



2020 CAPITAL BUDGET, 2021-2024 FORECAST

and Asset Management Status Update **(including Dec 2, 2019 Council approved amendments)**

The City of St. Catharines

Page Intentionally Left Blank

2020 Capital Budget, and 2021-2024 Forecast and Asset Management Status Update

Table of Contents

1. Asset Management Status Update

2. 2020 Capital Budget Program Details - \$48,837,068

Schedule A - Capital Budget Summary

Schedule B - Roads

Schedule C - Sidewalks and Walkways

Schedule D - Storm Sewer Collection System (Incl. Sewer Separation)

Schedule E - Sanitary Sewer Collection System

Schedule F - Pollution Control

Schedule G - Water Distribution System (Watermains)

Schedule H - Bridges and Major Culverts

Schedule I - Shoreline Protection

Schedule J - Watercourses

Schedule K - Regional Projects

Schedule L - Parks, Recreation and Culture Services

Schedule M - Buildings and Facilities (Including Accessibility)

Schedule N - Parking Services

Schedule O - Fire Services

Schedule P - Corporate Infrastructure

Schedule Q - Transit Commission

Schedule R - Niagara District Airport (No Request for 2020)

Schedule S - Coordinated Projects

3. Future Capital Budget and Forecast Information

Schedule T - 2021 Capital Forecast

Schedule U - 2020 Capital Budget and Four Year Forecast

Schedule V - Other Potential Capital Projects - 2025 and Beyond

4. Funding Our Capital Budget

Schedule W - Project Funding Details

Schedule X - Funding Our Capital Assets

Schedule Y - Funding From Federal Gas Tax

2020 Capital Budget, and 2021-2024 Forecast and Asset Management Status Update

Table of Contents

4. Funding Our Capital Budget (continued)

Schedule Z - Debt Management Strategy

Schedule AA - Municipal Act Debt Limits

Schedule AB - Capital Budget and Debt - Municipal Comparators

Schedule AC - Re-prioritized Prior Four Year Forecasts

5. 2020 Construction Program - Ward Listing

Schedule AD - 2020 Construction Program by Ward Listing - Linear

Schedule AE - 2020 Construction Program by Ward Listing - Facilities

Asset Management Status Update

Background

The City's Asset Management Plan (AMP) was presented to Council in 2013. The AMP included the major asset categories of roads, bridges & major culverts, water mains, sanitary sewers and facilities. Subsequently, staff have, with limited resourcing, continued to refine the City's asset management planning, so that this report also includes information on sidewalks, playgrounds/courts and the storm sewer collection system.

In response to the new legislation from the Province related to Asset Management (O. Reg.588/17), the Asset Management Working Group (AMWG) comprising of TES, FMS and other senior staff has been working together since 2018. In June 2019, AMWG brought forward the Strategic Asset Management Policy for Council's approval. Staff will continue to work together onward to ensure that the City of St. Catharines meets all of the various milestones required by O. Reg. 588/17.

Infrastructure Deficit

A 2016 Federation of Canadian Municipalities report on the state of Canadian Infrastructure in Canada ⁽¹⁾ identified that the replacement value of assets rated as poor to very poor across the entire country was estimated to be approximately \$141 billion or 12% of the total replacement value of those assets. The City of St. Catharines was one of a total of 120 survey respondents from municipalities across Canada that helped to inform the report.

The City's current infrastructure deficit of approximately \$406 million represents approximately 8.7% of the replacement value of those asset categories as shown in Figure 1. This value has increased by almost \$42 million from the prior year values, largely due to the refinement of estimates in most asset classes. However, the largest increase is attributable to the sanitary and storm sewer collection systems (\$31.5 million). The City's infrastructure deficit for a particular asset is being defined as the replacement value of known deficiencies and includes assets rated as poor or very poor or as a high priority building deficiency identified through condition assessments.

With the City's infrastructure deficit currently below the national average, of 12% ⁽¹⁾ the infrastructure deficit needs to be considered in relation to sustainable funding and annual reinvestment targets for the City's assets, as the City's current contributions are below the recommended reinvestment targets.

Notes

- (1) Federation of Canadian Municipalities (FCM), in cooperation with the Canadian Construction Association (CCA), the Canadian Public Works Association (CPWA) and the Canadian Society for Civil Engineering (CSCE) published the *Canadian Infrastructure Report Card – 2016 (CIRC – 2016)*.

Figure 1.

Asset Category			Asset Replacement	Infrastructure Deficit	Target Reinvestment Rate (1)				Total Renewal Cap, OP, W/WW Budgets (\$M) (2)	
			Value (\$M)	Value (\$M)	Lower %	Upper %	Lower \$M	Upper \$M		
Sch. #										
Roads	569 km	B	967.0	59.0	2.0%	3.0%	19.3	29.0	8.1	
Bridges and Major Culverts	71	H	51.0	12.1	1.0%	1.5%	0.5	0.8	2.4	
Water Distribution System (3)	605 km	G	1,317.0	64.0	1.5%	2.0%	19.8	26.3	7.7	
Sanitary Sewer Collection System	570 km	E	900.0	140.0	1.0%	1.3%	9.0	11.7	4.5	
Storm Sewer Collection System	406 km	D	716.0	67.0	1.0%	1.3%	7.2	9.3	0.2	
Sidewalks (4)	559 km	C	135.4	6.8	2.3%	3.3%	3.1	4.5	0.8	
Facilities & Improved Lands (5)	128	M	567.0	51.0	1.7%	2.5%	9.6	14.2	5.4	
Playgrounds/Courts	109	L	18.8	6.3	1.7%	2.5%	0.3	0.5	0.3	
Total			4,672.2	406.2			68.8	96.3	29.4	43% of lower limit

Notes:

(1) – Source for lower and upper target reinvestment percentage rates is Canadian Infrastructure Report Card 2016; (2) - Only includes 2020 renewal projects denoted by (R), and excludes projects identified as providing for service improvement or growth (i.e. excludes new separate storm sewers, new sidewalks, or new road between Ridley Road and GO Station; (3) - City's estimated target reinvestment rate is higher than 1%-1.5% prescribed because City has a lower estimated life expectancy; (4) - City's target reinvestment rate is higher than 2%-3% prescribed rate because the City has a lower estimated life expectancy for sidewalks; (5) Includes parking garages and paid parking lots (6) Shoreline Protection, Waterways, Fleet and Corporate Infrastructure are excluded from this analysis

Sustainable Funding

Each asset category has a life expectancy, and so there is a need to renew these assets on a regular basis. Generally speaking, the replacement value divided by the average expected life provides an approximation of the anticipated level of annual sustainable funding. The CIRC – 2016 report provides a lower and upper range of suggested annual reinvestment rates (based as a percentage of replacement value) for various asset classes. A summary of the target reinvestment rates required to support sustainability for the City’s assets are presented in Figure 1 above.

As highlighted above and discussed further in the 2020 Capital Budget, Four Year Forecast and Asset Management Status Update, funding levels still fall well short of the sustainable levels of funding required. The 2020 funding for capital from all budgets represents

43% of the estimated lower funding target. These annual shortfalls impact the City’s ability to sustain its current levels of service and increase risk of asset failure and contribute to the City’s growing infrastructure deficit.

In 2019 Council approved the 10-year Financial Plan for Water and Wastewater, which included significant increases in the investment in related infrastructure over the next ten years. Including these capital investments in the annual capital budgets in the next ten years will assist in closing the funding gap for the Water/Wastewater assets. The 2020 Capital Budget and 10-year Financial Plan for Water and Wastewater (2020 – 2029) are aligned.

The asset replacement costs, infrastructure deficit, sustainable funding and the 2020 budget allocations are shown graphically below in Figure 2, 3 and 4.

Figure 2.

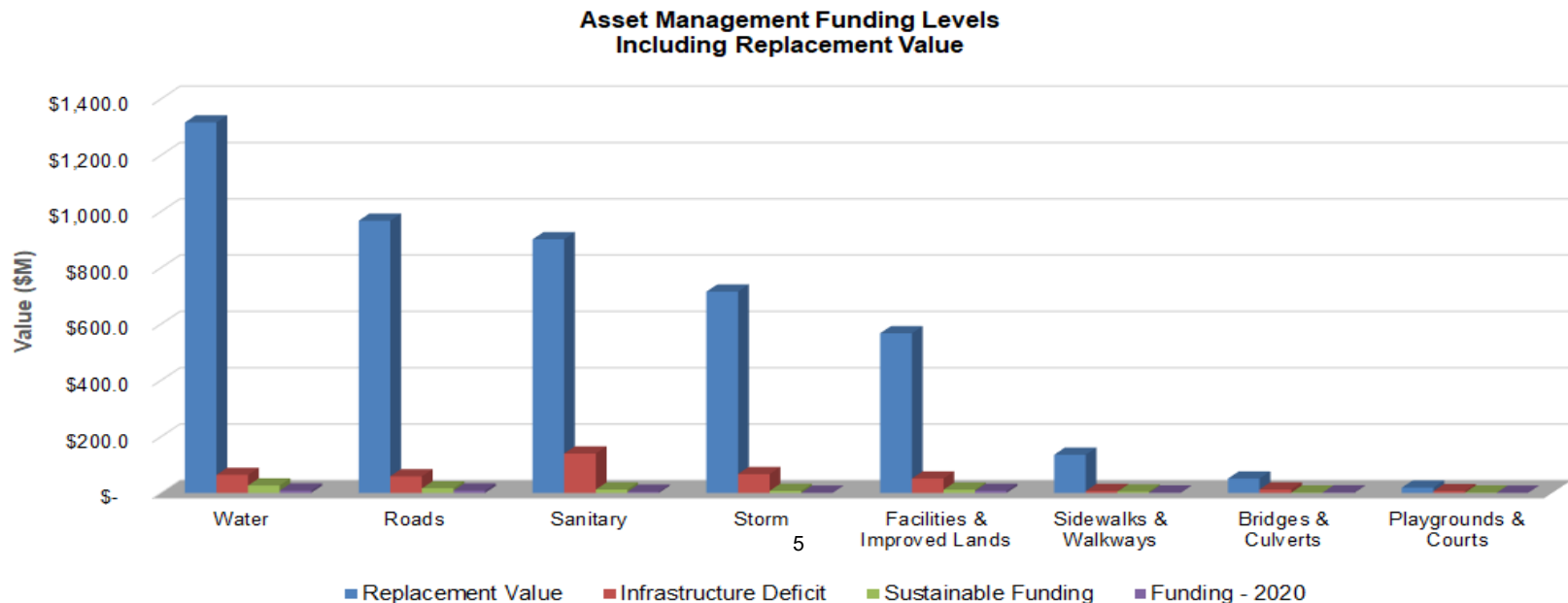


Figure 3.

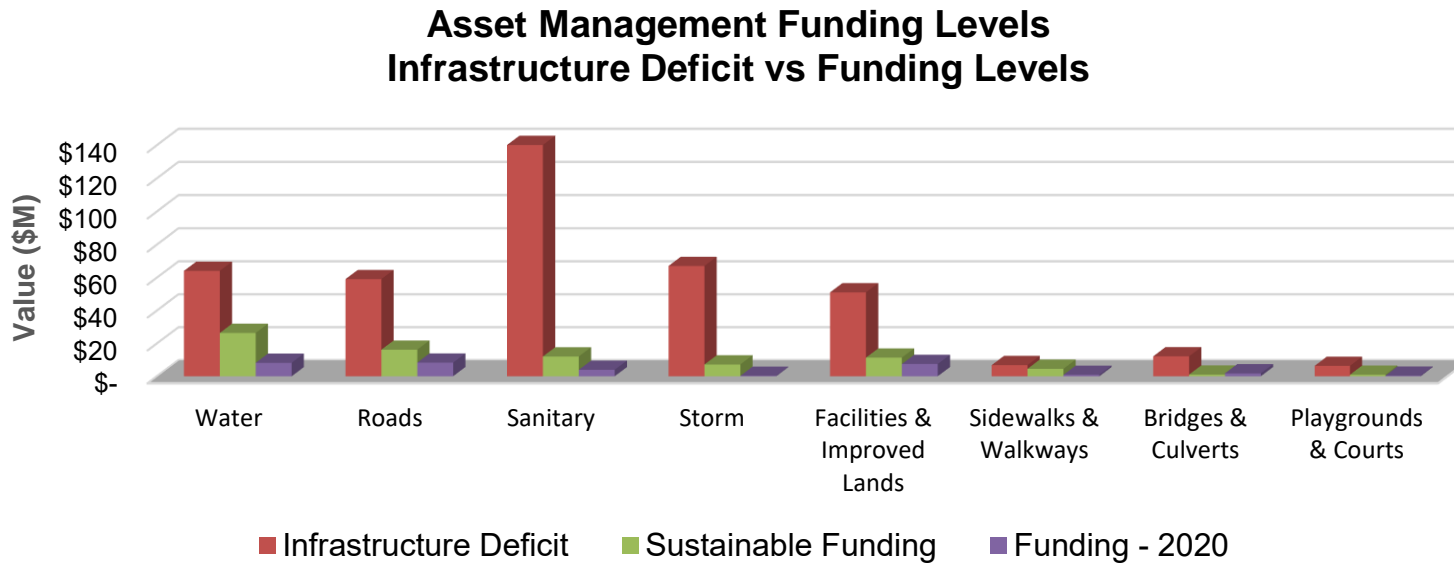
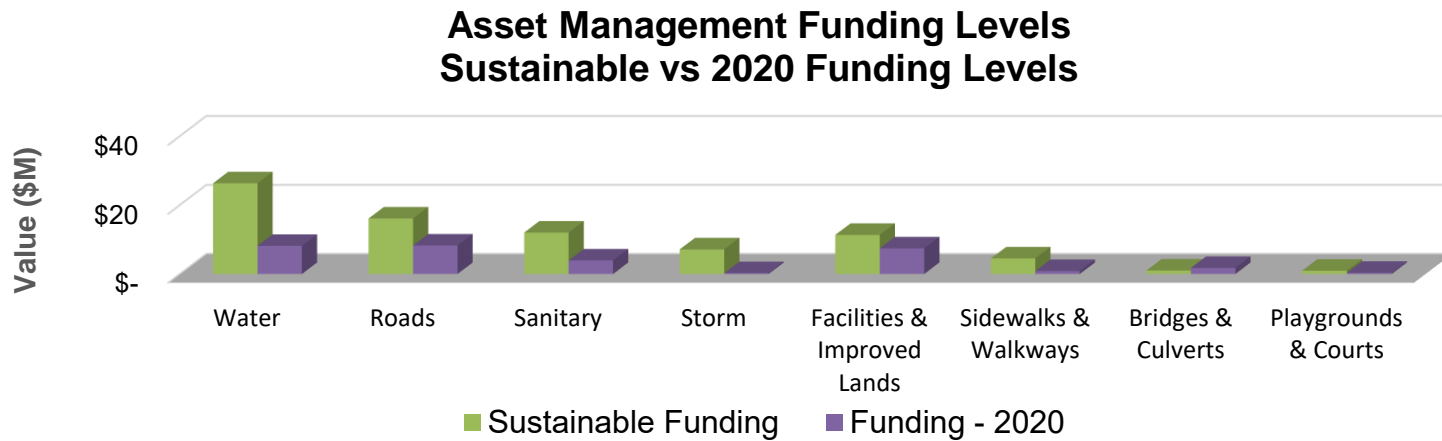


Figure 4.



Prioritization of Capital Projects

Recognizing that the City must prioritize its projects so as to reduce corporate risk, the general priority criteria are similar; namely that the highest priorities are given to:

- Regulatory requirements
- Health and safety concerns
- Maintenance of the basic asset / preventative maintenance
- Service level requirements or system reliability
- Programming quality of the asset

The introductory paragraphs of each capital budget section provide additional details of how these general priority criteria are applied to each asset class.

Prioritization of projects within each asset class are based on a series of criteria specific to the asset class. As an example, the pavement management system that provides suggested roads to be rehabilitated utilizes pavement condition ratings; water main break rates prioritize the replacement of water mains, etc.

Prioritization of Construction Programs

For asset categories within the road allowance (roads, sidewalks, sewers, water mains), coordination with other construction activities is also always taken into consideration to take advantage of economies of scale and reduce the impact of construction on abutting property owners and the travelling public. This coordination may impact the timing of asset renewal for some asset categories. As an example, the need to rehabilitate a certain section of roadway may accelerate the timing of sewer or water main replacement under that section of roadway. Determination of the

final construction program for all of the assets for a particular year is the result of an iterative effort by staff in reviewing all of the asset categories.

Schedule S within the 2020 Capital Budget and Four Year Forecast, provides a list of the 2020 coordinated projects, showing the budget for each asset class within the project.

Assets not within the AMP

As the City strengthens its Corporate Asset Management and continues to comply with O. Reg. 588/17, asset classes listed below that are currently not represented in the AMP will be addressed as required.

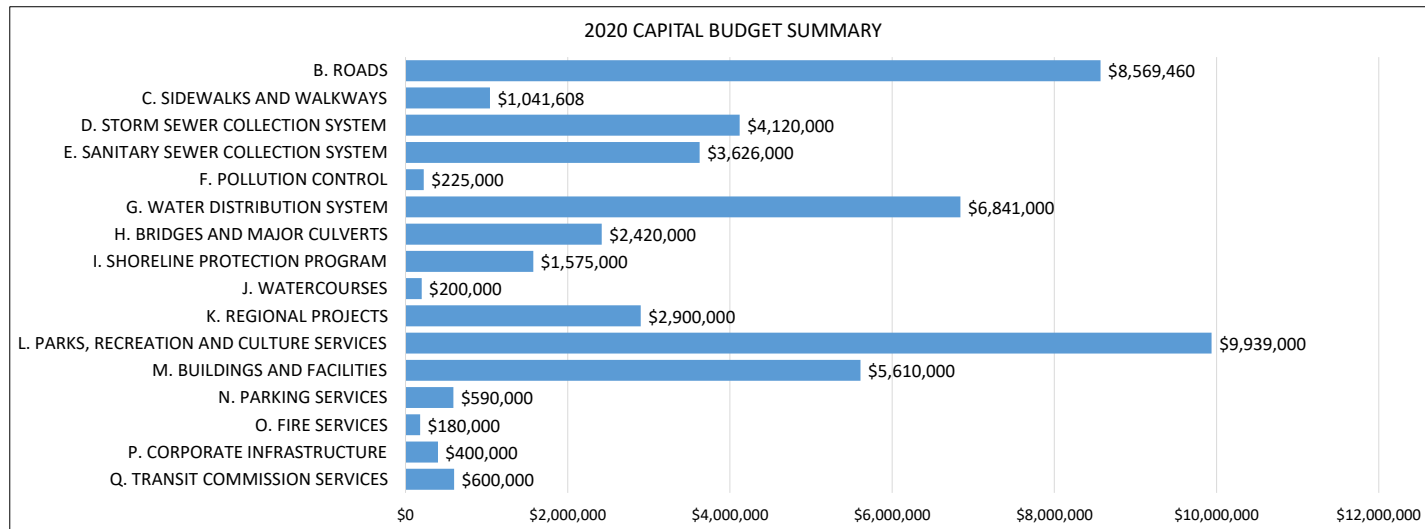
- | | |
|---------------------------|-----------------------------------|
| - Fleet | - Watercourse improvements |
| - Trees (Street and Park) | - Niagara District Airport assets |
| - Street lights | - Traffic lights & signage |
| - Shoreline protection | - Recreational trails |
| - Other Corporate Assets | - Street and Park Furniture |
- (Furniture, IT equipment, etc.)

While not incorporated into the AMP, information regarding these assets is maintained to varying degrees by staff to inform decisions regarding the rehabilitation or replacement of those assets. For example, information is maintained regarding the operational and replacement costs and ultimate replacement timing for our various fleet equipment. Funding for fleet replacement is incorporated as part of various equipment reserves in the Operating Budget.

