\$373	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,079

2022 Capital Project Detail Report

Project Title: Permanent Traffic Calming Measures

Project Number: RP1170

Department: Operations

Summary: Each ward will be evaluated for permanent measures consisting of permanent concrete speed cushions.

Rationale: Each ward will be evaluated for permanent measures consisting of permanent concrete speed cushions that will expand onto the existing temporary program with providing a year round roadway with 2 crossings of concrete speed cushions in each Ward.

PROJECT EXPENDITURE AND FUNDING												
<u>Expenditure (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Capital Purchase - Request	\$300	\$300	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$600
Total	\$300	\$300	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$600
<u>Funding (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Contribution from Tax Capital Reserve	\$300	\$300	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$600
Total	\$300	\$300	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$600

2022 Capital Project Detail Report

Project Title: Roads Operations New Fleet to Service Growth

Project Number: 001107

Department: Operations

Summary: Three new combination plow/sander units to provide winter control to new routes in the Secondary Plan Areas. Two new sidewalk plows and 3 light duty trucks to maintain road and stormwater assets as they come online in the Secondary Plan Areas.

Rationale: The new vehicles are required to operate and maintain new infrastructure in the Secondary Plan Areas. As part of the Winter Maintenance Route Optimization Project completed in early 2020, residential routes were adjusted to re-balance routes and find efficiencies. After optimization and using the forecasts for new development coming online, it is recommended to add three (3) additional residential road plowing routes and 3 additional sidewalk plowing routes to service an additional 130 lane km of roads and 105 km of sidewalk. This infrastructure also requires maintenance outside of the winter season, and associated stormwater infrastructure must be maintained.

Growing the fleet inventory along with the infrastructure inventory will ensure the City can continue to provide service to existing residents and meet minimum maintenance standards.

The vehicles are required in 2023 or 2024, but extensive lead time for vehicle purchases requires budget approvals in advance.

<u>PROJECT EXPENDITURE AND FUNDING</u>												
<u>Expenditure (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Capital Purchase - Request	\$0	\$900	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$900
Capital Purchase - Forecast	\$0	\$0	\$525	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$525
Total	\$0	\$900	\$525	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,425
<u>Funding (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Contribution from DC Public Works Fac & Fleet Res	\$0	\$900	\$525	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,425
Total	\$0	\$900	\$525	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,425

2022 Capital Project Detail Report

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

Project Number: EN1442

Department: Operations

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).

PROJECT EXPENDITURE AND FUNDING												
Expenditure (in 000's):												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Construction - Request	\$1,085	\$875	\$841	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,801
Total	\$1,085	\$875	\$841	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,801
Funding (in 000's):												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Developer Front Ending (Annex) - Developer Build	\$1,085	\$744	\$715	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,544
Contribution from DC Parks and Recreation Reserve	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Contribution from Cash-In-Lieu Parkland Reserve	\$0	\$131	\$126	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$257
Total	\$1,085	\$875	\$841	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,801

2022 Capital Project Detail Report

Project Title: Bus Stop Infrastructure Replacement/Improvements

Project Number: TR1018

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												
<u>Expenditure (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Capital Purchase - Request	\$210	\$704	\$590	\$610	\$140	\$126	\$130	\$126	\$0	\$0	\$0	\$2,637
Capital Purchase - Forecast	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$130	\$135	\$139	\$404
Total	\$210	\$704	\$590	\$610	\$140	\$126	\$130	\$126	\$130	\$135	\$139	\$3,041
<u>Funding (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Province of Ontario Grant Revenue	\$69	\$232	\$195	\$201	\$46	\$42	\$43	\$41	\$0	\$0	\$0	\$870
Government of Canada Grant Revenue	\$84	\$282	\$236	\$244	\$56	\$50	\$52	\$50	\$0	\$0	\$0	\$1,055
Contribution from Tax Capital Reserve	\$57	\$190	\$159	\$165	\$38	\$34	\$35	\$34	\$130	\$135	\$139	\$1,116
Total	\$210	\$704	\$590	\$610	\$140	\$126	\$130	\$126	\$130	\$135	\$139	\$3,041

2022 Capital Project Detail Report

Project Title: Conventional Transit Bus Replacement Program

Project Number: TR1029

Department: Transit & Parking Strategy

Summary: Replacement of 4 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 12 years. 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):