Page Intentionally Left Blank

CITY OF ST. CATHARINES
2020 CAPITAL BUDGET SUMMARY (SCHEDULE A)

DESCRIPTION	SCHEDULE	GROSS COST	GAS TAX	OTHER EXTERNAL/RESERVES	TAX/RATE PAYER	DEBT
ROADS	SCHEDULE B	8,569,460	250,000	1,067,040	2,711,000	4,541,420
SIDEWALKS AND WALKWAYS	SCHEDULE C	1,041,608	121,000	228,608	438,000	254,000
STORM SEWER COLLECTION SYSTEM (INCL. SEWER SEP.)	SCHEDULE D	4,120,000	753,000	1,292,500	209,000	1,865,500
SANITARY SEWER COLLECTION SYSTEM	SCHEDULE E	3,626,000	65,000	-	3,130,500	430,500
POLLUTION CONTROL	SCHEDULE F	225,000	-	-	112,500	112,500
WATER DISTRIBUTION SYSTEM (WATERMAINS)	SCHEDULE G	6,841,000	1,352,000	-	5,349,250	139,750
BRIDGES AND MAJOR CULVERTS	SCHEDULE H	2,420,000	175,170	525,000	208,000	1,511,830
SHORELINE PROTECTION	SCHEDULE I	1,575,000	-	-	158,000	1,417,000
WATERCOURSES	SCHEDULE J	200,000	-	-	20,000	180,000
REGIONAL PROJECTS	SCHEDULE K	2,900,000	1,457,000	-	703,000	740,000
PARKS, RECREATION AND CULTURE SERVICES	SCHEDULE L	9,939,000	4,185,000	4,012,000	1,174,000	568,000
BUILDINGS & FACILITIES (INCLUDING ACCESSIBILITY)	SCHEDULE M	5,610,000	-	620,000	582,000	4,408,000
PARKING SERVICES	SCHEDULE N	590,000	-	190,000	40,000	360,000
FIRE SERVICES	SCHEDULE O	180,000	-	-	18,000	162,000
CORPORATE INFRASTRUCTURE	SCHEDULE P	400,000	-	-	40,000	360,000
TRANSIT COMMISSION SERVICES	SCHEDULE Q	600,000	-	-	60,000	540,000
		\$ 48,837,068	\$ 8,358,170	\$ 7,935,148	\$ 14,953,250	\$ 17,590,500
LESS: CAPITAL BUDGETS COUNCIL PREAPPROVED IN 2019/PRIOR YRS		14,865,000	4,185,000	5,307,648	2,494,150	2,878,202
CAPITAL BUDGET REQUIRING COUNCIL APPROVAL		\$ 33,972,068	\$ 4,173,170	\$ 2,627,500	\$ 12,459,100	\$ 14,712,298



Page intentionally left blank

Road Construction and Improvement Program Schedule B

The City owns and maintains 569 km of roadway or 1,150 km of traffic lanes. The current replacement cost is estimated at \$967 million, in 2020 dollars. The current roadway infrastructure deficit estimated at \$59 million is currently under review.

The City has utilized a pavement management system to guide the road improvement program since 1989. The City is transitioning from one software system to another. Both pavement management systems identify the highest priorities for road renewal based on a predicted future road condition using historical experience and the risks of delaying treatments. Generally, this means priority is given to roads with higher traffic volumes. Both software will generally recommend resurfacing rather than more costly reconstruction.

The Road Construction and Improvement Capital Program (Schedule B) includes \$8.569M of which \$2.28M is for road resurfacing. In addition to the Capital Budget, \$375,000 proposed in the 2020 Operating Budget supports guiderail improvements, studies and preventative maintenance such as spot road repairs and crack sealing.

Many of the projects within the Road Construction and Improvements Capital program (Schedule B) are coordinated with other major asset improvement projects occurring at the same time on the same street.

Given the identified road deficiencies and the current level of funding, further declines in the overall condition of the road network is expected within 10 years if

funding remains at 2020 levels.

Management will update the City's asset management plan for the road network before July 1, 2021, to comply with the recent Provincial legislation (O. Reg. 588/17). As part of this process levels of service, cost of service and risk will be revisited. This work will include updating Council's approved average Pavement Condition Rating (PCR) target of 75, as this measure does not correspond directly with the new pavement management system's Pavement Quality Index (PQI).

2020 CAPITAL BUDGET
ROADS (SCHEDULE B)

Project No.	Project Type	Project Name/Location	From	To	Gross Cost	Details	Notes
Previously Approved Projects - additional budget requirements							
P17-021	R	Cecil St. Underground Improvements	Ontario St.	Ernest St.	\$ 162,000	Semi urban resurfacing in conjunction with underground improvements	#
P17-062	R	Cumming St./Kent Reconstruction Kent St.	Rykert St.	Pelham Rd. West limit	100,000	Reconstruction & drainage imprvmnts in conjunction with storm sewer construction & underground imprvmnts (Cumming St. bus route)	#
P17-063	R	Glenwood Ave/South Dr Reconstruction South Dr.	Rockcliffe Rd.	North limit Cliff Rd.	178,000	Road resurfacing in conjunction with underground improvements	#
P17-066	R	Russell/Woodland Ave. Russell Ave. Woodland Ave.	Lake St. George St. Maple St.	George St. Geneva St. Russell Ave.	496,000	Mill, resurface and spot curb repairs Road improvements in conjunction with underground improvements	#
P17-101	SI	Bromley Dr. (Bromley Gardens)	Stepney St.	Approx. 50m south of Stepney St.	50,000	Cost sharing with developer for road improvements	#
P19-020	R	Avalon/Bernhardt/Embassy Rd & Underground Imprvmts Bermhardt St. Embassy Rd.	Lakeport Rd. Avalon PL. Lakepond Rd.	South Limit Embassy Ave. South Limit	100,000	Road resurfacing in conjunction with underground improvements	#
P19-065	R	Ridley Rd. Reconstruction	Louth St.	Henrietta St.	3,110,000	Council Approval PBS-108-2019 Reconstruction in conjunction with the development at the GO station	PA #
P19-067	R	Arglye Crescent road Improvements	Collier St.	Westchester Cres.	900,000	Additional funds for road rehabilitation construction phase	
Subtotal					\$ 5,096,000		

Project Type:

R = Renewal, SI = Service Improvement, G= Growth

City of St. Catharines 2020 Budget and 2021-24 Forecast

2020 CAPITAL BUDGET
ROADS (SCHEDULE B)

Project No.	Project Type	Project Name/Location	From	To	Gross Cost	Details	Notes
New Projects							
P20-062	R	Scarth Rd. Reconstruction	South Dr.	Highland Ave.	\$ 50,000	Design for future road reconstruction	#
P20-065	G	New road from Ridley to GO Station	Ridley Rd.	GO Station	425,000	Council Approval PBS-108-2019 Construction of a new roadway through subdivision development from Ridley Road into the GO station (incl. streetlights)	PA #
P20-080	R	2020 Resurfacing Program			2,280,460		
		Ameer Dr.	Granada Dr.	Shoreline Dr.			
		Bullocks Corner	Rochelle Dr.	Cul-de-sac			
		Geneva St.	Grote St.	Scott St.			
		Park Ave.	Rockwood Ave.	Seymour Ave.			
		Pasut Dr.	Vansickle Rd.	West Farmington Dr.			
		Pelham Rd.	Kent St.	Rykert St.		Mill, resurface and spot curb repairs	
		Pelham Rd.	Rykert St.	St Paul Cres			
		St Paul St.	William St.	James St.			
		Ventura Dr.	Haig St.	Haig St.			
		Bessborough Dr.	Grantham Ave.	Foxglove Ave.		Semi urban road resurfacing in conjunction with underground improvements	
		Daley Dr.	Grantham Ave.	Edinburgh Dr.			
		Oriole Dr.	Grantham Ave.	Foxglove Ave.			
		Welland Canals Parkway	Glendale Ave.	Queenston St.		Semi urban road resurfacing	
		Various	Various Locations				

Project Type:

R = Renewal, SI = Service Improvement, G= Growth

City of St. Catharines 2020 Budget and 2021-24 Forecast

2020 CAPITAL BUDGET
ROADS (SCHEDULE B)

Project No.	Project Type	Project Name/Location	From	To	Gross Cost	Details	Notes
P20-100	R	Edinburgh/Tamarack Tamarack Ave.	Scott St. Grantham Ave.	Bessborough Dr. East Limit	\$ 168,000	Resurface with watermain replacement	#
P20-097	R	Traffic Signals (including pedestrian crossings)			300,000	Annual program based on Region's condition assessments and priorities	
P20-069	R	2020 Active Transportation			250,000	Multi year initiative to implement recommendations of the Active Transportation Committee	
				Subtotal	<u>\$ 3,473,460</u>		
					<u>\$ 8,569,460</u>		
Less:							
	PA	New road From Ridley to GO Station			425,000	Council Approval PBS-108-2019	
	PA	Ridley Rd. Reconstruction			3,110,000	Council Approval PBS-108-2019	
Total budget requiring Council approval					<u><u>\$5,034,460</u></u>		

Notes:

PA - "Previously Approved " During 2019, Council approved this 2020 budget item.

- Co-ordinated project involving more than one asset class (See Schedule S)

Project Type:

R = Renewal, SI = Service Improvement, G= Growth

City of St. Catharines 2020 Budget and 2021-24 Forecast

**Sidewalks and Walkways
Schedule C**

The City’s sidewalks are those which are located within road allowances. Walkways and emergency accesses are located on City owned lands. Walkways include those sidewalks which run mid block between two streets or are located between houses to connect a park or school to an adjacent street. An emergency access is like a walkway but is wide enough to allow vehicles to drive along it. The sidewalk construction program excludes recreational trails or sidewalks within a City facility’s site such as within a park, arena or parking lot.

Table 1 – City of St Catharines – Rehabilitation Programs – City Sidewalks & City Walkways

Category	Total length	Estimated replacement value
City Sidewalks	Approx. 559 km	\$129.4 m
City Walkways & Emergency Accesses	26.2 km	\$6.0 m
Total	585.2km	\$135.4m

Based on an estimated life cycle of 30 years, the annual sustainable reinvestment rate of the sidewalks, walkways and emergency accesses is more than \$4 million which is substantially higher than the 2020 \$436,000 budget for the renewal component of this program. The City is supporting approximately 10% of the recommended minimum reinvestment level.

Existing sidewalks are replaced to maintain safe walking routes for pedestrians. To mitigate risk of user injury, locations for sidewalk replacements are determined from a list of sidewalk deficiencies compiled by Operations staff based on annual field observations and resident complaints. The lists are then analyzed and in cases where more than 40% of the existing sidewalks are deficient, the entire block is recommended for replacement. Locations not meeting the 40% threshold are repaired as “spot” repairs. Spot repairs are carried out by both City crews and contractors. The spot repairs are included in the operating budget (and not in the amounts above).

The construction of new sidewalks is based on requests from residents and businesses, and to complete the gaps in the sidewalk network. Priorities for new sidewalks are based on safety considerations (traffic volume, traffic speed), pedestrian demand (bus routes, generators, destinations), and coordination with other City works. In 2020, 100% of the sidewalk replacements will be done in conjunction with other municipal works.

2020 CAPITAL BUDGET
SIDEWALKS AND WALKWAYS (SCHEDULE C)

Project No.	Project Type	Project Name/Location	From	To	Gross Cost	Details	Notes
Previously Approved Projects - additional budget requirements							
P17-062	R	Cumming St./Kent Reconstruction Kent St.	Rykert St.	Pelham Rd.	\$ 62,000	Replace deteriorated sidewalks in conjunction with road and underground improvements	#
P17-063	R	Glenwood/South Reconstruction South Dr.	Rockcliffe Rd.	North Limit	80,000	Replace deteriorated sidewalks in conjunction with road and underground improvements	#
P17-066	R	Russell/Woodland	George St.	Geneva St.	155,000	Replace deteriorated sidewalks in conjunction with road and underground improvements	#
P17-067	R	Thorold - St. Davids Rd. Reconstruction	Burleigh Hill Dr.	Townline Rd. E	89,000	Replace deteriorated sidewalks in partnership with Thorold Rd.	
P19-065	G	Ridley Rd. Reconstruction Ridley Rd.	Louth St.	Henrietta St.	471,000	Council Approval PBS-108-2019, construct new sidewalk in conjunction with road works and replace deteriorated sidewalks	PA #
Subtotal					\$ 857,000		

Project Type:

R = Renewal, SI = Service Improvement, G = Growth

City of St. Catharines 2020 Capital Budget and 2021-24 Forecast

2020 CAPITAL BUDGET
SIDEWALKS AND WALKWAYS (SCHEDULE C)

Project No.	Project Type	Project Name/Location	From	To	Gross Cost	Details	Notes
New Projects							
P20-041	SI	2020 New Sidewalk Program	tbd		\$ 134,608	Annual - priority location(s) to be determined	
P20-040-	R	2020 Sidewalk and Walkway Repairs			50,000	Priority walkway or sidewalk repairs - location(s) to be determined	
Subtotal					\$ 184,608		
					\$ 1,041,608		

Less:

PA	Ridley Rd. Reconstruction	471,000	Council Approval PBS 108-2019
Total budget requiring Council Approval		\$570,608	

Notes:

PA - "Previously Approved " During 2019, Council approved this 2020 budget item.

- Co-ordinated project involving more than one asset group (See schedule)

Addition budget for sidewalk construction within Regional Projects (Schedule K)	\$ 393,000
---	-------------------

Project Type:

R = Renewal, SI = Service Improvement, G = Growth

Page intentionally left blank

Storm Sewer Collection System (Including Sewer Separation) Schedule D

The total length of storm sewers in the City is approximately 406 km with current estimated replacement value of \$716 million, in 2020 dollars.

As previously reported to Council, storm sewer separation forms a significant component of a multifaceted approach to alleviate basement flooding problems. Removal of storm water from combined sanitary sewers creates additional capacity in the sanitary sewer system reducing the chances of basement flooding and incidents of combined sewer overflows to the environment. New storm sewers are also proposed in areas with surface flooding when open channel solutions cannot be effective.

The new storm sewers will reduce the amount of surface water entering the sanitary or combined sewer system thereby providing relief to the immediately adjacent areas as well as the properties upstream and downstream of the new sewers.

Staff recommend very few newly identified projects in 2020. The majority of the funds recommended in the 2020 budget are additional funds for projects previously approved (and not yet tendered). Funds for cost sharing in two Regional projects are also a part of the recommended budget (schedule K).

The project requiring the largest amount of additional funding is a storm sewer on Else Street. Advancement of the project design has identified additional costs due to existing infrastructure and nature of the area in relation to storm water.

Unlike sanitary and combined sewers, storm sewers are not inspected and as a result it is more difficult to assess their condition.

A zoom camera inspection program that began in August 2017 is currently underway to prioritize further investigations, maintenance and replacements. Complete results for the inspections are expected later in 2019. Preliminary data for the inspected sewers (which is a significant portion of the whole system) indicates that approximately 9.4% and 1.7% of the existing storm sewer system is in a poor condition, or critical condition, respectively, resulting in an infrastructure deficit of approximately \$67 million in 2020 dollars.

Based on an estimated life cycle of a hundred years, the annual sustainable reinvestment rate for the storm sewer system should be at least \$7.2 million. Only a very small portion (less than 10%) of the proposed \$4.37 million 2020 budget is slated for replacement or rehabilitation of existing storm sewers. The remaining budget is required for the construction of new storm sewers. Therefore, the actual reinvestment rate in the existing storm sewer system is extremely low as compared to the required sustainable reinvestment rate. The Asset Management Plans legislated for completion by July 1, 2021 will address this issue.

2020 CAPITAL BUDGET
STORM SEWER COLLECTION SYSTEM - INCLUDING SEWER SEPARATION (SCHEDULE D)

Project No.	Project Type	Project Name/Location	From	To	Gross Cost	Details	Notes
Previously Approved Projects - additional budget requirements							
P16-003	SI	Else St.	Linwell Rd.	Scott St.	\$1,450,000	Additional funds for storm sewer construction for CSO Control	
P17-062	SI	Cumming/Kent Reconstruction	Pelham Rd.	Rykert St.	465,000	Additional funds for storm sewer construction in area with combined sewer system	#
		Kent St.	Pelham Rd.	West Limit			
P17-063	SI	Glenwood/South Reconstruction	Rockcliffe Rd.	North Limit	670,000	Additional funds for storm sewer construction in conjunction with watermain, sewer and road re-construction	#
		South Dr.	Cliff Rd.	Rockcliffe Rd.			
P17-066	SI	Russell/Woodland	McGhie St.	Geneva St.	700,000	Additional funds for storm sewer construction in conjunction with watermain, sewer and road work	#
		Woodland Ave.	Maple St.	Russell Ave.			
P17-101	SI	Bromley Dr. (Bromley Gardens)	Stepney St.	South Limit	50,000	City share of construction of a new storm sewer in conjunction with a new subdivision (Bromley Gardens)	#
P19-020	SI	Avalon/Bernhardt/Embassy Rd and Underground	Avalon Place	Embassy Ave.	310,000	Additional funds for the construction of catch basins and leads in conjunction with watermain replacement	#
		Avalon Place	Lakeport Rd.	South Limit			
		Embassy Ave.	Lakeport Rd.	South Limit			
P19-065	R	Ridley Rd. Reconstruction	Louth St.	Henrietta St.	124,000	Council Approval PBS-108-2019, spot repairs in conjunction with road reconstruction and underground improvements	PA #
Subtotal					\$3,769,000		

Project Type:

R = Renewal, SI = Service Improvement, G = Growth

City of St. Catharines 2020 Capital Budget and 2021-24 Forecast

2020 CAPITAL BUDGET
STORM SEWER COLLECTION SYSTEM - INCLUDING SEWER SEPARATION (SCHEDULE D)

Project No.	Project Type	Project Name/Location	From	To	Gross Cost	Details	Notes	
New Projects								
P20-006	SI	Catch Basins and Storm Service installations			\$ 100,000	Installation of catch basins, catch basin leads, and storm laterals to alleviate isolated surface flooding		
P20-015	SI	Design for possible future storm sewer projects			50,000	Engineering services for future storm sewer construction projects		
P20-016	SI	Storm Sewer Spot Repairs			126,000	Spot repairs of storm sewers at various locations as necessary		
P20-065	G	New road From Ridley Rd. to GO Station	Ridley Rd.	Go Station	75,000	Council Approval PBS-108-2019, install new storm sewer for new road from Ridley Rd. to the GO Station	PA	#
Subtotal					\$ 351,000			
					\$4,120,000			
Less:								
PA		Ridley Rd. Reconstruction			124,000	Council Approval PBS-108-2019		
PA		New road From Ridley to GO Station			75,000	Council Approval PBS-108-2019		
Total budget requiring Council approval					\$3,921,000			
Additional budget for storm sewer and sewer separation within Regional Projects (Schdule K)					\$ 247,000			

Notes:

PA - "Previously Approved " During 2019, Council approved this 2020 budget item.

- Co-ordinated project involving more than one asset group (See Schedule S)

Project Type:

R = Renewal, SI = Service Improvement, G = Growth

City of St. Catharines 2020 Capital Budget and 2021-24 Forecast

Page intentionally left blank

Sanitary Sewer Collection System Schedule E

The total length of combined and sanitary sewers in the City is approximately 570 km. The estimated replacement value of these sewers, is in the order of \$900 million.

The 2020 Capital Budget is aligned with the 10- Year Financial Plan for Water and Wastewater (The Water/Wastewater Plan), which Council approved in 2019. The Plan includes year over year increases for investment in capital infrastructure, which will reduce the funding gap for this asset class.

Commencing in 2020, a portion of the capital expenditures related to Wastewater infrastructure, which was previously included in the Water/Wastewater Budget is included in the Capital Budget to improve transparency and understandability. As a result of the change, \$3.13 million of budgeted wastewater capital projects are funded from wastewater rates (See Schedule W) which will be included in the 2020 Water/Wastewater Budget, that Council will approve in Q1 2020.

To mitigate the risk of asset failure, sewers for replacement and rehabilitation are selected on a priority basis. The priorities are set principally from the results of CCTV inspection reports and an ongoing city-wide sewer zoom camera inspection project. Information from operations field personnel is also solicited when developing the program. Also when possible, sewer repair, replacement and rehabilitation works are carried out in conjunction with other works, such as road repairs and watermain replacements.

Deficiencies in the sewer system include blockages from collapsed pipe sections, grease and severe root infiltration, which restricts capacity and may lead to backup during periods of high flow. Rehabilitation of these sewers is intended to ensure an adequate level of service and reduce the likelihood of basement flooding in adjacent and upstream areas of the sewer system.

A City-wide Zoom camera inspection of the sewer systems started in August 2017. Complete results for the inspections are expected later in 2019. Preliminary data indicates that approximately 15.6% and 9% of the sanitary sewer system is in a poor condition or critical condition, respectively. This results in an infrastructure deficit of approximately \$140 million in 2020 dollars.

As shown on Schedule E, the 2020 budget is \$3.63 million, (excluding \$1 million in Pollution Control – Schedule F) which is 40% of the recommended reinvestment minimum, ranging from \$9.0 million to \$11.7 million. (Assuming an average service life between 75 and 100 years for sanitary sewer lines). Therefore, the actual reinvestment rate in the wastewater system is low as compared to the required sustainable reinvestment rate. The Asset Management Plans legislated for completion by July 1, 2021 will address this issue.

2020 CAPITAL BUDGET
SANITARY SEWER COLLECTION SYSTEM (SCHEDULE E)

Project No.	Project Type	Project Name/Location	From	To	Gross Cost	Details	Notes
Previously Approved Projects - additional budget requirements							
P15-066	R	Moffatt St. Reconstruction	25m south of Glory Hill Rd.	210m south of Glory Hill Rd.	\$ 305,000	Additional funds for replacement of additional sections of existing sewer in conjunction with road re-construction	
P17-021	R	Cecil St. Underground Improvements	Ernest St.	Ontario St.	200,000	Necessary spot repairs of existing sanitary sewers in conjunction with road works	#
P17-062	R	Cumming/Kent Reconstruction Kent St.	Pelham Rd. Pelham Rd.	Rykert St. West Limit	570,000	Replacement and necessary spot repairs of existing sanitary sewers in conjunction with storm sewers, watermain, and road works	#
P17-063	R	Glenwood/South Reconstruction	Rockcliffe Rd.	North Limit	1,095,000	Necessary spot repairs of existing sanitary sewers in conjunction with storm sewer, watermain, and road works	#
P17-066	R	Russell/Woodland Woodland Ave.	George St. Maple St.	Geneva St. Russell Ave.	620,000	Sanitary sewer replacements in conjunction with storm sewer, watermain, and road works	#
P17-101	R	Bromely Dr. (Bromley Gardens)	Stepney St.	South limit	6,000	Sanitary sewer lateral replacements in conjunction with other works in relation to a new sub-division (Bromley Gardens)	#
P19-065	R	Ridley Rd. Reconstruction	Louth St.	Henrietta St.	320,000	Council Approval PBS-108-2019, replacement of sanitary sewer sections in conjunction with storm sewer, watermain, and road works	PA #
Subtotal					\$3,116,000		

Project Type:

R = Renewal, SI = Service Improvement, G = Growth

City of St. Catharines 2020 Capital Budget and 2021-24 Forecast

2020 CAPITAL BUDGET
SANITARY SEWER COLLECTION SYSTEM (SCHEDULE E)

Project No.	Project Type	Project Name/Location	From	To	Gross Cost	Details	Notes
New Projects							
P20-001	R	North St.	Court St.	60m west of Court St.	\$ 50,000	City share of costs for replacement of sewer in conjunction with a new development (111 Church Street)	
P20-010	SI	Extraneous Flow Elimination			50,000	Study to determine sources of inflow and infiltration into sanitary sewer system	
P20-011	R	Sewer Spot Repair			175,000	Spot repairs for sanitary sewers as req'd	
P20-012	R	Sanitary Sewer Flushing and Reaming			25,000	Sewer flushing and reaming for physical cleaning of selected sewer sections with operational issues	
P20-014	R	CCTV Sewer Inspections			150,000	CCTV inspections of existing sewers to identify condition and future works	
P20-015	R	Design for Possible Future Sanitary Sewer Projects			50,000	Engineering services for future construction projects	
P20-019	SI	Sewershed Analysis			10,000	Engineering services required for analysis	
Subtotal					\$ 510,000		
					\$3,626,000		
Less:							
	PA	Ridley Rd. Reconstruction			320,000	Council Approval PBS-108-2019	
Total budget requiring Council approval					\$3,306,000		
Additional budget for sanitary sewer improvements within Regional Prj. (Sch. K)					\$ 935,000		

Notes:

PA - "Previously Approved " During 2019, Council approved this 2020 budget item.

- Co-ordinated project involving more than one asset group (See Schedule S)

Project Type:

R = Renewal, SI = Service Improvement, G = Growth

City of St. Catharines 2020 Capital Budget and 2021-24 Forecast

Page intentionally left blank

Pollution Control Plan Schedule F

Projects identified by the City's Pollution Control Plan (PCP) are the City's effort to meet or exceed the requirements of the Ministry of the Environment and Climate Change's Procedure F-5-5, Determination of Treatment Requirements for Municipal and Private Combined and Partially Separated Sewer Systems. The PCP identified a number of initiatives to upgrade the existing sewage infrastructure to address combined sewer overflow discharges to the natural environment.

An update of the City's Pollution Control Plan is underway. The 2020 budget includes undertaking additional flow monitoring by acquiring updated flow monitoring equipment and SCADA control software. An application will be submitted for an additional \$70,000 (40%) funding from the Region's CSO MAP program for eligible activities.

The first construction phase for the Burleigh Hill/Glendale Combined Sewer Overflow (CSO) is complete. A second construction phase for works north of Glendale Avenue should be operational late 2020.

2020 CAPITAL BUDGET
POLLUTION CONTROL (SCHEDULE F)

Project No.	Project Type	Project Name	From	To	Gross Cost	Details
New Projects						
P20-018	SI	2020 Flow Monitoring, Studies and Scada Upgrade			\$ 225,000	Update equipment and software that has reached the end of its service life
				Subtotal	<u>\$ 225,000</u>	
					<u><u>\$ 225,000</u></u>	

Project Type:

R = Renewal, Si = Service Improvement, G = Growth

Water Distribution System (Watermains) Schedule G

The total length of watermains under the City's jurisdiction is approximately 605 km with an estimated replacement value of \$1,317 million (including water service replacements) in 2020 dollars.

Approximately 4.9% of all of the watermain sections are currently in a critical condition. Critical watermain sections are the sections that have broken in the current year, or have broken multiple times in the past, or are undersized as per current standards. The cost to replace or upgrade these sections is approximately \$64 million in 2020 dollars.

The \$7.7 million 2020 capital budget for renewal (Schedule G & K), is approximately 39% of the recommended reinvestment minimum, which ranges from \$19.8 million to \$26.3 million. (Assuming an average service life of 50 to 75 years for watermains). The 2020 Capital Budget is consistent with the 10-Year Financial Plan for Water and Wastewater (2020- 2029) (The Water/Wastewater Plan), which Council approved in 2019. The Water/Wastewater Plan includes year over year increases in capital infrastructure which will reduce the annual funding gap for this asset class.

Commencing in 2020 a portion of the capital expenditures related to watermains which was previously included in the Water/Wastewater Budget, are included in the Capital Budget to improve transparency and understandability. As a result of the change, \$5.35 million of budgeted watermain projects are funded from water rates (See Schedule W), which will be included in the 2020 Water/Wastewater Budget, that Council will approve in Q1 2020.

Council has also directed that each year's water budget should include an allocation of at least \$750,000 for the replacement of old and deteriorated cast iron watermains in areas experiencing coloured water problems. The 2020 budget includes \$7.08 million for replacement of old and deteriorated cast iron watermains which are usually the cause of coloured water in the system. Approximately 25% of the City's watermain system is comprised of older cast iron watermains. Not all cast iron watermains have reached the end of their useful lives yet and replacements are prioritized based on watermain break histories, coloured water issues, and in conjunction with other projects.

Staff continues to monitor the number and location of existing watermain breaks. Figures 1 and 2 present records for the past 15 years and reflect the high variability in the number of annual watermain breaks. Despite the variability in annual watermain breaks, a continuous targeting of watermains with relative high break rates for replacements seem to be gradually reducing the average number of annual watermain breaks. Increasing age of existing watermains, especially watermains made of older materials, makes the watermains more prone to possible failures. A proactive approach is necessary to keep the watermain system in a good and reliable condition which also reduces maintenance costs and the risks of contamination of the system. In spite of these mitigation strategies while capital reinvestment remains under the target levels, break rates are expected to increase.

Figure 1

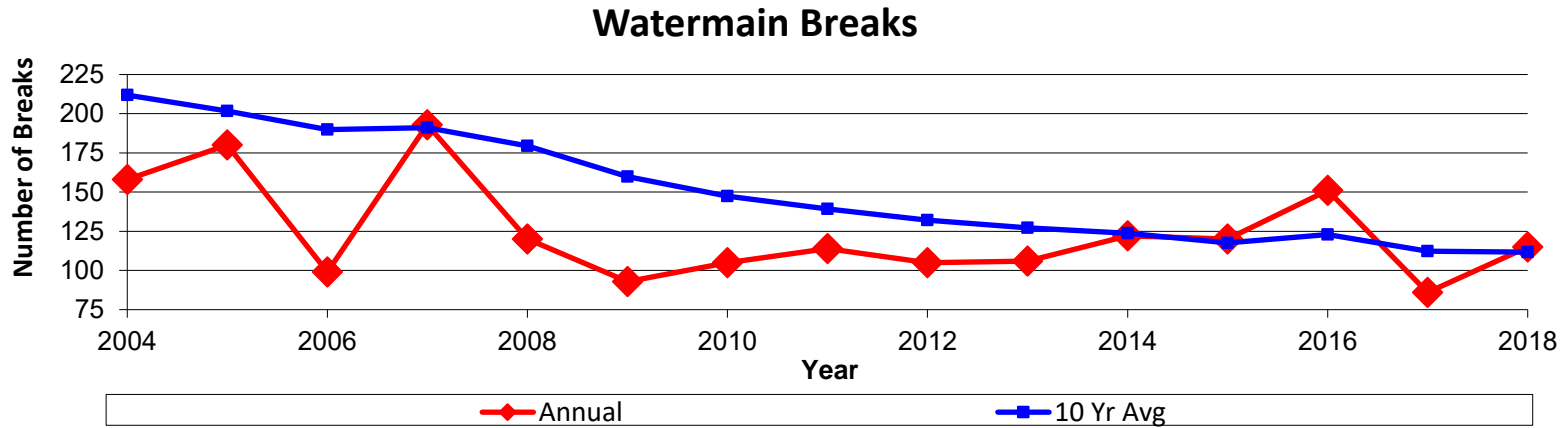
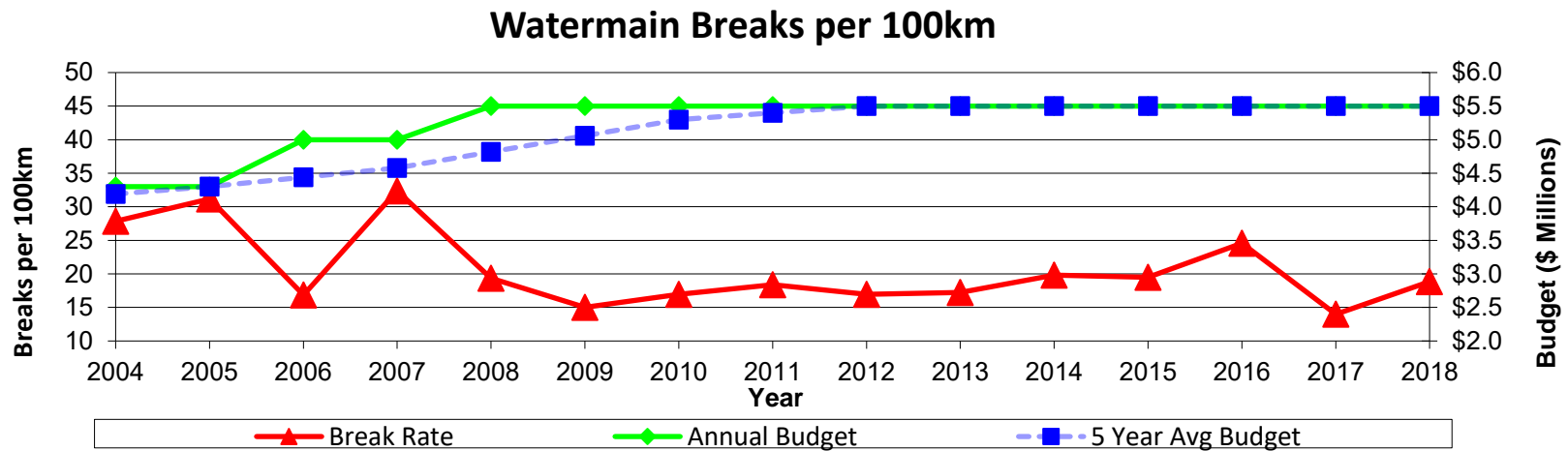


Figure 2



2020 CAPITAL BUDGET
WATER DISTRIBUTION SYSTEM - WATERMAINS (SCHEDULE G)

Project No.	Project Type	Project Name/Location	From	To	Gross Cost	Details	Notes
Previously Approved Projects - additional budget requirements							
P17-062	R	Cumming/Kent Reconstruction	Pelham Rd.	Rykert St.	\$ 505,000	Additional funds for construction to replace existing cast iron (C.I.) watermain in conjunction with sewer and road works	#
		Kent St.	Pelham Rd.	West Limit			
P17-063	R	Glenwood/South Reconstruction	Rockcliffe Rd.	North Limit	475,000	Replacement of existing C.I. watermain in conjunction with sewer and road works	#
P17-066	R	Russell/Woodland	George St.	Geneva St.	1,538,818	Replacement of existing C.I. watermain in conjunction with sewer and road works	#
		Woodland Ave.	Maple St.	Russell Ave.			
		Russell Ave.	George St.	Catherine St.			
P19-020	R	Avalon/Bernhardt/Embassy Rd and Underground	Lakeport Rd.	South Limit	505,000	Additional funds for replacement of asbestos cement (A.C.) watermain in conjunction with storm sewer and road works	#
		Bernhardt St.	Avalon Place	Embassy Ave.			
		Embassy Ave.	Lakeport Rd.	South Limit			
P19-065	R	Ridley Rd. Reconstruction	Louth St.	Henrietta St.	1,175,000	Council Approval PBS-108-2019, replacement of existing C.I. watermain in conjunction with sewer and road works	PA #
Subtotal					\$4,198,818		
New Projects							
P20-062	R	Scarth Rd.	South Dr.	Highland Ave.	14,500	Design for replacing existing C.I. watermain with high break rate in conjunction with road re-construction	#
P20-100	R	Tamarack Ave./Edinburgh Dr.	Grantham Ave.	50m East of Foxglove Ave.	1,200,000	Replacement/upgrade of existing C.I. watermain with very high break rate in conjunction with roadworks	#
		Edinburg Dr.	Bessborough	Scott St.			#
P20-101	R	Jacobson Ave.	Chestnut St. W	Oscar Ave.	850,000	Replacement of existing C.I. watermain	

Project Type:

R = Renewal, SI = Service Improvement, G = Growth

City of St. Catharines 2020 Capital Budget and 2021-24 Forecast

2020 CAPITAL BUDGET
WATER DISTRIBUTION SYSTEM - WATERMAINS (SCHEDULE G)

Project No.	Project Type	Project Name/Location	From	To	Gross Cost	Details	Notes
P20-102	R	Lakeshore Rd. at Welland Canal	Broadway St.	85m West of Broadway St.	\$ 27,682	Design for existing watermain replacement across Welland Canal in conjunction with Seaway bridge work	
P20-116	SI	Storz Hydrant Port Conversions			450,000	Phase 1 of multi-year conversion of existing hydrant ports to Storz type connections in priority areas	
P20-118	R	Valves, Hydrant and Services			50,000	Replacement of existing valves, hydrants, and services etc. in conjunction with other works	
P20-119	R	Design for 2021 Projects			50,000	Engineering Services for possible 2021 projects	
Subtotal					\$2,642,182		
					\$6,841,000		
Less:							
PA		Ridley Rd. Reconstruction			1,175,000	Council Approval PBS-108-2019	
Total budget requiring Council approval					\$5,666,000		
Additional budget for watermains within Regional Projects (Schedule K)					\$1,325,000		

Notes:

PA - "Previously Approved " During 2019, Council approved this 2020 budget item.

- Co-ordinated project involving more than one asset group (See Schedule S)

Project Type:

R = Renewal, SI = Service Improvement, G = Growth

City of St. Catharines 2020 Capital Budget and 2021-24 Forecast

Bridges and Major Culverts Schedule H

The 2020 replacement value for the City’s 71 owned bridges and major culverts (greater than 3m span) is approximately \$51 million. Provincial regulations require that biennial inspections (once every two years) be carried out on bridge and culverts with spans greater than three metres. These inspections were last undertaken during the 2018 calendar year, and are scheduled for 2020.

The estimated priority infrastructure deficit is \$12.1 million, which includes identified needs for the “NOW” and “1 to 5 Year” categories.

Priority Rating in 2019	Bridge & Culvert Deficiencies – January 30, 2019		
	Total Structures	% of Total	Total Deficiency (\$000)
Adequate	21	28%	\$ -
6-10 Year	6	8%	2,890
1-5 Year	26	35%	8,175
NOW	22	29%	3,923
Total	75*	100%	\$14,988

*There are 75 records above because 4 structures require work for two different time frames.

The consequences of not implementing a proactive plan and sustainable levels of funding for the City’s bridge assets include:

- Further aging of the City’s structural infrastructure
- An increase in the amount of backlog work to be completed

- Increased capital expenditures at the time of rehabilitation or replacement
- Unexpected emergency structure closures or maintenance activity affecting the travelling public, businesses, and emergency services, and
- The possibility of catastrophic failures

The 2020 capital budget includes partial funding for three structures which require major rehabilitation or replacement and engineering studies associated with a future project. One location, Third Avenue Louth/Glass Ave is a boundary bridge and jointly owned with the Town of Lincoln. Costs will be shared 50/50 with the Town. The City’s \$2.4 million investment in bridges and culverts is higher than the average annual funding level of approximately \$1.5 million over a 10-year period shown above, and the annual funding target range of \$0.5-\$0.8 million.

2020 CAPITAL BUDGET
BRIDGES AND MAJOR CULVERTS (SCHEDULE H)

Project No.	Project Type	Project Name/Location	Gross Cost	Details
Previously Approved Projects - additional budget requirements				
P17-121	R	Third Ave. Louth/Glass Ave. Bridge@ 15 Mile Creek	\$ 1,050,000	Construction phase for replacement of bridge with load restrictions. Costs shared with Town of Lincoln
P17-123	R	Pelham Rd. Bridge @ CN	1,000,000	Final construction funding for bridge rehabilitation; rehab was delayed to accommodate Regional construction at Burgoyne Bridge and St. Paul St. W.
P18-123	R	Third Ave. Louth @ Richardson Creek	330,000	Additional funds to replace bridge with identified deficiencies and increase hydraulic capacity
Subtotal			\$ 2,380,000	
New Projects				
P20-122	R	First Ave. Louth, s/o Pelham @ 12 Mile Creek - Engineering Services	40,000	Funds for rehab/replacement analysis for structure with identified deficiencies
Subtotal			\$ 40,000	
			<u>\$ 2,420,000</u>	

Project Type:

R = Renewal, SI = Service Improvement, G = Growth

City of St. Catharines 2020 Capital Budget and 2021-24 Forecast

Shoreline Protection Schedule I

The City has approximately 4,360 metres of shoreline. The City has installed approximately 3,275 metres of shoreline protection. The 2019 replacement value of the existing shoreline protection is approximately \$40 million.

Approximately 2,380 metres of shoreline is in good condition requiring no immediate foreseeable remediation/actions.

The City undertook a city wide review in 2018 of both protected shoreline (with existing City installed shoreline protection) and unprotected (natural) shoreline. The report was finalized in early 2019 and is summarized below;

Remediation Priority		Sites with existing shoreline protection			Site with no protection or temporary protection			All city owned shoreline		
Description	Timing (years)	# of Sites	Length (m)	Cost (\$000)	# of Sites	Length (m)	Cost (\$000)	# of Sites	Length (m)	Cost (\$000)
High	1-5	-	-	\$ -	4	470	\$ 4,725	4	470	\$ 4,725
Med. or Low/Med. Maintenance	Ongoing	1	425	130	1	440	\$175	2	865	305
Medium or Low/Medium	1-5	1	240	2,950	4	140	\$1,723	5	380	4,673
Medium or Low/Medium	6-10	1	210	13	-	-	-	1	210	13
Low	n/a	15	2,400	-	5	580	-	20	2,980	-
Total		18	3,275	\$ 3,093	14	1,630	\$ 6,623	32	4,905	\$ 9,716

The HIGH priority sites should be addressed between the 1 to 5-year timeframe, while the medium or Low/Medium priority sites include ongoing maintenance and repairs between the 1 to 5-year timeframe and repairs within the 6 to 10-year period.

The \$75,000 project included in the 2020 Capital Budget will fund the update to the 2018 city wide review, focusing on the impact of record high 2019 Lake Ontario water levels.

The project for \$1,500,000 includes the engineering studies and partial construction for the highest priority location (Abby Mews).

2020 CAPITAL BUDGET
SHORELINE PROTECTION (SCHEDULE I)

Project No.	Project Type	Project Name	From	To	Gross Cost	Details
Previously Approved Projects - additional budget requirements						
P20-132	SI	Abby Mews - engineering & partial construction	Considine Ave.	Christie St.	\$1,500,000	Engineering services and partial construction to address Lake Ontario shoreline with identified deficiencies in proximity to private structures
Subtotal					\$1,500,000	
New Projects						
ST20-10	R	Interim Priority Review			75,000	Update 2019 Shoreline Review to assess impact of 2019 record high water levels in Lake Ontario
Subtotal					\$ 75,000	
					<u>\$1,575,000</u>	

Project Type:

R = Renewal, SI = Service Improvement, G = Growth

City of St. Catharines 2020 Capital Budget and 2021-24 Forecast

Watercourse Rehabilitation Program Schedule J

Natural Watercourses

The City of St. Catharines has approximately 36.5 km of natural watercourses that generally drain water from within the City out to Lake Ontario. The deterioration of the protective works for these watercourses and the limited funds available to rehabilitate them, may lead to the erosion of public and private lands and structures.

A Watercourse Flooding and Erosion Control Priority Study Report was completed in February 2015 for creeks within the urban areas of St. Catharines. Staff is using the report's findings and recommendations for prioritizing watercourse restoration works in conjunction with other required infrastructure works/projects. The study also prioritized rehabilitation needs of culverts with diameters too small to be included in the mandatory biennial Bridge and Major Culvert Inspections.