	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Capital Purchase - Request	\$4,107	\$2,883	\$2,238	\$2,316	\$2,397	\$2,481	\$3,424	\$3,544	\$0	\$0	\$0	\$23,389
Capital Purchase - Forecast	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$5,501	\$5,694	\$5,865	\$17,060
Total	\$4,107	\$2,883	\$2,238	\$2,316	\$2,397	\$2,481	\$3,424	\$3,544	\$5,501	\$5,694	\$5,865	\$40,449

Funding (in 000's):

	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Province of Ontario Grant Revenue	\$1,355	\$951	\$738	\$764	\$791	\$819	\$1,130	\$1,169	\$0	\$0	\$0	\$7,718
Government of Canada Grant Revenue	\$1,643	\$1,153	\$895	\$926	\$959	\$992	\$1,369	\$1,417	\$0	\$0	\$0	\$9,355
Contribution from Tax Capital Reserve	\$1,109	\$778	\$604	\$625	\$647	\$670	\$924	\$957	\$5,501	\$5,694	\$5,865	\$23,375
Total	\$4,107	\$2,883	\$2,238	\$2,316	\$2,397	\$2,481	\$3,424	\$3,544	\$5,501	\$5,694	\$5,865	\$40,449

2022 Capital Project Detail Report

Project Title: Digital Parking Pass Solution

Project Number: TR1032

Department: Transit & Parking Strategy

Summary: The physical parking pass has many disadvantages, including a labour-intensive reconciliation process, dispute-prone visual inspection process for Enforcement, and reliance on in-person sales that can be inconvenient for the customer. The Resident Waterfront Parking Pass in particular can be susceptible to fraud in its physical format because there is no efficient method to prevent inappropriate sharing or validate residency online. This was demonstrated by the backlog that resulted from the influx of requests received during the 2020 summer season.

The Digital Parking Pass Solution avoids the issues associated with physical formats and offers new functionality such as a streamlined method to validate residency, LPR-assisted enforcement, new data generated by synergies with Parking App and pay-by-plate kiosks, and online sales. Contactless payment options are of heightened importance due to the COVID-19 pandemic.

When the full transition is complete, the corporation will save a \$27,000 a year on hangtags and waterfront parking revenues are expected to increase because it will be difficult to fraudulently obtain a Resident Waterfront Parking Pass. Staff time previously dedicated to tracking and reconciling parking pass sales can be reinvested in customer service and other corporate initiatives.

A dedicated resource with an IT skillset is required to ensure the project progresses and maintain current service levels as new processes are implemented. While technology is poised to transform the parking business model and improve the customer experience significantly, it will also add a layer of complexity to the way we do business. The Parking Technology Project Manager will also be responsible for the full deployment of the Parking App and LPR. Tasking a single position with leading simultaneous technology projects will maximize opportunities for integration and optimization between projects. This position will be temporary.

Rationale: Today the City of Barrie provides hangtag parking passes, however new technology has made it possible to completely transition from physical to digital parking passes. The Digital Parking Pass Solution is a suite of software that includes backoffice management of parking pass sales and a customer-facing platform for online sales. Parking passes are linked to license plate numbers, which acts a unique identifier for all parking transactions. In this way, the Digital Parking Pass Solution lays the foundation for a future-state parking “ecosystem” where customer service, operations and enforcement are connected through technology. Integrating with other corporate initiatives such as the Parking App and License Plate Recognition (LPR) enforcement technology will unlock new caches of information to support evidence-based improvements.

The intent is to phase out hangtags gradually overtime, starting with a digital option for the Resident Waterfront Parking Pass for summer 2021. This will allow a controlled environment for testing and resolving unforeseen issues before the full transition. A dedicated resource with an IT skill set is required to ensure the project progresses and maintain current service levels as new processes are implemented. This position will be temporary.

PROJECT EXPENDITURE AND FUNDING												
Expenditure (in 000's):												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Capital Purchase - Request	\$139	\$143	\$53	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$335
Total	\$139	\$143	\$53	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$335
Funding (in 000's):												

Expense amounts in bold text – 2022 Budget Request

Expense amounts in shaded text – Previously Committed Funding

	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Contribution from Parking Capital Reserve	\$139	\$143	\$53	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$335
Total	\$139	\$143	\$53	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$335

2022 Capital Project Detail Report

Project Title: Renewal - Paid Public Parking Lots

Project Number: 001003

Department: Transit & Parking Strategy

Summary: The City of Barrie manages over 3400 public parking spaces in the downtown and waterfront. These parking lots provide access to a wide variety of activities that bring life to our community, including working, shopping, participating in events and using recreation facilities. Ongoing renewal of parking lots is necessary in order to maintain service levels. Work includes localized concrete stair, curb and paver repairs, catch basin repairs and additions, asphalt replacement and line painting.