That 2015 study identified 87 watercourse sites within the urban boundary that are eroded and need rehabilitation. Of those sites, 16 are identified as highest priority based on erosion levels with an estimated \$8.7 million cost for remediation. Based on high level estimates, the total citywide watercourse rehabilitation costs, excluding Twelve Mile Creek, will be approximately \$44.3 million in 2020 dollars.

Martindale Pond Control Structures

In 2018 a Dam Safety Review was completed for the Martindale Pond Weir and Heywood Generating Station on Twelve Mile Creek. These two structures control the water level in Martindale Pond. The review concludes that deficiencies exist in the existing weir and to a much lesser extent at the Heywood Generating Station. Additional studies will be carried out with existing funding to suggest alternatives and recommend a preferred option for the

Weir. The five-year Capital Forecast includes high level estimates for full replacement of the weir with additional spillway capacity.

Old Welland Canal Lock Walls

There have been 4 alignments of the Welland Canal including the present canal through Port Weller. In 2018, a detailed inspection program was undertaken on the exposed lock walls constructed for the first three (3) Welland Canals, and assigned a timeline for the recommended maintenance and capital rehabilitation. Based on the 2018 inspections the following table summarizes the maintenance and capital needs:

Priority Rating	Total
Adequate	\$ -
6-10 Years	73,250
1-5 Years	757,500
NOW	897,250
Total	\$1,728,000

These priority ratings highlight the need for immediate capital work and translate into an average annual funding level of more than \$170,000 over a 10-year period.

The 2020 capital project for \$200,000, includes the necessary engineering services including detailed design and tender process for lock #2. Funding to undertake the construction is included in the 2021–24 forecast.

2020 CAPITAL BUDGET
WATERCOURSES (SCHEDULE J)

Project No.	Project Type	Project Name	Gross Cost	Details
Previously Approved Projects - additional budget requirements				
P19-131	R	2nd Welland Canal, Lock 7 lock wall stabilization - studies and detail	\$ 200,000	Additional funds for engineering services at high priority locations identified in 2018 Lock Wall Inspection Report
			<u>\$ 200,000</u>	

Project Type:

R = Renewal, SI = Service Improvement, G = Growth

Regional Projects Schedule K

This category includes the City's share of municipal works (such as sewer repairs, watermain replacements, sidewalk replacements and new storm sewer construction) on projects undertaken in cooperation with the Regional Municipality of Niagara. The Region consults with the City, when determining the timing of projects, which are managed by the Region. Coordinating the City's efforts in this way helps to minimize cost and disruption to the affected residents and businesses, and provides infrastructure renewal within the City.

For 2020 Niagara Region has advised they will proceed with construction tenders for two projects, namely St. Davids Road from Highway 406 to Burleigh Hill/Collier Road and replacement of the St. Paul Street West Bridge over CN railway.

St. Davids Road is a boundary road between Thorold and St. Catharines. The road allowance and Burleigh Hill were uploaded to the Region's jurisdiction following the Region's most recent Transportation Strategy. The Region proposes to convert the road's cross-section from semi-urban to urban (i.e.; install curbs) and extend a south side multi-use trail being constructed by MTO across their reconfigured Highway 406 interchange to Burleigh Hill/Collier Road. The City's share of costs includes replacement sidewalks, replacement watermains, existing sewer repairs, new storm sewers and a short section of new sidewalk west of Barbican Trail.

The existing bridge which carries St. Paul Street West over the CN railway tracks is currently posted with a load restriction and its configuration has substandard sightlines. The replacement bridge and modified bridge approaches will improve safety for vehicles and pedestrians, provide increased clearances from the rail tracks and modify Great Western Street, the existing primary entrance to the St Catharines train station (future GO station). The City's share of costs includes replacement sidewalks and a wider sidewalk on the bridge structure, replacement watermains, existing sewer repairs and new storm sewers for combined sewer separation.

2020 CAPITAL BUDGET
REGIONAL PROJECTS (SCHEDULE K)

Project No.	Project Type	Project Name/Location	From	To	Gross Cost	Details	Notes
Sidewalks							
RN20-std	SI	St. Davids Rd. (RR#71) Reconstruction	Barbican Trail	Grangeway Court	\$ 18,000	New sidewalk to emergency access at Grangeway in conjunction with Regional road reconstruction to improve network conductivity	#
RN20-std	R	St. Davids Rd. (RR#71) Reconstruction	Barbican Gate	Burleigh Hill Dr.	140,000	Replace deteriorated sidewalks in conjunction with Region of Niagara	#
RN20-stp	R	St. Paul St. West (RR#81) (Bridge over CN Tracks)	Merigold St.	St Paul Cres.	235,000	Replace deteriorated sidewalks and City share of wider sidewalk on proposed Regional bridge	#
Subtotal					\$ 393,000		
Storm Sewer							
RN20-std	R	St. Davids Rd. (RR#71) Reconstruction	Highway 406	Burleigh Hill Dr.	112,000	City's & Thorold's share of costs for storm sewer upgrades in conjunction with underground upgrades and Regional road reconstruction	#
RN20-stp	SI	St. Paul St. West (RR#81) (Bridge over CN Tracks)	Merigold St.	St Paul Cres.	135,000	New storm sewer for combined sewer separation in conjunction with bridge replacement by the Region	#
Subtotal					\$ 247,000		

Project Type:

R = Renewal, SI = Service Improvement, G = Growth

City of St. Catharines 2020 Capital Budget and 2021-24 Forecast

2020 CAPITAL BUDGET
REGIONAL PROJECTS (SCHEDULE K)

Project No.	Project Type	Project Name/Location	From	To	Gross Cost	Details	Notes
Sanitary Sewer							
RN20-std	R	St. Davids Rd. (RR#71) Reconstruction	Highway 406	Burleigh Hill Dr.	485,000	Replacement of sanitary sewer sections in conjunction with watermain and Regional road works	#
RN20-stp	R	St. Paul St. West (RR#81) (Bridge over CN Tracks)	Merigold St.	St Paul Cres.	450,000	Replacement of sanitary sewer sections in conjunction with underground upgrades, road works and bridge replacement	#
Subtotal					\$ 935,000		
Watermains							
RN20-std	R	St. Davids Rd. (RR#71) Reconstruction	Marmac Dr.	Burleigh Hill Dr.	845,000	Replacement of existing cast iron watermain in conjunction with Regional road re-construction project	#
RN20-stp	R	St. Paul St. West (RR#81) (Bridge over CN Tracks)	Merigold St.	Leeper St.	480,000	Replacement of existing cast iron watermain in conjunction with Regional bridge replacement project	#
Subtotal					\$ 1,325,000		
					<u>\$ 2,900,000</u>		

Notes:

- Co-ordinated project involving more than one asset group (See Schedule S)

Project Type:

R = Renewal, SI = Service Improvement, G = Growth

City of St. Catharines 2020 Capital Budget and 2021-24 Forecast

Page intentionally left blank

Parks, Recreation and Culture Services – Non-Building Assets Schedule L

Parks, Recreation and Cultural services will be involved in a number of capital projects in 2020, which includes larger multi-year projects and ongoing annual capital renewal projects.

Canada Summer Games (Initial Project)

In the spring of 2017, Niagara was named the host of the 2021 Canada Summer games. The capital budget dollars set aside for this event is the third of a four-year commitment the City has made for this unique occasion that will take place in our City and Region. Funds are targeted towards capital facility investments as detailed in report PRCS/CAO-320-2016. The \$320,000 annual commitment set aside for this event has been included in the four year forecast for Parks, Recreation and Culture Services.

Canada Summer Games Legacy Project

In Q2 2019, Council approved \$8.72 million funding The City's portion of the Canada Summer Games Legacy Project (CAO-101-2019 & FMS-141-2019). The project includes upgrades to existing sports facilities and the development of new sport infrastructure and equipment that will be located at a new Canada Games Park adjacent to Brock University. The project also includes a new Rowing Centre at the Henley Rowing Course. The completion of the project is contingent upon confirmation of funding from other levels of government and other named parties. The funding for the City's portion of the new assets will come from an additional receipt of Federal Gas Tax and Hydro Dividends as well as additional Infrastructure Levy and prior year surpluses.

Parks Renewal Plan

There are 72 playgrounds, 15 tennis court and 22 basketball court locations that serve the residents of St. Catharines. Playground equipment and court renewal as well as upgrades are required to maintain service levels and ongoing safe play spaces. The City's Parks Renewal Plan prioritizes asset renewal based on asset condition, as well as health and safety considerations, with the assets in the poorest condition being prioritized for replacement.

Asset condition evaluation is classified into red, yellow and green categories:

- Red category: replacement expected within the next five years
- Yellow category: replacement expected within the next five to 10 years
- Green category: replacement not expected within the next 10 years

Current red category assets within the Parks Renewal Plan include: 41 playgrounds, 15 basketball courts and 10 tennis courts. In 2020, the playground equipment at Happy Rolph's Animal Farm is scheduled for replacement.

Tree Planting

The City of St Catharines plants trees to help improve air quality and add economic value, beauty and shade to its neighbourhoods. Trees are planted on public boulevards, road allowances fronting residences, and in circles where trees are currently not planted.

This capital program assists in increasing the tree canopy percentage on both public and private property, which is currently at 22%. The 2020 budget will allow the City to hold two tree giveaways intended to assist in reaching the City's 30% tree canopy goal by 2030.

Memorial Bench Program

The City currently has an inventory of 304 wooden benches with many of the benches approaching end of useful life. The Memorial Bench Program will replace 50 benches per year from 2020-2025 with the replacements concluding in 2025. The new benches will be made from composite materials that are expected to last 25-30 years.

Totem Pole Restoration & Re-installation

In July 2019 Council pre-approved a \$125,000 budget for the restoration of the 51 year old Totem Pole, allowing the restoration project to commence in 2019.

The Totem Pole is reaching the end of its current life cycle, and 2018 testing on the Totem Pole, confirmed that the pole interior has significant deterioration. Staff have worked collaboratively with Niagara Regional Native Centre, a representative from the Alert Bay Kwakwaka'wakw and undertaken public consultation. The Capital funding will address identified structural deficiencies. As preferred by all parties consulted, the Totem Pole will be taken down, restored and returned to Centennial Gardens.

2020 CAPITAL BUDGET
PARKS, RECREATION AND CULTURE SERVICES (SCHEDULE L)

Project No.	Project Type	Project Name	Gross Cost	Details	Notes
Previously Approved Projects - additional budget requirements					
PRC18-01	SI	Canada Summer Games (Year 3 of 4)	\$ 320,000	Address asset deficiencies and improvements for the Canada Summer Games (PRCS/CAO-320-2016)	PA
Subtotal			\$ 320,000		
Ongoing Annual Capital Renewal Projects					
PRC20-01	SI	Tree Planting Program	364,000	Address asset deficiencies and achieve Council approved tree canopy goal of 30%	
PRC20-02	R	Park Renewal Program - Happy Rolph's Playground Equip.	330,000	To replace playground assets which are at end of useful life, and to maintain level of service	
Subtotal			\$ 694,000		

Project Type:

R = Renewal, SI = Service Improvement, G = Growth

City of St. Catharines 2020 Capital Budget and 2021-24 Forecast

2020 CAPITAL BUDGET
PARKS, RECREATION AND CULTURE SERVICES (SCHEDULE L)

Project No.	Project Type	Project Name	Gross Cost	Details	Notes
New Projects					
PRC20-03	R	Memorial Bench Program - 50 benches 2020-2025	\$ 80,000	Replace assets which are approaching end of useful life, and to maintain level of service	
PRC20-04	R	Totem Pole Restoration & Reinstallation	125,000	Restore Totem Pole which is at end of useful life (Testing confirmed the significant structural deterioration and deficiencies) PRCS-126-2019	PA
PRC20-05	SI	Canada Summer Games Legacy Project	8,720,000	St. Catharines portion of the upgrades to new sport infrastructure & equipment located at a new Canada Games Park adjacent to Brock University. Also a Rowing Centre at the Henley Rowing Course. (CAO-101-2019 & FMS-141-2019)	PA
Subtotal			\$ 8,925,000		
			\$ 9,939,000		
Less:					
PA		Canada Summer Games Legacy Project Canada	8,720,000	Council Approval CAO-101-2019 Council	
PA		Summer Games	320,000	Approval PRCS/CAO-320-2016	
PA		Totem Pole Restoration & Reinstallation	125,000	Council Approval PRCS-126-2019	
Total budget requiring Council approval			\$ 774,000		

Notes:

PA - "Previously Approved " During 2019 or prior years, Council approved this 2020 budget item.

Project Type:

R = Renewal, SI = Service Improvement, G = Growth

City of St. Catharines 2020 Capital Budget and 2021-24 Forecast

Buildings and Facilities (Including Accessibility) Schedule M

The estimated total replacement value of City owned structures addressed in the program is \$567 million, the related current infrastructure deficit is estimated at \$51.0 and the target annual reinvestment rate is between \$9.6 million and \$ 14.2 million.

The facility improvements proposed in 2020 total \$6.2 million, (budgets shown in schedules M and N), which is slightly below the target reinvestment rate. The Arena Strategy was updated in 2019 and the capital items identified in that plan are consistent with the amount and timing of the items included in the 2020 Capital budget.

The Master Plan for Sunset Beach was also developed in 2019, and the 2020 Capital budget incorporates the highest priority capital requirements identified in the plan. However, due to cost, and corporate prioritization all the elements in the plan are not fully incorporated within the 2020 budget and 2020-2024 forecast. The unfunded portion of the plan is included in Schedule V - Other potential Capital Projects - 2025 and Beyond.

The 2017 Fire Master Plan, includes the replacement of 3 fire halls. The 2021-2024 Capital Forecast includes a portion of the replacement cost of Fire Hall #1. The estimated unfunded portion of the fire hall replacement costs are included in Schedule V – Other potential Capital Projects - 2025 and Beyond. During 2020, planning work related to Fire Hall replacements will be undertaken, which will result in more accurate project cost estimates.

The City maintains many buildings differentiated by factors such as usage, (i.e. arenas, fire halls, operations work centres), or third party designation (i.e. Historical buildings). Various components within buildings also receive attention (i.e. roofs, washrooms) as

well as overall standards for buildings (i.e. accessibility). The City undertakes several ongoing key initiatives and programs to maintain and improve City owned facility assets such as structures, buildings and related land improvements.

Accessibility Implementation

The City is striving to meet the provincially mandated Accessibility standards by the 2025 target as set out by the Accessibility for Ontarians with Disability Act (AODA). To rectify the estimated \$5.750 million in non-compliant items, the City continues to complete accessibility upgrades, including barrier free washrooms. The 2020 Capital budget of \$250,000 includes washroom improvements at Merritton and Bill Burgoyne Arenas. Based on 2020-2024 forecast budget levels (ranging annually from \$250,000 to \$500,000), the highest priority items will be completed, however some portion of the lower priority items will remain unaddressed, at the target date.

Heritage Building Rehabilitation

The Old Court House, Montebello Park Pavilion and Band Shell, City Hall, the Morningstar Mill, Dalhousie House, and the Old Robertson School at 85 Church Street are examples of City owned buildings which are classified as Heritage Buildings.

Due to the age of the heritage buildings many of the architectural, structural, mechanical, and electrical components of these structures have well exceeded their useful service life and require regular maintenance and rehabilitation in order to preserve the integrity of these buildings. There are some components within these structures that do not meet current codes and safety regulations and require retrofits in order to remain in operation.

The 2020 heritage building rehabilitations will include upgrades to City Hall and Port Dalhousie Library.

Arena Improvement Initiative

The 2019 Arena Strategy highlighted the need to right size the City's arenas (excluding Meridian Centre), to ensure that current levels of service can be delivered at an optimal cost.

In 2020, several mechanical and electrical systems are being replaced within the capital budget of \$2.47 million. This includes ice pad & board replacement at Bill Burgoyne Memorial Arena, washroom upgrades at Merritton Centennial Arena, and LED lighting upgrades at Seymour Hannah Sports and Entertainment Centre.

Parking Services (Schedule N)

In 2020, \$320,000 of the Capital budget is allotted to Improvements at the Carlisle Street Parking Garage and Structural Repairs to the Ontario Street Parking Garage. There is also an additional \$270,000 included in Schedule N for parking lot reconstruction.

General Building Improvement

Recent condition assessments and regulatory requirements were considered in determining the Facilities Capital budget. In 2020 the \$650,000 reserve contribution funded from 2020 operating budget will fund a portion of the smaller projects which include the structural, architectural, mechanical and electrical components of various City buildings that have reached the end of their service life.

2020 CAPITAL BUDGET
BUILDINGS AND FACILITIES - INCLUDING ACCESSIBILITY (SCHEDULE M)

Project No.	Project Type	Project Name	Gross Cost	Details	Notes
Additional budget for existing projects					
P17-135	R	Yates St. - Structural Repairs/Reinforcing to Stone Retaining Wall - Phase 2	\$ 200,000	Address additional structural concerns, and mitigate risk of future repairs	
P19-177	SI	Destination Pool Feasibility Study	25,000	Study to evaluate feasibility of future outdoor pool. (replaces original funds)	
P18-160-	R	Merritton Arena - Dehumidificaton system replacement	110,000	Additional funds required to acquire system	
Subtotal			\$ 335,000		
New Projects					
Administration & Operational centres					
P20-133	R	City Hall - Critical repairs (atrium, James St. doors and roof)	335,000	Address roofing deficiency, and recurring repairs to doors and glass seals	
P20-134	R	City Hall - Office/space renovation	20,000	Space renovation to maintain level of service	
P20-135	R	Lake St. Svc Centre - Replace lighting in truck bays for efficiency	250,000	Replace outdated fixtures to minimize recurring maintenance issues, and improve energy efficiency	
P20-136	SI	Lake St. Svc Centre - Security for facility - Phase 2 (cameras only)	50,000	Improve level of service, and site security	
P20-137	SI	PRCS Admin Bldg - Environmental study of site	50,000	Determine existing conditions of the site, and identify future remediation works	
Administration & Operational centres			\$ 705,000		

Project Type:

R = Renewal, Si = Service Improvement, G = Growth

City of St. Catharines 2020 Capital Budget and 2021-24 Forecast

2020 CAPITAL BUDGET
BUILDINGS AND FACILITIES - INCLUDING ACCESSIBILITY (SCHEDULE M)

Project No.	Project Type	Project Name	Gross Cost	Details	Notes
PRCS - Arenas & Recreation Facilities					
P20-138	SI	Bill Burgoyne Arena - Accessibility improvements washrooms & other	\$ 290,000	Implement accessibility within the facility, incorporation of FADS compliant washroom to improve level of service	A
P20-139	R	Bill Burgoyne Arena - Board & floor replacement	1,075,000	Replace ice slab and boards which are approaching end of service life, and to improve efficiency/performance of ice plant	
P20-140	R	Merritton & Garden City Arena Complex - Arena maintenance	85,000	Address select equipment replacement at Garden City, and replacement of Low-E Ceiling at Merritton which are both at end of service life	
P20-141	SI	Merritton Arena - Accessibility improvements washrooms & other	240,000	Implement accessibility within the facility, incorporation of FADS compliant washroom to improve level of service	A
P20-142	R	Merritton Arena - Compressor maintenance & condenser	115,000	Replace equipment which is at end of service life	
P20-143	R	Seymour Hannah Arena - Replacement of one compressor, water pump, cooling pump & control panel upgrade	200,000	Replace 1 of 4 compressors and associated equipment which is at end of service life	
P20-144	R	Seymour Hannah Arena - Replace event doors	100,000	Mitigate on-going repairs	
P20-145	R	Seymour Hannah Arena - Upgrade arena lighting to LED	200,000	Replace outdated fixtures to minimize recurring maintenance issues, and improve energy efficiency	

Project Type:

R = Renewal, Si = Service Improvement, G = Growth

City of St. Catharines 2020 Capital Budget and 2021-24 Forecast

2020 CAPITAL BUDGET
BUILDINGS AND FACILITIES - INCLUDING ACCESSIBILITY (SCHEDULE M)

Project No.	Project Type	Project Name	Gross Cost	Details	Notes
P20-146	R	Kiwanis Aquatic Centre - Regrout Leisure pool & lifeguard area	\$100,000	Final phase of regrouting to maintain level of service	
P20-147	R	Kiwanis Aquatic Centre - Replace pressure relief valves on AHU-01	15,000	Replacement of equipment to comply with legislation	
P20-148	SI	Burgoyne & Kiwanis - Water bottle filling stations	50,000	Addition of water bottle filling stations at Burgoyne Woods and Kiwanis Field to improve level of service	
PRCS - Arenas & Recreation Facilities			\$2,470,000		
PRCS - Parks Structures & Facilities					
P20-150	R	Lancaster Park - Soccer & Diamond 1 structure Capital maintenance	95,000	Address on-going maintenance concerns, roofing deficiencies, and to prolong service life of both buildings	
P20-151	R	Merritton Park - Dugout capital maintenance	30,000	Address on-going maintenance concerns, and maintain level of service	
P20-152	R	Merritton Park - Replace scoreboard & press box	145,000	Replace elements which are at end of useful life, and to maintain level of	
P20-153	R	Sunset Beach - Phase One - park design and washrooms	970,000	Replace existing washroom which is at end of life and does not meet accessibility requirements, and to improve level of service at Sunset Beach	A
P20-154	R	Walkinshaw - Washroom roof	10,000	Address roofing deficiency	
P20-155	SI	West Park - New Musco controls	100,000	Improve energy efficiency, and to minimize maintenance on lighting system	
PRCS - Parks Structures & Facilities			\$1,350,000		

Project Type:

R = Renewal, Si = Service Improvement, G = Growth

City of St. Catharines 2020 Capital Budget and 2021-24 Forecast

2020 CAPITAL BUDGET
BUILDINGS AND FACILITIES - INCLUDING ACCESSIBILITY (SCHEDULE M)

Project No.	Project Type	Project Name	Gross Cost	Details	Notes
Other Special Purpose Facilities					
P20-156	R	Victoria Lawn Cemetery - Garden of Memories-roof & structural repairs	\$55,000	Address building deficiencies	
P20-157	SI	Public Libraries - Door replacements (incl. Mag lock)	50,000	Address public safety concerns at Central Branch, and to comply with accessibility at Port Dalhousie Branch	
P20-158	R	Meridian Centre - Ice surface LED lighting conversion	400,000	Replace outdated fixtures to minimize recurring maintenance issues, and improve energy efficiency	
P20-159	R	Meridian Centre - Chiller capital maintenance (regasketing - 3 units)	60,000	Preventative maintenance on equipment to prolong service life	
P20-160	R	Meridian Centre - HVAC repairs - AHU 18 - replace 2 defective compressors	30,000	Address equipment deficiency	
P20-161	R	Meridian Centre - Suite level carpet replacement	65,000	Replace carpet which is at end of useful life, and to maintain level of service	
P20-162	R	Meridian Centre Front sliding door replacement	25,000	Mitigate on-going repairs	
P20-163	SI	Meridian Centre other upgrades	65,000	Upgrades to radios/telecommunication systems and interior signage to improve operations and service offering	
Other Special Purpose Facilities			\$750,000		
New Projects Subtotal			<u>\$5,275,000</u>		
			<u>\$5,610,000</u>		

Project Type:

R = Renewal, Si = Service Improvement, G = Growth

City of St. Catharines 2020 Capital Budget and 2021-24 Forecast

2020 CAPITAL BUDGET
BUILDINGS AND FACILITIES - INCLUDING ACCESSIBILITY (SCHEDULE M)

Project No.	Project Type	Project Name	Gross Cost	Details	Notes
-------------	--------------	--------------	------------	---------	-------

Notes:

A = Accessibility Upgrades

FADS = Accessibility Design Standards

Total Accessibility Upgrades included in Above Projects

Proj. #	Location/Name	Accessibility Budget
P20-138	Bill Burgoyne Arena	\$90,000
P20-141	Merritton Arena	\$90,000
P20-133	Sunset Beach	\$70,000
		<u><u>\$250,000</u></u>

Project Type:

R = Renewal, Si = Service Improvement, G = Growth

City of St. Catharines 2020 Capital Budget and 2021-24 Forecast

Page intentionally left blank

2020 CAPITAL BUDGET
PARKING SERVICES (SCHEDULE N)

Project No.	Project Type	Project Name	From	To	Gross Cost	Details
Additional budget for Existing Projects						
P18-151-3	SI	Carlisle Garage for water line			\$ 40,000	Additional funds to complete water line installation
P17-179	R	Race Street Park Parking Lot			70,000	Additional funds for enhanced streetscaping
Subtotal					\$ 110,000	
New Projects						
P20-166	R	Market Square / City Hall Parking Lot			200,000	Resurface existing lot to prevent further deterioration
P20-164	R	Carlisle Garage Waterproofing repairs annual			80,000	Ongoing building preventative maintenance
P20-165	R	Ontario St. Garage structural repairs			200,000	Addressing identified structural deficiencies
Subtotal					\$ 480,000	
					\$ 590,000	

See Asset narrative in Schedule M

Project Type:

R = Renewal, Si = Service Improvement, G = Growth

City of St. Catharines 2020 Capital Budget and 2021-24 Forecast

Page intentionally left blank

2020 CAPITAL BUDGET
FIRE SERVICES (SCHEDULE O)

Project No.	Project Type	Project Name	Gross Cost	Details
New Projects				
PFR20-01	SI	Next Generation 911 implementation	\$ 180,000	Required upgrades to call handling software in communication centre tied to PBX, upgrades to recording software (NICE system) and upgrades to CAD (dispatch system) due to legislated changes to 911 system
			<u>\$ 180,000</u>	

Project Type:

R = Renewal, SI = Service Improvement, G = Growth

Page intentionally left blank

2020 CAPITAL BUDGET
CORPORATE INFRASTRUCTURE (SCHEDULE P)

Project No.	Project Type	Project Name	Gross Cost	Details
New Projects				
PCI20-01	SI	Website redesign and update	\$ 400,000	Update the City's website to meet users' expectations for content, and meet accessibility and other regulatory notification requirements
			<u>\$ 400,000</u>	

Project Type:
R = Renewal, SI = Service Improvement, G = Growth

Page intentionally left blank

2020 CAPITAL BUDGET
TRANSIT COMMISSION SERVICES (SCHEDULE Q)

Project No.	Project Type	Project Name	Gross Cost	Details	Notes
PTC20-0:	R	2020 Transit Funding Replenishment	\$ 600,000	Portion of Transit Commission 2020 Fleet budget	1
			<u>\$ 600,000</u>		

Note

- 1 Budget established to provide the City's portion of funding for fleet renewal. Upper levels of government provide the largest share of the required funding. Budget will be funded by debt serviced by the Transit Commission and a 10% revenue contribution from the Transit Commission.

Project Type:

R = Renewal, SI = Service Improvement, G = Growth

City of St. Catharines 2020 Capital Budget and 2021-24 Forecast

Page intentionally left blank

2020 CAPITAL BUDGET
 NIAGARA DISTRICT AIRPORT (SCHEDULE R)

Project No.	Project Name	Gross Cost	Details
PNA20-01	2020 Municipal Working Capital Grant	\$ -	As per request submitted by the Niagara District Airport
		<u>\$ -</u>	

Due to the Governance Review of airport service operations within the Niagara Region, no capital request is anticipated for 2020.

Project Type:

R = Renewal, SI = Service Improvement, G = Growth

Page intentionally left blank

Co-ordinated Projects Schedule S

For asset categories within the road allowance (roads, sidewalks, sewers, water mains), coordination with other construction activities is taken into consideration to take advantage of economies of scale and reduce the impact of construction on abutting property owners and the travelling public.

Determination of the final construction program for all of the assets for a particular year is the result of an iterative effort by staff in reviewing all of the asset categories. Schedule S reports on the new and continuing projects included within the 2020 Capital Budget. For each project in the schedule each of the asset categories previously reported in Schedule B to R is shown.

2020 CAPITAL BUDGET
COORDINATED PROJECTS (SCHEDULE S)

SCH.	DESCRIPTION	PROJECT NO.	PROJECT NAME	GROSS COST	COMMENTS
B	Roads	P17-101	Bromley Dr. (Bromley Gardens)	\$ 50,000	City share of construction to upgrade existing road allowance adjacent to a new sub-division (Bromley Gardens) including sanitary repairs, new storm sewer, replacement watermain and road urbanization
D	Storm Sewer Collection System	P17-101		50,000	
E	Sanitary Sewer Collection System	P17-101		6,000	
				\$ 106,000	
B	Roads	P17-021	Cecil St. Underground	162,000	Sanitary sewer repairs and road resurfacing
E	Sanitary Sewer Collection System	P17-021	Improvements	200,000	
				\$ 362,000	
B	Roads	P17-062	Cumming St./Kent Reconstruct.	100,000	Additional funds for sewer separation and repairs, cast iron watermain replacement, roadworks, and sidewalk repairs
C	Sidewalks & Walkways	P17-062		62,000	
D	Storm Sewer Collection System	P17-062		465,000	
E	Sanitary Sewer Collection System	P17-062		570,000	
G	Water Distribution System	P17-062		505,000	
				\$ 1,702,000	
B	Roads	P17-063	Glenwood Ave/South Dr Reconstruction	178,000	Additional funds for combined sewer separation and repairs, cast iron watermain replacements, and associated roadworks
C	Sidewalks & Walkways	P17-063		80,000	
D	Storm Sewer Collection System	P17-063		670,000	
E	Sanitary Sewer Collection System	P17-063		1,095,000	
G	Water Distribution System	P17-063		475,000	
				\$ 2,498,000	
B	Roads	P17-066	Russell/Woodland	496,000	Additional funds for combined sewer separation and spot repairs, cast iron watermain replacement, sidewalk replacement, and roadworks including resurfacing of Russell Ave. beyond the limits of underground improvements
C	Sidewalks & Walkways	P17-066		155,000	
D	Storm Sewer Collection System	P17-066		700,000	
E	Sanitary Sewer Collection System	P17-066		620,000	
G	Water Distribution System	P17-066		1,538,818	
				\$ 3,509,818	

2020 CAPITAL BUDGET
COORDINATED PROJECTS (SCHEDULE S)

SCH.	DESCRIPTION	PROJECT NO.	PROJECT NAME	GROSS COST	COMMENTS
B	Roads	P19-020	Avalon/Bernhardt/Embassy road &	\$ 100,000	Additional funds to address road drainage concerns, improve watermain connectivity, and provide combined sewer separation, including asbestos cement and cast iron watermain replacement and road resurfacing
D	Storm Sewer Collection System	P19-020	Underground Improvements	310,000	
G	Water Distribution System	P19-020		505,000	
				\$ 915,000	
B	Roads	P19-065	Ridley Rd. Reconstruction	3,110,000	Council Approval PBS-108-2019 in conjunction with GO station initiatives, reconstruct existing road to urban cross-section, replace or construct new sidewalks, replace/repair sewers and cast iron watermains
C	Sidewalks & Walkways	P19-065		471,000	
D	Storm Sewer Collection System	P19-065		124,000	
E	Sanitary Sewer Collection System	P19-065		320,000	
G	Water Distribution System	P19-065		1,175,000	
				\$5,200,000	
B	Roads	P20-065	New road From Ridley to GO	425,000	Council Approval PBS-108-2019 in conjunction with GO station initiatives, construction of new roadway and storm drainage system
D	Storm Sewer Collection System	P20-065	Station	75,000	
				\$ 500,000	
B	Roads	P20-062	Scarth Rd. Reconstruction	50,000	Engineering design services for cast iron watermain replacement and road reconstruction
G	Water Distribution System	P20-062		14,500	
				\$ 64,500	
B	Roads	P20-100	Edinburgh/Tamarack	168,000	Resurface road and replace existing cast iron watermain with very high break rate
G	Water Distribution System	P20-100		1,200,000	
				\$ 1,368,000	
K	Sidewalks	RN20-std	Regional Project St. Davids	18,000	Replacement/upgrades of sanitary sewer, storm sewer, cast iron watermain and sidewalks in conjunction with Regional road reconstruction
K	Sidewalks	RN20-std	Rd.(RR#71)	140,000	
K	Storm Sewers	RN20-std		112,000	
K	Sanitary Sewers	RN20-std		485,000	
K	Water	RN20-std		845,000	
				\$ 1,600,000	

2020 CAPITAL BUDGET
COORDINATED PROJECTS (SCHEDULE S)

SCH.	DESCRIPTION	PROJECT NO.	PROJECT NAME	GROSS COST	COMMENTS
K	Storm Sewers	RN20-stp	Regional Project St. Paul St.	\$ 235,000	Replacement/upgrades of sanitary sewer, storm sewer, cast iron watermain and sidewalks in conjunction with Regional replacement bridge and bridge approaches
K	Storm Sewers	RN20-stp	(RR#81) West (Bridge over CN	135,000	
K	Sanitary Sewers	RNxx-stp	Tracks)	450,000	
K	Water	RNxx-stp		480,000	
				\$1,300,000	

CITY OF ST. CATHARINES
2021 CAPITAL FORECAST (SCHEDULE T)

DESCRIPTION	GROSS COSTS	GAS TAX	OTHER EXTERNAL/ RESERVES	TAX/RATE PAYER	DEBT
2021 Priority Program	7,311,000	-	-	2,396,000	4,915,000
Active Transportation	250,000	250,000	-	-	-
Traffic Signals (including pedestrian crossings)	300,000	-	-	300,000	-
ROADS - 2021 Priorities	\$ 7,861,000	\$ 250,000	\$ -	\$ 2,696,000	\$ 4,915,000
SIDEWALKS AND WALKWAYS					
Lake Street Reconstruction	97,000	-	-	97,000	-
2021 New Sidewalks	153,000	-	-	75,000	78,000
2021 Sidewalk Replacements	174,000	-	-	174,000	-
2021 Walkway & Sidewalk Improvements	50,000	-	-	50,000	-
	474,000	-	-	396,000	78,000
STORM SEWER - 2021 Priorities	2,825,168	295,000	550,000	198,000	1,782,168
SANITARY SEWER - 2021 Priorities	4,036,720	175,000	-	3,307,860	553,860
POLLUTION CONTROL - 2021 Priorities	500,000	-	-	250,000	250,000
WATERMAINS - 2021 Priorities	8,589,320	612,000	-	6,303,656	1,673,664
BRIDGES AND MAJOR CULVERTS					
SSR/Dunkirk/ Dieppe @ Cushman	800,000	676,699	-	12,000	111,301
Third Ave. Louth Bridge @ Richardson Creek	300,000	-	-	30,000	270,000
	1,100,000	676,699	-	42,000	381,301
SHORELINE PROTECTION					
Abbey Mews (Considine Ave. to Christie St.)	585,000	-	-	59,000	526,000
Westgate Park (8-14 Shore Blvd) - construction	1,260,000	-	-	126,000	1,134,000
	1,845,000	-	-	185,000	1,660,000
WATERCOURSES - 2021 Priorities	800,000	-	-	80,000	720,000
REGIONAL - St. Paul St. Reconstruction	2,236,000	2,213,000	-	23,000	-

CITY OF ST. CATHARINES
2021 CAPITAL FORECAST (SCHEDULE T)

DESCRIPTION	GROSS COSTS	GAS TAX	OTHER EXTERNAL/ RESERVES	TAX/RATE PAYER	DEBT
PARKS, RECREATION AND CULTURE SERVICES					
Canada Summer Games (yr 4 of 4)	320,000	-	-	32,000	288,000
Park Renewal - Playground equipment	325,000	-	-	325,000	-
Tree Planting program	368,000	-	-	368,000	-
Memorial bench program	80,000	-	-	80,000	-
Sunset Beach	3,171,101	-	-	718,000	2,453,101
	\$ 4,264,101	\$ -	-	\$ 1,523,000	\$ 2,741,101
BUILDING AND FACILITIES					
Administrative & Operational Centres	900,000	-	-	90,000	810,000
PRCS Arenas & Recreational Facilities	2,010,000	-	400,000	161,000	1,449,000
PRCS Parks & Other Structures	3,010,000	-	-	301,000	2,709,000
Meridan Centre	130,000	-	-	13,000	117,000
Accessibility Program, 2021	450,000	-	300,000	15,000	135,000
	6,500,000	-	700,000	580,000	5,220,000
FIRE SERVICE - FIRE HALL REPLACEMENT	330,000	-	-	33,000	297,000
CORPORATE INFRASTRUCTURE	700,000	-	-	70,000	630,000
TRANSIT COMMISSION SERVICES	600,000	-	-	60,000	540,000
TOTALS 2021 CAPITAL FORECAST	\$ 42,661,309	\$ 4,221,699	\$ 1,250,000	\$ 15,747,516	\$ 21,442,094

2020 CAPITAL BUDGET AND FOUR YEAR FORECAST
(SCHEDULE U)

	2020	2021	2022	2023	2024
CAPITAL EXPENDITURES					
Roads	8,569,460	7,861,000	8,031,000	8,391,000	8,402,000
Sidewalks and Walkways	1,041,608	474,000	50,000	211,000	735,000
Storm Sewer Collection System (incl. Sewer Separation)	4,120,000	2,825,168	1,840,000	2,375,168	3,815,168
Sanitary Sewer Collection System	3,626,000	4,036,720	4,208,954	5,077,133	6,173,376
Pollution Control	225,000	500,000	800,000	1,000,000	1,000,000
Water Distribution System (Watermains)	6,841,000	8,589,320	8,415,906	7,979,225	12,960,749
Bridges and Major Culverts	2,420,000	1,100,000	420,000	450,000	674,000
Shoreline Protection	1,575,000	1,845,000	35,000	640,000	1,910,000
Watercourses	200,000	800,000	1,400,000	4,050,000	1,600,000
Regional Projects	2,900,000	2,236,000	7,425,000	4,998,000	-
Parks, Recreation and Culture Services	9,939,000	4,264,101	2,027,800	1,387,000	1,739,600
Buildings and Facilities (Including Accessibility)	5,610,000	6,500,000	3,975,000	4,627,000	4,910,000
Parking Services	590,000	-	1,095,000	400,000	-
Fire Services	180,000	330,000	1,420,000	4,420,000	3,850,000
Corporate Infrastructure	400,000	700,000	500,000	500,000	500,000
Transit Commission	600,000	600,000	600,000	600,000	600,000
	\$ 48,837,068	\$ 42,661,309	\$ 42,243,660	\$ 47,105,526	\$ 48,869,893
SOURCES OF FINANCING					
Gas Tax	8,358,170	4,221,699	4,221,699	4,405,251	4,405,251
Other External Funding (Including Grants)	5,725,608	550,000	550,000	550,000	-
Reserve Funds (Incl. D.C.)	2,209,540	700,000	1,760,000	1,230,000	750,000
TOTAL GRANTS/3rd PARTY/RESERVES	\$ 16,293,318	\$ 5,471,699	\$ 6,531,699	\$ 6,185,251	\$ 5,155,251
Infrastructure Levy	1,569,000	1,569,000	1,569,000	1,569,000	1,569,000
Tax support	2,306,000	2,210,000	2,209,000	2,330,000	2,282,000
Water/Wastewater	8,299,000	7,941,880	7,901,758	7,988,693	8,205,747
Capital out of Revenue (1)	2,779,250	4,026,636	4,791,990	6,081,833	7,313,467
TOTAL TAX/RATE PAYER	\$ 14,953,250	\$ 15,747,516	\$ 16,471,748	\$ 17,969,526	\$ 19,370,214
DEBENTURE (2)	17,590,500	21,442,094	19,240,213	22,950,750	24,344,428
TOTAL	\$ 48,837,068	\$ 42,661,309	\$ 42,243,660	\$ 47,105,527	\$ 48,869,893

2020 CAPITAL BUDGET AND FOUR YEAR FORECAST
(SCHEDULE U)

Note (1)	2020	2021	2022	2023	2024
Capital out of Revenue allocation					
Tax Supported	1,751,000	2,047,000	1,825,000	2,048,000	2,149,000
Water/Wastewater	968,250	1,919,636	2,906,990	3,973,833	5,104,467
Transit Commission	60,000	60,000	60,000	60,000	60,000
Total Capital Out of Revenue	<u>2,779,250</u>	<u>4,026,636</u>	<u>4,791,990</u>	<u>6,081,833</u>	<u>7,313,467</u>
Note (2)					
Debenture allocation					
Tax Supported	15,717,750	18,424,570	15,386,101	18,436,918	19,332,517
Water/Wastewater	1,332,750	2,477,524	3,314,112	3,973,833	4,471,911
Transit Commission	540,000	540,000	540,000	540,000	540,000
Total Debenture	<u>17,590,500</u>	<u>21,442,094</u>	<u>19,240,213</u>	<u>22,950,750</u>	<u>24,344,428</u>

OTHER POTENTIAL CAPITAL PROJECTS - 2025 and BEYOND
SCHEDULE V

The intent of the list below is to highlight projects that have been raised to Council or discussed by Council. As these projects have not been included in the forecast at this time they would be considered in years six through ten (2025- 2029). However, some of these items represent underfunding of current programs, and so if funding was available the expenditures could be accelerated. The costs provided are based on high level estimates. Costs are expected to change as the scope is refined and project planning proceeds. This list does not include the regular ongoing annual replacement of linear assets, buildings and facilities that are being accommodated in the annual Capital Budget. Items that are not included on this list, as they are currently under review are sidewalks and Roads underfunding.