Rationale:

PROJECT EXPENDITURE AND FUNDING												
Expenditure (in 000's):												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Capital Purchase - Request	\$0	\$50	\$326	\$326	\$326	\$326	\$0	\$0	\$0	\$0	\$0	\$1,354
Capital Purchase - Forecast	\$0	\$0	\$0	\$0	\$0	\$0	\$326	\$326	\$326	\$326	\$326	\$1,630
Total	\$0	\$50	\$326	\$326	\$326	\$326	\$326	\$326	\$326	\$326	\$326	\$2,983
Funding (in 000's):												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Contribution from Parking Capital Reserve	\$0	\$50	\$326	\$326	\$326	\$326	\$326	\$326	\$326	\$326	\$326	\$2,983
Total	\$0	\$50	\$326	\$326	\$326	\$326	\$326	\$326	\$326	\$326	\$326	\$2,983

2022 Capital Project Detail Report

Project Title: Renewal - Parking Devices

Project Number: 001068

Department: Transit & Parking Strategy

Summary: The City manages 127 pay stations and 397 coin meters across the paid parking system within the downtown, waterfront, and hospital parking areas. These parking devices are required to be replaced every 10-15 years to maintain their functionality and service to the public.

Rationale: The City manages 127 pay stations and 397 coin meters across the paid parking system within the downtown, waterfront, and hospital parking areas. These parking devices are required to be replaced every 10-15 years to maintain their functionality and service to the public.

PROJECT EXPENDITURE AND FUNDING												
Expenditure (in 000's):												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Capital Purchase - Request	\$0	\$83	\$83	\$83	\$83	\$83	\$0	\$0	\$0	\$0	\$0	\$413
Capital Purchase - Forecast	\$0	\$0	\$0	\$0	\$0	\$0	\$83	\$83	\$83	\$83	\$83	\$413
Total	\$0	\$83	\$83	\$83	\$83	\$83	\$83	\$83	\$83	\$83	\$83	\$825
Funding (in 000's):												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Contribution from Parking Capital Reserve	\$0	\$83	\$83	\$83	\$83	\$83	\$83	\$83	\$83	\$83	\$83	\$825
Total	\$0	\$83	\$83	\$83	\$83	\$83	\$83	\$83	\$83	\$83	\$83	\$825

2022 Capital Project Detail Report

Project Title: Transit Alternative Payment Technology Implementation

Project Number: TR1031

Department: Transit & Parking Strategy

Summary: Research and implementation of smart payment technologies will increase payment options for the transit riders, increase efficiency and reduce cash handling costs, increase service, and remove barriers to access transit that will result in additional transit riders and revenue for the City.

Rationale: Existing payment options for transit users are limited to cash or pre-purchased ride cards. As payment technologies become commonplace in other transit agencies and industries there is a growing expectation from transit users to have additional payment options such as smart cards or mobile applications.

As part of the evaluation of payment options the City will undertake a business case to determine whether or not the PRESTO card system should be deployed. PRESTO has been in operation for several years now in the Greater Toronto and Hamilton Areas and is already used by Barrie Transit users that utilize it on the GO Transit system.

Mobile payment, using an application (app) running on a smart phone, is becoming more common place and eliminates the need for cash, cards or tickets. York Region Transit launched YRT/VIVA Pay in July 2017 as an alternative to cash and by January 2018 had over 13,000 users. Transport for London, which operates the London Underground has been leveraging Apple Pay as has Japanese railway JR East and New York's MTA's eTix app.

Handling cash is both inefficient for the customer and the City. The collection, control, processing, counting, depositing, and reconciling of cash is costly and could be avoided through smart payment technologies. In addition, the lack of payment options will deter more residents from using the transit system and will continue to create an additional barrier for the growth of transit ridership.

Finally, with the recent impacts of COVID-19 the need for contactless payment options is greater than ever to limit the number of interactions between riders, staff, and bus operators.

<u>PROJECT EXPENDITURE AND FUNDING</u>												
<u>Expenditure (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Capital Purchase - Request	\$317	\$577	\$258	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,153
Total	\$317	\$577	\$258	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,153
<u>Funding (in 000's):</u>												
	Prior Approvals	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Contribution from Tax Capital Reserve	\$317	\$577	\$258	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,153
Total	\$317	\$577	\$258	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,153