Project Type	Asset	Facility/location	Description	Estimated Cost		Supporting reports plans/strategy	Estimated Year
				(\$000)			
SI	Road/ Bridge	Moffat Street Secondary Access	High level estimate to be confirmed once location is determined	\$ 6,500	-	Environmental Assessment funding approved 2019	2025-29
R	Road	First Road West	(associated with development of s/o CNR lands)	1,295		2009 Development Charges (D.C.) Study	2025-29
R	Shoreline	Newport ROW Shoreline	Shoreline Protection	985		2018 Shoreline Protection Review	2026-27
R	Watercourses	Lock Wall Rehabilitation	Various lock wall locations identified as medium rating to be completed within 1-5 years	590		2018 Lock Wall Inspections	2025
R	Bridges	Bridges	Replacements -Costs over \$500k annual budget	1,900		2018 Bridge and Culvert Inspection	2025-29
R	Watercourses	Dick's Creek	Erosion control- Various locations Spring Garden Creek & other locations	4,000		2011 Inspection/2014 Priority Report	2025
R	Shoreline	Lakefront Park	2024 budget deferrals	1,000			2025
R	Fire Hall	Fire Hall 1 2 &3	Replacement of FireHalls #1, #2 & #3	8,000		Fire Master Plan -Council 10/18/2017	2025-29
R	Arena	Bill Burgoyne Arena	Twin Arena (option 1)	21,800		PRCS-124-2019 - Arena Strategy	2029
R	Heritage	Old Courthouse	Address Accessibility / Deficiencies	2,700			2025
R	Heritage	Robertson School	FADS	1,800			2025
R	Arena	Merritton Arena	Replace floor and boards	1,100			2025
R	Arena	Jaycee Park	New indoor equipment storage facility	1,000			2026-29
SI	Aquatics	not yet determined	New Destination Pool	4,500			2025-29
SI	Park	Sunset Beach	Park Improvements phase 3 including Playground	1,405		PRCS-149-2019	2025-29
R	Playgrounds	Playground Replacements	57 playground replacements as planned from 2020-29	9,360		PRCS-B002-2018 - Parks Renewal Plan	2025-29
R	Tennis Courts	Tennis Court Replacements	10 tennis court replacements as planned from 2020-29	2,075			
R	Basketball Courts	Basketball Courts	18 basketball court replace. as planned from 2020 -29	1,350			
2025-2029 identified unfunded projects				\$ 71,360			

Page intentionally left blank

2020 CAPITAL BUDGET
PROJECT FUNDING DETAILS (SCHEDULE W)

			FUNDING SOURCES									
			GRANTS/DEVELOPMENT CHRGS/RESERVE			RATE/TAX PAYER SUPPORT						
Sch.	Project No.	Facility/Project Name	Gross Cost	Gas Tax	Other external Fundg	Reserves (Incl. D.C.)	Infrastruct. Levy	Tax Support	Water/Wastewater	Cap. out of Rev.(7)	Debenture	Notes
B	P19-020	Avalon/Bernhardt/Embassy road & Underground Improvements	100,000	-	-	-	-	-	-	10,000	90,000	
B	P17-021	Cecil St. Underground Improvements	162,000	-	-	-	-	-	-	16,000	146,000	
B	P17-062	Cumming St./Kent Reconstruction	100,000	-	-	-	-	-	-	10,000	90,000	
B	P20-062	Scarath Rd. Reconstruction	50,000	-	-	-	-	-	-	5,000	45,000	
B	P17-063	Glenwood Ave/South Dr Reconstruction	178,000	-	-	-	-	-	-	18,000	160,000	
B	P19-065	Ridley Rd. Reconstruction	3,110,000	-	-	938,754	-	-	-	217,000	1,954,246	1 PA
B	P20-065	New road From Ridley to GO Station	425,000	-	-	128,286	-	-	-	30,000	266,714	1 PA
B	P17-066	Russell/Woodland	496,000	-	-	-	-	-	-	50,000	446,000	
B	P19-067	Arglye Crescent road Improvements	900,000	-	-	-	-	-	-	90,000	810,000	
B	P20-069	2020 Active Transportation	250,000	250,000	-	-	-	-	-	-	-	
B	P20-080	2020 Resurfacing Program	2,280,460	-	-	-	-	1,856,000	-	42,000	382,460	
B	P20-097	Traffic Signals (incl.pedestrian crossings)	300,000	-	-	-	300,000	-	-	-	-	
B	P20-100	Edinburgh/Tamarack	168,000	-	-	-	-	-	-	17,000	151,000	
B	P17-101	Bromley Dr. (Bromley Gardens)	50,000	-	-	-	-	50,000	-	-	-	
C	P20-040-1	2020 Sidewalk and Walkway Repairs	50,000	-	-	-	50,000	-	-	-	-	
C	P20-041	2020 New Sidewalk Program	134,608	-	-	-	-	-	-	13,000	121,608	
C	P17-062	Cumming/Kent Reconstruction	62,000	-	-	-	-	62,000	-	-	-	
C	P17-062	Cumming/Kent Reconstruction	80,000	-	-	-	-	80,000	-	-	-	
C	P19-065	Ridley Rd. Reconstruction	471,000	-	-	228,608	-	95,000	-	15,000	132,392	1 PA
C	P17-066	Russell/Woodland	155,000	121,000	-	-	-	34,000	-	-	-	
C	P17-067	Thorold - St. Davids Rd. Reconstruction	89,000	-	-	-	-	89,000	-	-	-	
D	P16-003	Else St.	1,450,000	-	725,000	-	-	-	-	73,000	652,000	2
D	P20-006	Catch Basins and Storm Service Installations	100,000	-	-	-	-	-	-	10,000	90,000	
D	P20-015	Design for future storm sewer projects	50,000	-	-	-	-	-	-	5,000	45,000	
D	P20-016	Storm Sewer Spot Repairs	126,000	-	-	-	-	-	-	13,000	113,000	
D	P19-020	Avalon/Bernhardt/Embassy road and Underground Improvements	310,000	53,000	-	-	-	-	-	26,000	231,000	
D	P17-062	Cumming/Kent Reconstruction	465,000	-	232,500	-	-	-	-	23,000	209,500	2
D	P17-063	Glenwood/South Reconstruction	670,000	-	335,000	-	-	-	-	34,000	301,000	2
D	P19-065	Ridley Rd. Reconstruction	124,000	-	-	-	-	-	-	12,000	112,000	PA
D	P20-065	New road From Ridley to GO Station	75,000	-	-	-	-	-	-	8,000	67,000	PA
D	P17-066	Russell/Woodland	700,000	700,000	-	-	-	-	-	-	-	
D	P17-101	Bromley Dr. (Bromley Gardens)	50,000	-	-	-	-	-	-	5,000	45,000	
E	P20-001	North St.	50,000	-	-	-	-	-	50,000	-	-	

2020 CAPITAL BUDGET
PROJECT FUNDING DETAILS (SCHEDULE W)

			FUNDING SOURCES								
			GRANTS/DEVELOPMENT CHRGS/RESERVE			RATE/TAX PAYER SUPPORT					
Sch. Project No.	Facility/Project Name	Gross Cost	Gas Tax	Other external Fundg	Reserves (Incl. D.C.)	Infrastruct. Levy	Tax Support	Water/	Cap. out of Rev.(7)	Debenture	Notes
E	P20-010	Extraneous Flow Elimination	50,000	-	-	-	-	50,000	-	-	
E	P20-011	Sewer Spot Repair	175,000	-	-	-	-	175,000	-	-	
E	P20-012	Sanitary Sewer Flushing and Reaming	25,000	-	-	-	-	25,000	-	-	
E	P20-014	CCTV Sewer Inspections	150,000	-	-	-	-	150,000	-	-	
E	P20-015	Design for Future Sanitary Sewer Projects	50,000	-	-	-	-	50,000	-	-	
E	P20-019	Sewershed Analysis	10,000	-	-	-	-	10,000	-	-	
E	P17-021	Cecil St. Underground Improvements	200,000	-	-	-	-	200,000	-	-	
E	P17-062	Cumming/Kent Reconstruction	570,000	-	-	-	-	329,000	120,500	120,500	
E	P17-063	Glenwood/South Reconstruction	1,095,000	65,000	-	-	-	1,030,000	-	-	
E	P19-065	Ridley Rd. Reconstruction	320,000	-	-	-	-	320,000	-	-	PA
E	P15-066	Moffatt St. Reconstruction	305,000	-	-	-	-	305,000	-	-	
E	P17-066	Russell/Woodland	620,000	-	-	-	-	-	310,000	310,000	
E	P17-101	Bromely Dr. (Bromley Gardens)	6,000	-	-	-	-	6,000	-	-	
F	P20-018	2020 Flow Monitoring, Studies and Scada Upgrade	225,000	-	-	-	-	-	112,500	112,500	
G	P17-062	Cumming/Kent Reconstruction	505,000	-	-	-	-	505,000	-	-	
G	P17-063	Glenwood/South Reconstruction	475,000	-	-	-	-	475,000	-	-	
G	P17-066	Russell/Woodland	1,538,818	1,352,000	-	-	-	186,818	-	-	
G	P19-020	Avalon/Bernhardt/Embassy road and Underground Improvements	505,000	-	-	-	-	505,000	-	-	
G	P19-065	Ridley Rd. Reconstruction	1,175,000	-	-	-	-	1,086,000	31,150	57,850	PA
G	P20-062	Scarth Rd.	14,500	-	-	-	-	14,500	-	-	
G	P20-100	Edinburgh/Tamarack	1,200,000	-	-	-	-	1,074,000	44,100	81,900	
G	P20-101	Jacobson Ave.	850,000	-	-	-	-	850,000	-	-	
G	P20-102	Lakeshore Rd. at Welland Canal	27,682	-	-	-	-	27,682	-	-	
G	P20-116	Storz Hydrant Port Conversions	450,000	-	-	-	-	450,000	-	-	
G	P20-118	Valves, Hydrant and Services	50,000	-	-	-	-	50,000	-	-	
G	P20-119	Design for 2021 Projects	50,000	-	-	-	-	50,000	-	-	
H	P17-121	Third Ave. Louth/Glass Ave. Bridge @ 15 Mile Creek	1,050,000	-	525,000	-	-	-	53,000	472,000	3
H	P17-123	Pelham Rd. Bridge @ CN	1,000,000	175,170	-	-	-	-	82,000	742,830	
H	P18-123	Third Ave. Louth @ Richardson Creek	330,000	-	-	-	-	-	33,000	297,000	
H	P20-122	First Ave. Louth, s/o Pelham @ 12 Mile Creek - Engineering Services	40,000	-	-	-	40,000	-	-	-	
I	P20-132	Abby Mews - engineering & partial construction	1,500,000	-	-	-	-	-	150,000	1,350,000	

2020 CAPITAL BUDGET
PROJECT FUNDING DETAILS (SCHEDULE W)

			FUNDING SOURCES									
			GRANTS/DEVELOPMENT CHRGS/RESERVE			RATE/TAX PAYER SUPPORT						
Sch.	Project No.	Facility/Project Name	Gross Cost	Gas Tax	Other external Fundg	Reserves (Incl. D.C.)	Infrastruct. Levy	Tax Support	Water/Wastewater	Cap. out of Rev.(7)	Debenture	Notes
I	ST20-10	Interim Priority Review	75,000	-	-	-	-	-	-	8,000	67,000	
J	P19-131	Old Welland Canal lockwall stabilization-studies, detail for #2 Lock7	200,000	-	-	-	-	-	-	20,000	180,000	
K	RN20-std	St. Davids Rd.(RR#71) Reconstruction	18,000	-	-	-	18,000	-	-	-	-	
K	RN20-std	St. Davids Rd. (RR#71) Reconstruction	140,000	140,000	-	-	-	-	-	-	-	
K	RN20-stp	St. Paul St. (RR#81) West (Bridge over CN Tracks)	235,000	135,000	-	-	-	-	-	10,000	90,000	
K	RN20-std	St. Davids Rd. Reconstruction	112,000	112,000	-	-	-	-	-	-	-	
K	RN20-stp	St. Paul St. West (Bridge over CN Tracks)	135,000	135,000	-	-	-	-	-	-	-	
K	RN20-std	St. Davids Rd. Reconstruction	485,000	485,000	-	-	-	-	-	-	-	
K	RN20-stp	St. Paul St. West (Bridge over CN Tracks)	450,000	450,000	-	-	-	-	-	-	-	
K	RN20-std	St. Davids Rd. Reconstruction	845,000	-	-	-	-	-	325,000	182,000	338,000	
K	RN20-stp	St. Paul St. West (Bridge over CN Tracks)	480,000	-	-	-	-	-	-	168,000	312,000	
L	PRC18-01	Canada Summer Games (Year 3 of 4)	320,000	-	-	-	-	-	-	32,000	288,000	PA
L	PRC20-01	Tree Planting program	364,000	-	-	-	364,000	-	-	-	-	
L	PRC20-02	Park Renewal Program - Happy Rolph's	330,000	-	-	-	19,000	-	-	31,000	280,000	
L	PRC20-03	Memorial Bench Program - 50 benches 2020-2025	80,000	-	-	-	80,000	-	-	-	-	
L	PRC20-04	Totem Pole Restoration & reinstallation	125,000	-	-	-	125,000	-	-	-	-	PA
L	PRC20-05	Canada Summer Games Legacy Project	8,720,000	4,185,000	3,912,000	100,000	523,000	-	-	-	-	4 PA
M	P17-135	Yates St. - Structural Repairs/Reinforcing to Stone Retaining Wall - Phase 2	200,000	-	-	-	-	-	-	20,000	180,000	
M	P18-160-1	Merritton Arena - Dehumidificaton system replacement	110,000	-	-	-	-	-	-	11,000	99,000	
M	P19-177	Destination Pool Feasibility Study (replace original funds)	25,000	-	-	25,000	-	-	-	-	-	5
M	P20-133	City Hall - Critical repairs (atrium, James St. doors and roof)	335,000	-	-	25,000	-	-	-	31,000	279,000	
M	P20-134	City Hall - Office/space renovation	20,000	-	-	20,000	-	-	-	-	-	5
M	P20-135	Lake St. Svc Centre - Replace lighting in truck bays for efficiency	250,000	-	-	-	-	-	-	25,000	225,000	
M	P20-136	Lake St. Svc Centre - Security for facility - Phase 2 (cameras only)	50,000	-	-	50,000	-	-	-	-	-	5
M	P20-137	PRCS Admin Bldg - Environmental study of site	50,000	-	-	50,000	-	-	-	-	-	5

2020 CAPITAL BUDGET
FUNDING PROJECT (SCHEDULE W)

			FUNDING SOURCES									
			GRANTS/DEVELOPMENT CHRGS/RESERVE			RATE/TAX PAYER SUPPORT						
Sch.	Project No.	Facility/Project Name	Gross Cost	Gas Tax	Other external Fundg	Reserves (Incl. D.C.)	Infrastruct. Levy	Tax Support	Water/Wastewater	Cap. out of Rev.(7)	Debenture	Notes
M	P20-138	Bill Burgoyne Arena - Accessibility improvements washrooms & other	290,000	-	-	-	-	-	-	29,000	261,000	
M	P20-139	Bill Burgoyne Arena - Board & Floor	1,075,000	-	-	-	-	-	-	108,000	967,000	
M	P20-140	Merritton & Garden City Arena Complex - Arena maintenance	85,000	-	-	85,000	-	-	-	-	-	5
M	P20-141	Merritton Arena - Accessibility improvements washrooms & other	240,000	-	-	-	-	-	-	24,000	216,000	
M	P20-142	Merritton Arena - Compressor maintenance & condenser replacement	115,000	-	-	-	-	-	-	12,000	103,000	
M	P20-143	Seymour Hannah Arena - Replacements of	200,000	-	-	-	-	-	-	20,000	180,000	
M	P20-144	Seymour Hannah Arena - Replacements	100,000	-	-	-	-	-	-	10,000	90,000	
M	P20-145	Seymour Hannah Arena - Upgrade arena	200,000	-	-	-	-	-	-	20,000	180,000	
M	P20-146	Kiwanis Aquatic Centre - Regrout Leisure pool & lifeguard area	100,000	-	-	-	-	-	-	10,000	90,000	
M	P20-147	Kiwanis Aquatic Centre - Replace pressure relief valves on AHU-01	15,000	-	-	15,000	-	-	-	-	-	5
M	P20-148	Burgoyne & Kiwanis - Water bottle filling	50,000	-	-	50,000	-	-	-	-	-	5
M	P20-150	Lancaster Park - Soccer & Diamond 1	95,000	-	-	-	-	-	-	10,000	85,000	
M	P20-151	Merritton Park - Dugout capital Maintnc.	30,000	-	-	30,000	-	-	-	-	-	5
M	P20-152	Merritton Park - Replace scoreboard & press box	145,000	-	-	-	-	-	-	15,000	130,000	
M	P20-153	Sunset Beach Phase 1 Park Design & W.C.	970,000	-	-	-	-	-	-	97,000	873,000	
M	P20-154	Walkinshaw - Washroom Roof Replcmt	10,000	-	-	10,000	-	-	-	-	-	5
M	P20-155	West Park - New Musco Controls	100,000	-	-	-	-	-	-	10,000	90,000	
M	P20-156	Victoria Lawn Cemetery - Garden of Memories - Roofing and Structural Repairs	55,000	-	-	55,000	-	-	-	-	-	5
M	P20-157	Public Libraries - Door replacements (incl. Mag lock)	50,000	-	-	50,000	-	-	-	-	-	5
M	P20-158	Meridian Centre - Ice surface LED lighting	400,000	-	-	-	-	-	-	40,000	360,000	
M	P20-159	Meridian Centre - Chiller capital maintenance (regasketing - 3 units)	60,000	-	-	60,000	-	-	-	-	-	5
M	P20-160	Meridian Centre - HVAC repairs - AHU 18 - replace 2 defective compressors	30,000	-	-	30,000	-	-	-	-	-	5
M	P20-161	Meridian Centre - Suite level carpet	65,000	-	-	65,000	-	-	-	-	-	5
M	P20-162	Meridian Centre-Front sliding door replac.	25,000	-	-	-	25,000	-	-	-	-	
M	P20-163	Meridian Centre-Additional Items	65,000	-	-	-	65,000	-	-	-	-	
N	P17-179	Race Street Park Parking Lot	70,000	-	-	70,000	-	-	-	-	-	6

2020 CAPITAL BUDGET
FUNDING PROJECT (SCHEDULE W)

			FUNDING SOURCES								
			GRANTS/DEVELOPMENT CHRGS/RESERVE			RATE/TAX PAYER SUPPORT					
Sch. Project No.	Facility/Project Name	Gross Cost	Other			Infrastruct. Levy	Tax Support	Water/ Wastewater	Cap. out of Rev.(7)	Debenture	Notes
			Gas Tax	external Fundg	Reserves (Incl. D.C.)						
N	P18-151-3 Carlisle Grge. for water line	40,000	-	-	40,000	-	-	-	-	-	5
N	P20-166 Market Square/City Hall Parking Lot	200,000	-	-	-	-	-	-	20,000	180,000	
N	P20-164 Carlisle Garage. Waterproofing repairs	80,000	-	-	80,000	-	-	-	-	-	6
N	P20-165 Ontario St. Pkg Garage structural repairs	200,000	-	-	-	-	-	-	20,000	180,000	
O	PFR20-01 Next Generation 911 implementation	180,000	-	-	-	-	-	-	18,000	162,000	
P	PCI20-01 Website redesign and update	400,000	-	-	-	-	-	-	40,000	360,000	
Q	PTC20-01 2020 Fleet Funding Replenishment	600,000	-	-	-	-	-	-	60,000	540,000	
TOTAL		\$48,837,068	\$8,358,170	\$5,729,500	\$2,205,648	\$1,569,000	\$2,306,000	\$8,299,000	\$2,779,250	\$17,590,500	
less amounts previously approved by Council		\$14,865,000	\$4,185,000	\$3,912,000	\$1,395,648	\$648,000	\$95,000	\$1,406,000	\$345,150	\$2,878,202	
Capital Budget Requiring Council Approval		\$33,972,068	\$4,173,170	\$1,817,000	\$ 810,000	\$921,000	\$2,211,000	\$6,893,000	\$2,434,100	\$14,712,298	

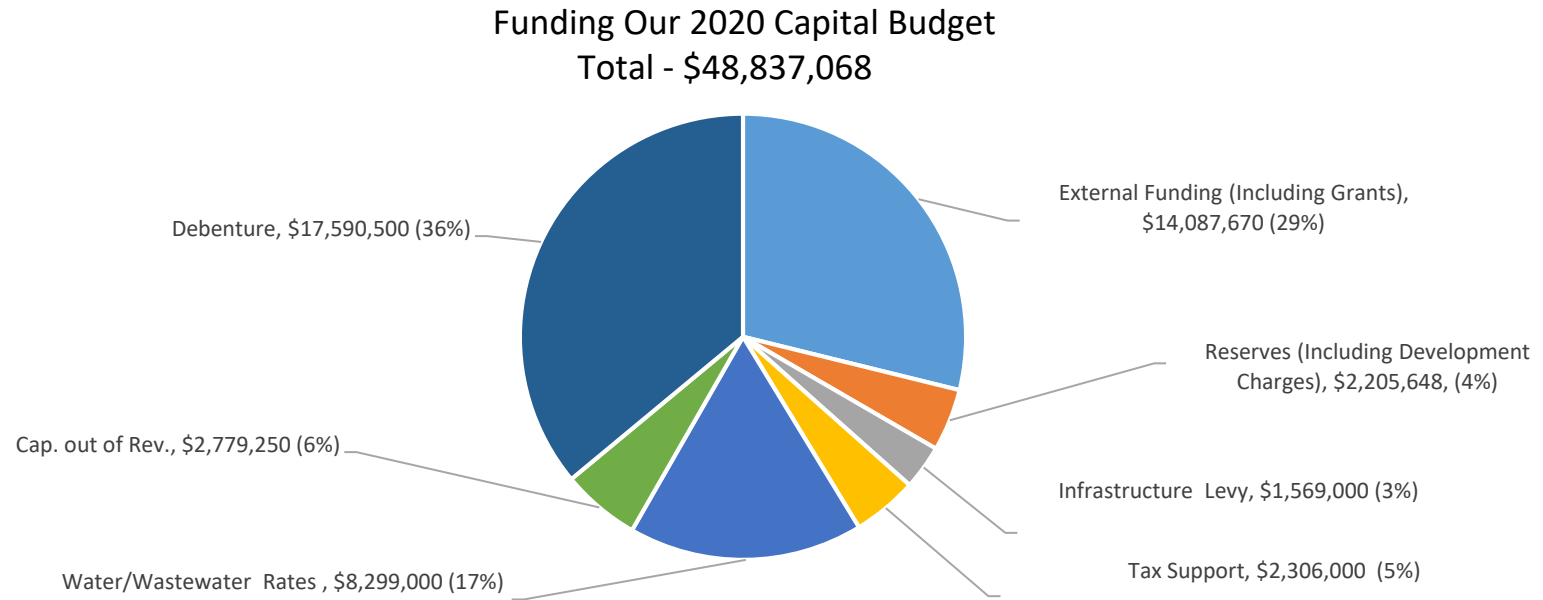
Notes:

- 1 - Development Charges
- 2 - Niagara CSO Map Grant Funding
- 3 - 3rd Party Billing provided by Town of Lincoln
- 4 - Hydro Dividends and Prior Year Surplus
- 5 - Building Reserve
- 6 - Parking Reserve
- 7- Capital out of revenue is provided from the Water/Wastewater, transit and tax supported operating budgets as shown in Schedule U
- PA - Previously Approved by Council
- D.C. - Development Charges

Page intentionally left blank

**Funding Our Capital Assets
Schedule X**

Seven different sources of funding for the 2020 capital Budget for the City of St. Catharines are shown below and on Schedule W:



External Funding (Including Grants) - \$14,087,670

The Federal Gas Tax Program (FGTP) is the largest of the grants received by the City for Capital projects. The City’s share of Gas Tax funding for 2020 is \$8,358,170 includes the additional one-time payment of \$4,185,000 which is funding a significant portion of the City’s Canada Summer Games Legacy Project (CSGLP). As in prior years the regular annual amount funds various linear projects that are discussed in further detail in Schedule Y.

In addition to the FGTP, the one time \$3,912,000 hydro dividends received from St Catharines Hydro have also been allocated to fund the Canada Summer Games Legacy Project. The 2020 budget funding also includes anticipated grants of \$1,292,500 from the Niagara Region through the Combined Sewer Overflow Control Policy Funding Program (CSO Map Fund). Should the Region not approve the application, the project will be removed from the 2020 capital budget. Also included in 2020, is \$525,000 for 50/50 project cost sharing with the Town of Lincoln for a bridge replacement.

Reserves (Including Development Charges) - \$2,205,648

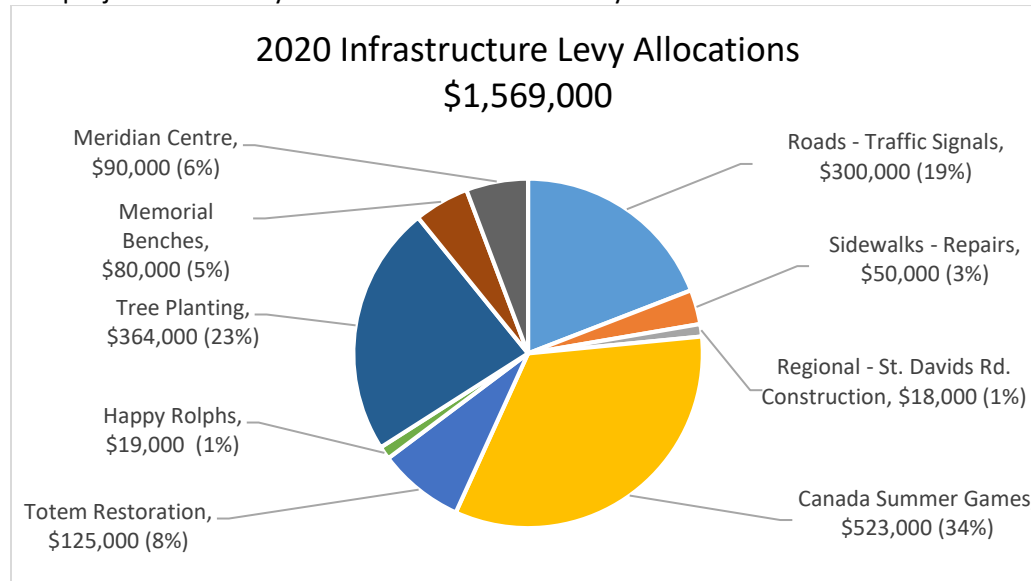
The City of St. Catharines also uses reserves to fund capital works. The Building Reserve Fund is providing funding of \$660,000 for works related to building and facilities infrastructure. The Parking Reserve Fund is providing funding of \$150,000 for improvements in parking garages and paid parking lots. The unallocated 2019 surplus of \$100,000 funding the CSGLP is also included in this grouping. The Ridley Road Construction Projects are partially funded by Development Charges of \$1,295,648.

for use in future years for eligible projects. The annual funding has been set at 1% of the City’s portion of the current year tax levy. For 2020 an additional 0.5% will be levied to provide \$523,000 of funding for the CSGLP.

Infrastructure Levy - \$1,569,000

The Infrastructure Levy was established in 2016 to address the infrastructure deficit. The funds are being utilized to fund renewal Any funds not allocated in the year will be maintained in a reserve

The projects funded by the 2020 infrastructure levy are listed below:



Water/Wastewater Support - \$8,299,000

For 2020 and future years, the capital projects related to Water and Sanitary Sewer Collection Systems will be included within the Capital Budget. (These amounts were shown for information only in schedule Q & R in the 2019 Capital Budget). This change has been made in 2020 so that the Capital Budget reports more comprehensively on the spending related to Asset Management. (In prior years they were included in the Water/Wastewater Budgets). This change does not change the calculation of Water/Wastewater rates.

In 2019 Council approved the 10-year Financial Plan for Water and Wastewater (The Water/Wastewater Plan) that included a significant increase in capital renewal, funded from rates. The Water/Wastewater Plan includes annual increases of no more than 6.5% on a typical residential household bill. The Water/Wastewater Plan was guided by the following principles (FMS-057-2019);

- 1) to reduce existing funding gaps, and
- 2) moving towards a sustainable replacement level of capital spending year over year.

The capital spending and funding amounts from rates, capital out of revenue, and debt that were included in The Water/Wastewater Plan have been reflected in the 2020 Capital Budget.

Tax Support - \$2,306,000

For 2020 and future years a portion of capital expenditures that were previously included in the Operating Budget will be reflected in the Capital Budget. This change has been made so that the

Capital Budget reports more comprehensively on the spending related to Asset Management. This change does not impact the calculation of tax rates, as these amounts will continue to be funded by the operating budget. The items that have been moved relate to rehabilitation projects for roads, sidewalks, bridges and major culverts. (These amounts were shown for information only in schedule S,T &U in the 2019 Capital Budget).

Capital out of Revenue - \$2,779,250

Capital out of revenue is the portion of the project cost that is funded from the operating budget after other sources of funding are applied. As required by Council approved strategy, it represents 10% of the project, or one years' worth of debenture costs of the project. Where the City is issuing debt for water, wastewater or Transit Commission, a separate capital out of revenue payment is required from the respective area.

Debt - \$17,590,500

Debt is the most significant funding source of the annual Capital Budget and is utilized after all other funding has been applied. Debenture financing allows the City to spread the costs of Capital over the term of debt, rather than requiring funding in the year of construction. Using debt also facilitates paying for the assets over a period that approximates the asset life. Debt Management is necessary to ensure that the City maintains an appropriate debt level. Debt Management Strategy is outlined in schedule AB.

Page intentionally left blank

**Funding from Federal Gas Tax - \$8,358,170
Schedule Y**

Council endorsed a five-year capital investment plan for Federal Gas Tax (FGT) revenues in 2009 which identified continued funding for combined sewer system upgrades (storm sewer separations) and watermain replacement in conjunction with the combined sewer system upgrade and various road resurfacing projects. Council subsequently shifted focus away from underground infrastructure to include facility energy related initiatives and non-resurfacing roadwork. In 2020 and future years, in line with the Water/Wastewater 10 Year Financial Plan, the City will resume utilizing the FGT primarily for underground infrastructure.

One of the requirements of the FGTP is that the expenditures are incremental, meaning that the funds cannot be used to displace current capital investment or reduce municipal taxes.

The City's Federal Gas Tax funding for 2020 is \$8,358,170 includes the additional one-time allocation of \$4,185,000 which is funding a significant portion of the City's Canada Summer Games Legacy Project (CSGLP). In addition to the 2020 annual funding of \$4,038,147, an available prior year amount of \$135,023 has been

applied to 2020 projects, bringing the total 2020 funding to \$4,173,170.

Below is a list of the 2020 capital projects funded by FGTP:

One time funding		
Sch. L	Canada Summer Games Legacy Project	\$ 4,185,000
Annual Funding		
Sch.B	2020 Active Transportation	250,000
Sch. C/K	New Sidewalks	396,000
Sch. D/K	Storm Sewer Collection	1,000,000
Sch. E/K	Sanitary Sewer Collection	1,000,000
Sch. G	Water distribution	1,352,000
Sch. H	Bridge Construction	<u>175,170</u>
	Total	<u>\$ 4,173,170</u>
		<u>\$ 8,358,170</u>

Page intentionally left blank

Debt Management Strategy Schedule Z

The currently established Debt Management Strategy, with Council's ongoing support, has the following criteria:

- 1) Eligibility: Not all capital projects are suited for debt financing. The City's strategy is to recommend debt financing only for infrastructure purposes. Large projects that provide assets with well-defined benefits to the community, have long asset lives and the ability to leverage additional financing elsewhere are eligible for debt financing.
- 2) Sustainable level of borrowing: For debt management purposes, the City has adopted a policy aimed at containing debt charges at approximately 10% of the City's total own expenditures. This constraint ensures that the debt service costs will not become an increasing burden and a larger portion of the City's budget, as it is essential the City ensure debt levels are sustainable within the Operating Budget.
- 3) Debt repayment: The City has a 10% down payment strategy which reduces the amount to be borrowed and at the same time, bringing the approximate costs of one year's debt service

to the year of decision. As a result, Council will raise, through property taxes, an amount which will be equivalent of future annual debt charges for each particular project. Debentures are taken for shorter timeframes versus longer timeframe which are typically five or ten years.

The Water/Wastewater Plan includes increasing capital out of revenue percentages, over the next 10 years. The targets of at least a 50/50 split are intended to balance asset renewal and debt levels.

The debt issuance proposed in the 2020 Capital Budget complies with the current Debt Management Strategy.

Throughout 2019 staff have worked on debt strategy and are providing an update in Report FMS-B023-2019, for Council's approval. The update highlights the relationship between the sustainability of infrastructure and the City's finances. The proposed revisions to the Debt Management Strategy are not significant and relate primarily to reporting on debt, and promoting closer alignment between infrastructure and its financing.

Debt Management Strategy

Schedule Z

The Municipal Act requires that a Municipality have a five-year capital financing forecast. Ontario Regulation 403/02 limits annual debt charges to no more than 25% of the City's net revenue fund revenues. Using this guideline, the City could increase its debt (approximately) by a further \$194.3 million based on an interest rate of 7%, which is the rate the Ministry of Municipal Affairs uses for illustrative purposes. (Calculation is provided on Schedule AA)

Using the City's current estimated borrowing rate of 5%, the City's additional debt capacity would be \$215.4 million. Although there has never been a suggestion that this limit be approached, Council does have significant capacity available should circumstances warrant additional debt financing. The City Treasurer has updated the Debt Repayment Limit for the City, and the debenture amount proposed in the 2020 Capital Budget will not cause the City to exceed its limit.

In 2018, the City's debt charges were 8.44% of the City's total estimated expenditures. Each year, the Ministry of Municipal Affairs produces a financial indicator review that states debt costs between 5% and 10% are considered moderate risk – which is where the City of St Catharines currently resides. Table 1 below reports the estimated impact of increased borrowing activities for the next five years.

TABLE 1

	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>
Outstanding Debt	\$122.9m	\$126.5m	\$130.4m	\$133.5m	\$135.9m	\$139.2m
Debt Per Household	\$1,919	\$1,999	\$2,060	\$2,119	\$2,184	\$2,237
Annual Debt Servicing	\$16.6m	\$17.2m	\$18.8m	\$21.0m	\$21.5m	\$22.6m
As % of Operating Expenses	8.56%	8.73%	9.27%	10.14%	10.12%	10.39%

Table 1 below shows the total debt charges as a percentage of operating budget slightly exceeding the 10% upper limit in 2022. There are many assumptions to determine this percentage, including the amount of debt to be issued, timing of the debt issuances and total amount of expenditures. This projection assumes all future debt being issued for a period of 10 years is at an interest rate of 4%. The interest rate on 2019 debentures was 2.37%. The assumptions made are conservative. Any changes made to any of the assumptions – whether that is timing, term or interest rate for debt issuances, or the level of capital spending supported by debt, will have an impact on the debt charges as a percentage of expenditures, projected debt balance and future tax levy impacts.

As the City continues to refine its Asset Management Plan and formulate its future debt needs these forecasts will be updated and the debt servicing will continue to be monitored and reviewed on a regular basis, for compliance with Council set limits.

MUNICIPAL ACT DEBT LIMITS	(Based on 2018 FIR schedule 81)	SCHEDULE AA				
Calculation of Debt Charges:						
Total Principal			11,253,981			
Total Interest			3,817,815			
NET DEBT CHARGES		A	<u><u>15,071,796</u></u>			
Calculation of Annual Repayment Limit:						
Total Revenue Fund Revenue (sch10 9910)		Note 1	\$ 234,983,703			
Excluded Revenue Amounts						
Ontario Grants - incl. Grants for TCAs (SLC 10 0699 01+SLC 10 0810 01+ SLC10 0815 01)			(4,790,281)			
Canada Grants - incl. Grants for TCAs (SLC 10 0820 01+SLC 10 0825 01)			(9,413,512)			
Deferred Revenue Earned (Provincial Gas Tax) (SLC 10 830 01)			(4,169,118)			
Deferred Revenue Earned (Canada Gas Tax) (SLC 10 831 01)			(3,360,122)			
Other Municipalities including revenue for TCA (SLC 10 1098 01+SLC 101099 01)			(6,029,032)			
Gain/Loss on sale of land & capital assets (SLC 10 1811 01)			(193,475)			
Other Deferred revenue earned (SLC 10 1814 01)			(170,398)			
Donated Tangible Capital Assets (SLC 53 0610 01)			(3,872,141)			
Increase/Decrease in Gov't Business Enterprise equity (SLC 10 1905 01)			(209,246)			
NET REVENUE FUND REVENUES			<u>\$ 202,776,378</u>			
25% OF NET REVENUE FUND REVENUE		B	<u>\$ 50,694,095</u>			
Adjustments to Annual Repayment Limit						
ANNUAL REPAYMENT LIMIT UNDER REGULATION		C (A - B)	<u>\$ 35,622,299</u>			
Unfinanced prior year capital projects/unissued debt (details in AC-1)	\$ 38,272,351					
Capitalized Annual Repayment	<table border="0" style="margin-left: 20px;"> <thead> <tr> <th style="text-align: left;">Years</th> <th style="text-align: left;">Rate</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">10</td> <td style="text-align: center;">7.00%</td> </tr> </tbody> </table>	Years	Rate	10	7.00%	
Years	Rate					
10	7.00%					
Factor	0.1424	D	(5,449,122)			
ADJUSTED ANNUAL REPAYMENT LIMIT		(C-D)	<u>\$ 30,173,177</u>			
Remaining Debt Capacity						
Capitalized Debt Capacity			211,923,767			
2020 Capital Budget			(17,590,500)			
REMAINING DEBT CAPACITY			<u><u>194,333,267</u></u>			

Note 1 - In 2019 revenue increase resulted from reclassification of Regional Water/Wastewater charges

MUNICIPAL ACT DEBT LIMITS
SCHEDULE AA

UNFINANCED PRIOR YEAR CAPITAL PROJECTS/UNISSUED DEBT
(INCLUDES 2019 CAPITAL PROJECTS)

	<u>Debt Amount</u>
Roads	\$ 8,541,940
Sidewalks & Walkways	1,643,000
Storm Sewer Collection (incl. Separation)	8,920,411
Pollution Control Plan	1,844,000
Water Distribution System	96,500
Shoreline Protection	495,000
Lakeside Skating Path	225,000
Canada Summer Games Commitment	576,000
Arenas Improvement Program	947,000
Merritton Park	810,000
Senior and Community Centres	792,000
PRCS Other Buildings & facilities	463,000
Heritage buildings	2,164,500
Fire	4,239,000
Parking Operations	405,000
Lock III Complex	1,485,000
Administrative & Operational Workspace	1,277,000
Corporate Infrastructure	3,348,000
TOTAL	<u>\$ 38,272,351</u>

Capital Budget and Debt – Municipal Comparators Schedule AB

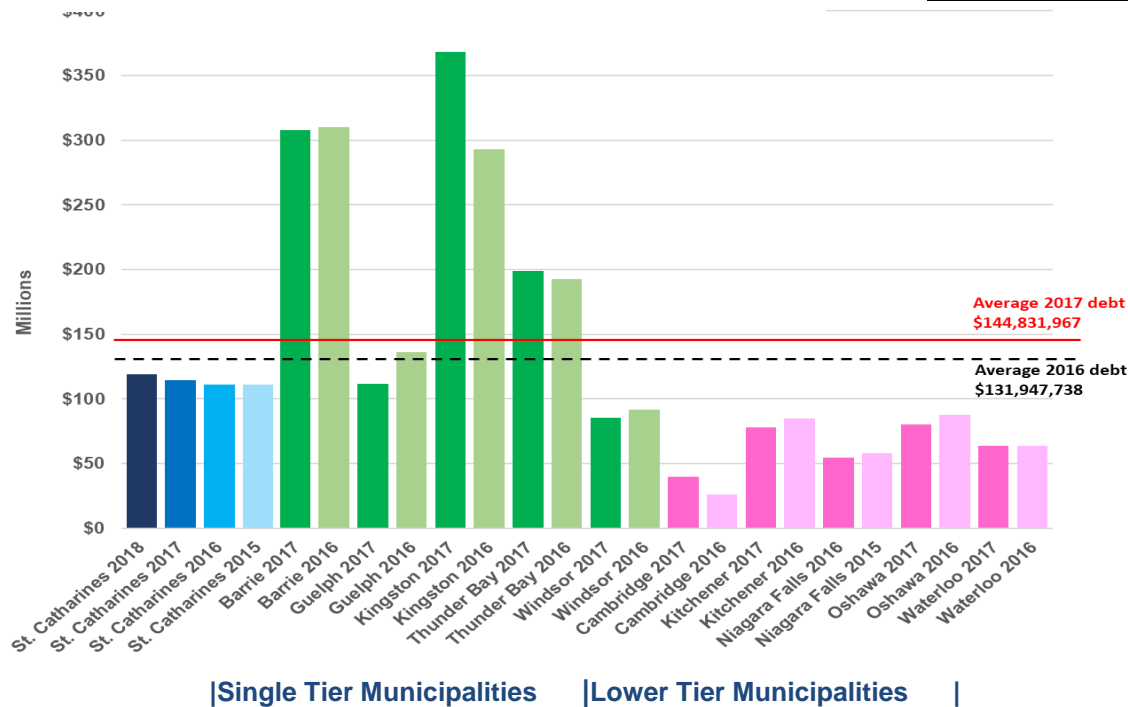
Unlike Federal and Provincial budgets, municipal budgets are very capital intensive. Borrowing for capital projects provides many economic benefits for the future of the municipality, especially so, as choosing to be debt-free would result in substantially less infrastructure being renewed and available to the public. City Council has identified five single-tier and five lower-tier municipalities with similar characteristics to the City of St. Catharines, which are shown in Graph 1 below.

Table 2 below shows with the City of St. Catharines debt burden for the last four years.

TABLE 2

City of St. Catharines Outstanding Debt (\$Millions)	
2015	\$110.9
2016	\$111.3
2017	\$114.6
2018	\$119.3

Graph 1. Debt levels: Comparator Municipalities

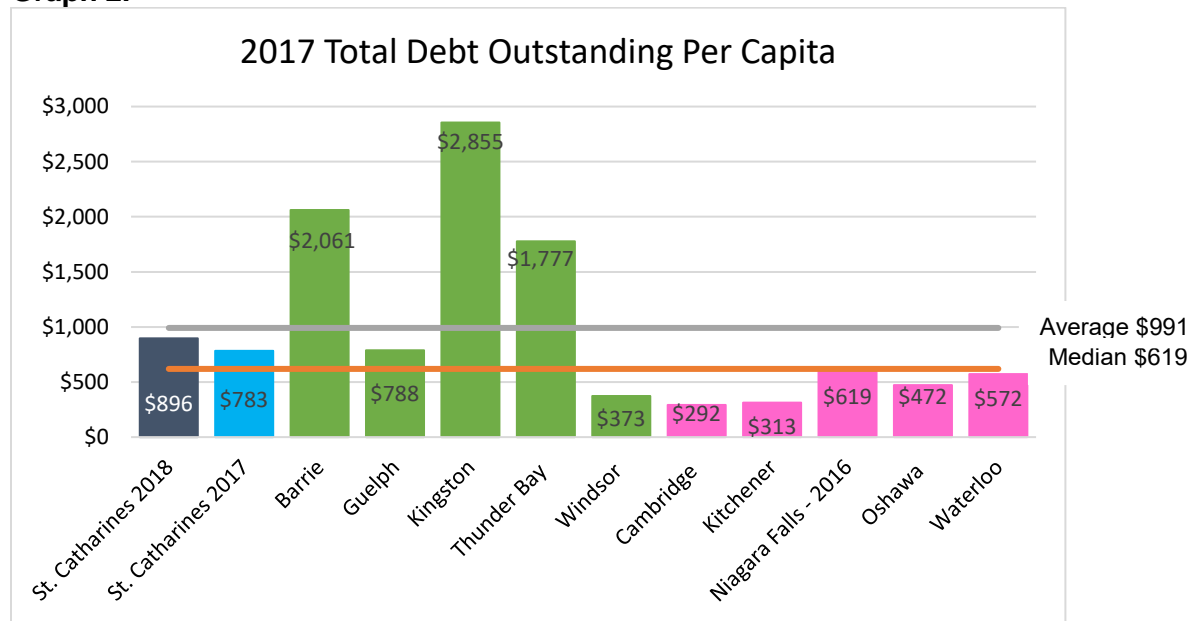


**Capital Budget and Debt – Municipal Comparators
Schedule AB (continued)**

Another common debt amount for debt analysis is debt per capita. The latest data available from the 2018 BMA Study based on 2017 FIRs is shown in the Graph 2 below. The City of St. Catharines total debt outstanding per capita for 2017 was \$783, which is slightly above the average for all reporting municipalities in the BMA study. The 2017 average for municipalities in the 2018 BMA Study was \$731 and the median was \$555. Looking amongst our ten comparators the data is a bit different. The eleven comparator municipalities’ average for 2017 was \$991 and the median

was \$619. St. Catharines outstanding debt per capita of \$896 for 2018 (\$783 – 2017) is below the average for the Council approved municipal comparators. If the top and bottom two municipalities are removed from the average, the remaining eight municipalities’ average is \$872 per capita. The 2017 per capita amount of St. Catharines would still be below this average. Therefore, the City of St. Catharines debt is at a reasonable level in comparison to other municipalities

Graph 2.



2020 CAPITAL BUDGET
REPRIORITIZED PRIOR FOUR YEAR FORECASTS (SCHEDULE AC)

This summary of capital expenditures compares the projected four year forecast (2020-2024) and capital budget completed in 2019 with the new figures projected in 2020 for the same forecast time period.

	2020			2021			2022			2023		
	2019 Forecast	2020 Forecast	Variance \$	2019 Forecast	2020 Forecast	Variance \$	2019 Forecast	2022 Forecast	Variance \$	2019 Forecast	2023 Forecast	Variance \$
CAPITAL EXPENDITURES												
Roads	5,296,420	8,569,460	3,273,040	5,437,808	7,861,000	2,423,192	5,645,320	8,031,000	2,385,680	5,861,133	8,391,000	2,529,867
Sidewalks and Walkways	350,000	1,041,608	691,608	350,000	474,000	124,000	350,000	50,000	(300,000)	362,000	211,000	(151,000)
Storm Sewer Collection System (Incl. Sewer Sep.)	2,625,162	4,120,000	1,494,838	2,730,168	2,825,168	95,000	2,730,168	1,840,000	(890,168)	2,730,168	2,375,168	(355,000)
Sanitary Sewer Collection System (note 1)		3,626,000	3,626,000		4,036,720	4,036,720		4,208,954	4,208,954		5,077,133	5,077,133
Pollution Control	1,000,000	225,000	(775,000)	500,000	500,000	-	800,000	800,000	-	100,000	1,000,000	900,000
Water Distribution System (Watermains) (note 1)		6,841,000	6,841,000		8,589,320	8,589,320		8,415,906	8,415,906		7,979,225	7,979,225
Bridges and Major Culverts	1,641,000	2,420,000	779,000	975,000	1,100,000	125,000	-	420,000	420,000	255,000	450,000	195,000
Shoreline Protection	500,000	1,575,000	1,075,000	610,000	1,845,000	1,235,000	500,000	35,000	(465,000)	500,000	640,000	140,000
Watercourses	1,000,000	200,000	(800,000)	500,000	800,000	300,000	500,000	1,400,000	900,000	1,000,000	4,050,000	3,050,000
Regional Projects	499,785	2,900,000	2,400,215	3,374,301	2,236,000	(1,138,301)	230,000	7,425,000	7,195,000	571,000	4,998,000	4,427,000
Parks, Recreation and Culture Services	1,160,000	9,939,000	8,779,000	1,570,000	4,264,101	2,694,101	620,000	2,027,800	1,407,800	2,250,000	1,387,000	(863,000)
Buildings and Facilities (Including Accessibility)	5,300,000	5,610,000	310,000	4,395,000	6,500,000	2,105,000	3,430,000	3,975,000	545,000	4,120,000	4,627,000	507,000
Parking Services	600,000	590,000	(10,000)	600,000	-	(600,000)	100,000	1,095,000	995,000	700,000	400,000	(300,000)
Fire Services	-	180,000	180,000	-	330,000	330,000	3,400,000	1,420,000	(1,980,000)	3,200,000	4,420,000	1,220,000
Corporate Infrastructure	1,050,000	400,000	(650,000)	700,000	700,000	-	500,000	500,000	-	500,000	500,000	-
Transit Commission		600,000	600,000		600,000	600,000		600,000	600,000		600,000	600,000
	<u>\$ 21,022,367</u>	<u>\$ 48,837,068</u>	<u>\$ 27,814,701</u>	<u>\$ 21,742,277</u>	<u>\$ 42,661,309</u>	<u>20,919,032</u>	<u>\$ 18,805,488</u>	<u>\$ 42,243,660</u>	<u>\$ 23,438,172</u>	<u>\$ 22,149,301</u>	<u>\$ 47,105,526</u>	<u>\$ 24,956,225</u>

<u>Projects Added/Increased</u>	<u>Projects Added/Increased</u>	<u>Projects Added/Increased</u>	<u>Projects Added/Increased</u>
Roads Increased 3,273,040	Roads Increased 2,423,192	Roads Increased 2,385,680	Roads Increased 2,529,867
Sidewalks Increased 691,608	Sidewalks Increased 124,000	Sanitary Sewer Added 4,208,954	Sanitary Sewer Added 5,077,133
Storm Sewer Increased 1,494,838	Storm Sewer Increased 95,000	Water Distribution Added 8,415,906	Pollution Increased 900,000
Sanitary Sewer Added 3,626,000	Sanitary Sewer Added 4,036,720	Watercourses Increased 900,000	Water Distribution Added 7,979,225
Water Distribution Increased 6,841,000	Water Distribution Increased 8,589,320	Buildings & Facilities Increased 545,000	Bridges & Culverts Increased 195,000
Bridges & Culverts Increased 779,000	Bridges & Culverts Increased 125,000	Parks Renewal Prog. Increased 130,000	Shoreline Protection Increased 140,000
Regional Projects Increased 2,400,215	Watercourses Increased 300,000	Regional Projects Increased (Martin Dale pond & Spring
Shoreline Protection Abby -	Shoreline Protection Abby	main St & Louth St 7,195,000	Garden Creek Added 3,050,000
Mews Added 1,075,000	Mews & Westgate Park 1,235,000	Sunset Beach Added 486,800	Regional Projects 4,427,000
Memorial Benches Added 80,000	Memorial Benches Added 80,000	Pathway - Hydro Corridor 760,000	Welland Canal Added 600,000
Totem Pole Restoration Added 125,000	Sunset Beach Added 3,171,101	Memorial Benches Added 80,000	Memorial Benches Added 80,000
Canada Summer Games Added 8,720,000	Fire Hall Projects Increased 330,000	Parking Services 995,000	Buildings & Facilities Increased 507,000
Fire Hall Projects Added 180,000	Buildings & Facilities Increased 2,105,000	Transit Commission Added 600,000	Fire Hall Replacement Increase 1,220,000
Building & Facilities Increased 310,000	Transit Commission Added 600,000	Bridges & Culverts Added 420,000	Transit Commission Added 600,000
Transit Commission Added 600,000			
<u>\$ 30,195,701</u>	<u>\$ 23,214,333</u>	<u>\$ 27,122,340</u>	<u>\$ 27,305,225</u>

<u>Projects Deferred/Decreased</u>	<u>Projects Deferred/Decreased</u>	<u>Projects Deferred/Decreased</u>	<u>Projects Deferred/Decreased</u>
Pollution Control Decreased 775,000	Regional Projects Decreased 1,138,301	Sidewalks Decreased 300,000	Sidewalks Decreased 151,000
Watercourses Decreased 800,000	Parking Services Decreased 600,000	Storm Sewer Decreased 890,168	Storm Sewer Decreased 355,000
Merritton Park mast stands 40,000	QE Centre Deferred 500,000	Shoreline Protection Decrease 465,000	Tree Planting Decreased 43,000
Montebello Park walkway 75,000	Playground Equip. Decreased 25,000	Tree Planting Decreased 49,000	Parking Services Decreased 300,000
Tree Planting Decreased 31,000	Basketball Court Decreased 32,000	Fire Hall Projects Deferred 1,980,000	Parks Improve & Renewal defe 700,000
Parking Services Decreased 10,000			Sunset Beach moved forward 200,000
Connected City & Network Dec 650,000			Pool Improve. Decreased 600,000
<u>\$ 2,381,000</u>	<u>\$ 2,295,301</u>	<u>\$ 3,684,168</u>	<u>\$ 2,349,000</u>
<u>\$ 27,814,701</u>	<u>\$ 20,919,032</u>	<u>\$ 23,438,172</u>	<u>\$ 24,956,225</u>

Page intentionally left blank

2020 CAPITAL BUDGET SORTED BY WARD-LINEAR PROJECTS
(SCHEDULE AD)

Schedule	Project No.	Project Name/Location	Details	WARD
B	P19-067	Arglye Crescent road Improvements	Additional funds for construction phase for road rehabilitation	1
B	P20-080	2020 Resurfacing Program - Welland Canals Parkway	Semi urban road resurfacing	1
E	P15-066	Moffatt St. Reconstruction	Additional funds for replacement of additional sections of existing sewer in conjunction with road re-construction	1
J	P19-131	Old Welland Canal lockwall stabilization - studies, detail for #2 Lock7	Additional funds for engineering services at high priority locations identified in 2018 Lockview review	1
K	RNxx-std	St. Davids Rd.(RR#71) Reconstruction	New sidewalk to emergency access at Grangeway in conjunction with Regional road reconstruction to improve network conductivity	1
K	RNxx-std	St. Davids Rd. (RR#71) Reconstr.	Replace deteriorated sidewalks in conjunction with Region	1
K	RNxx-std	St David's Rd. (RR#71) Reconstruction	City's & Thorald's share of costs for storm sewer upgrades in conjunction with underground upgrades and Regional road reconstruction	1
K	RNxx-std	St. Davids Rd. (RR#71) Reconstruction	Replacement of sanitary sewer sections along with watermain and Regional road works	1
K	RNxx-std	St. Davids Rd. (RR#71) Reconstruction	Replacement of existing cast iron watermain in conjunction with Regional road re-construction project	1
B	P20-080	2020 Resurfacing Program - Park Ave.	Mill, resurface and spot curb repairs	1
B	P1-062	Cumming St./Kent Reconstruct.	Reconstruction & drainage improvements in conjunction with storm sewer construction & underground improvements (bus	2
B	P20-062	Scarth Rd. Reconstruction	Design for future road reconstruction	2
B	P20-065	New road From Ridley to GO Station	Council Approval PBS-108-2019 Construction of a new roadway through subdivision development from Ridley Road into the GO station incl. streetlights	2

2020 CAPITAL BUDGET SORTED BY WARD-LINEAR PROJECTS
(SCHEDULE AD)

Schedule	Project No.	Project Name/Location	Details	WARD
B	P20-080	2020 Resurfacing Program - Pelham Rd.		2
C	P17-062	Cumming/Kent Reconstruction	Replace deteriorated sidewalks in conjunction with road and underground improvements	2
C	P17-062	Cumming/Kent Reconstruction	Mill, resurface and spot curb repairs	2
B	P17-063	Glenwood Ave/South Dr Reconstruction	Road resurfacing in conjunction with underground improvements	2
C	P19-065	Ridley Rd. Reconstruction	Council Approval PBS-108-2019, construct new sidewalk in conjunction with road works	2
C	P19-065	Ridley Rd. Reconstruction	Council Approval PBS-108-2019, replace deteriorated sidewalks in conjunction with road works	2
D	P17-062	Cumming/Kent Reconstruction	Additional funds for storm sewer construction in area with combined sewer system (with share of costs tentatively funded under Regional Niagara CSO Management Action Program)	2
D	P17-063	Glenwood/South Reconstruction	Additional funds for storm sewer construction in conjunction with watermain, sewer and road re-construction (with share of costs tentatively funded under Regional Niagara CSO Management Action Program)	2
D	P19-065	Ridley Rd. Reconstruction	Council Approval PBS-108-2019, spot repairs in conjunction with road reconstruction and underground improvements	2
D	P20-065	New road From Ridley to GO Station	Council Approval PBS-108-2019, install new storm sewer for new road from Ridley Road to the GO Station	2
E	P17-062	Cumming/Kent Reconstruction	Replacement of existing sanitary sewers in conjunction with storm sewers, watermain, and road works	2
E	P17-063	Glenwood/South Reconstruction	Necessary spot repairs if existing sanitary sewers in conjunction with storm sewer, watermain and road works.	2

2020 CAPITAL BUDGET SORTED BY WARD-LINEAR PROJECTS
(SCHEDULE AD)

Schedule	Project No.	Project Name/Location	Details	WARD
E	P19-065	Ridley Rd. Reconstruction	Council Approval PBS-108-2019, replacement of sanitary sewer sections in conjunction with storm sewer, watermain, and road works	2
G	P17-062	Cumming/Kent Reconstruction	Additional funds for construction to replace existing cast iron watermain in conjunction with sewer and road works	2
G	P17-063	Glenwood/South Reconstruction	Replacement of existing cast iron watermain in conjunction with sewer and road works	2
G	P19-065	Ridley Rd. Reconstruction	Council Approval PBS-108-2019, replacement of existing cast iron watermain in conjunction with sewer and road works	2
G	P20-062	Scarth Rd.	Design for replacing existing cast iron watermain with high break rate in conjunction with road re-construction	2
G	P20-101	Jacobson Ave.	Replacement of existing cast iron watermain	2
H	P17-123	Pelham Rd. Bridge @ CN	Final construction funding for bridge rehabilitation; rehab was delayed to accommodate Regional construction at Burgoyne Bridge and St. Paul St. W.	2
B	P19-065	Ridley Rd. Reconstruction	Council Approval PBS-108-2019 Reconstruction in conjunction with the development at the GO station	2
K	RNxx-stp	St. Paul St. (RR#81) West (Bridge over CN Tracks)	Replace deteriorated sidewalks and City share of wider sidewalk on proposed Regional bridge	2
K	RNxx-stp	St. Paul St. West (RR#81) (Bridge over CN Tracks)	New storm sewer for combined sewer separation along with bridge replacement by the Region	2
K	RNxx-stp	St. Paul St. West (RR#81) (Bridge over CN Tracks)	Replacement of sanitary sewer sections along with underground upgrades, road works and bridge replacement	2
K	RNxx-stp	St. Paul St. West (RR#81) (Bridge over CN Tracks)	Replacement of existing cast iron watermain in conjunction with Regional bridge replacement project	2
B	P20-080	2020 Resurfacing Program - Geneva St.	Mill, resurface and spot curb repairs	3

2020 CAPITAL BUDGET SORTED BY WARD-LINEAR PROJECTS
(SCHEDULE AD)

Schedule	Project No.	Project Name/Location	Details	WARD
B	P20-080	2020 Resurfacing Program - Pasut Dr.	Mill, resurface and spot curb repairs	4
B	P20-080	2020 Resurfacing Program - St Paul St.	Mill, resurface and spot curb repairs	4
C	P17-066	Russell/Woodland	Replace deteriorated sidewalks in conjunction with road and underground improvements	4
C	P17-067	Thorold - St. Davids Rd. Reconstruction	Replace deteriorated sidewalks in partnership with Thorold road reconstruction	4
D	P17-066	Russell/Woodland	Additional funds for storm sewer construction in conjunction with watermain, sewer and road work.	4
E	P20-001	North St.	City share of costs for replacement of sewer in conjunction with a New Development (111 Church Street)	4
E	P17-066	Russell/Woodland	Necessary spot repairs if existing sanitary sewers in conjunction with storm sewer, watermain and road works	4
G	P17-066	Russell/Woodland	Replacement of existing cast iron watermain in conjunction with sewer and road works	4
H	P17-121	Third Ave. Louth/Glass Ave. Bridge @ 15 Mile Creek	construction phase for replacement of bridge with load restrictions. Costs shared with Town of Lincoln	4
H	P18-123	Third Ave. Louth @ Richardson Creek	Additional funds to replace bridge with identified deficiencies and increase hydraulic capacity	4
B	P17-066	Russell/Woodland	Mill, resurface and spot curb repairs	4
B	P20-080	2020 Resurfacing Program - Ventura Dr.	Mill, resurface and spot curb repairs	4
B	P20-080	2020 Resurfacing Program - Bullocks Corner	Mill, resurface and spot curb repairs	5

2020 CAPITAL BUDGET SORTED BY WARD-LINEAR PROJECTS
(SCHEDULE AD)

Schedule	Project No.	Project Name/Location	Details	WARD
B	P20-080	2020 Resurfacing Program - Bessborough Dr.	Under ground improvements & Semi urban road resurfacing following	5
B	P20-080	2020 Resurfacing Program - Daley Dr.	Under ground improvements & Semi urban road resurfacing following	5
B	P20-080	2020 Resurfacing Program - Oriole Dr.	Under ground improvements & Semi urban road resurfacing following	5
B	P20-100	Edinburgh/Tamarack	Resurface with watermain replacement	5
D	P16-003	Else St.	Additional funds for storm sewer construction for CSO Control (with share of costs tentatively funded under Regional Niagara CSO Management Action Program)	5
G	P20-100	Edinburgh/Tamarack	Replacement/upgrade of existing cast iron watermain with very high break rate in conjunction with roadworks	5
G	P20-102	Lakeshore Rd. at Welland Canal	Design for existing watermain replacement across Welland Canal in conjunction with Seaway bridge work.	5
I	ST20-10	Intermin Priority Review	Update 2018 Shoreline Review to assess impact of record high 2019 Lake Ontario lake levels	5
B	P1-021	Cecil St. Underground Improvements	Semi urban resurfacing following underground improvements	6
B	P20-080	2020 Resurfacing Program - Ameer Dr.	Mill, resurface and spot curb repairs	6
D	P19-020	Avalon/Bernhardt/Embassy road and Underground Improvements	Additional funds for the construction of catch basins and leads in conjunction with watermain replacement	6
D	P17-101	Bromely Dr. (Bromely Gardens)	City share of construction of a new storm sewer in conjunction with a new sub-division (Bromley Gardens)	6
E	P17-021	Cecil St. Underground Improvements	Necessary spot repairs of existing sanitary sewers in conjunction with storm sewers and road works	6

2020 CAPITAL BUDGET SORTED BY WARD-LINEAR PROJECTS
(SCHEDULE AD)

Schedule	Project No.	Project Name/Location	Details	WARD
E	P17-101	Bromely Dr. (Bromley Gardens)	Sanitary sewer lateral replacements in conjunction with other works in relation to a new sub-division (Bromley Gardens)	6
B	P17-101	Bromley Dr. (Bromley Gardens)	Cost sharing with developer for road improvements	6
G	P19-020	Avalon/Bernhardt/Embassy road and Underground Improvements	Additional funds for replacement of A.C. watermain in conjunction with storm sewer and road works	6
B	P19-20	Avalon/Bernhardt/Embassy road & Underground Improvements	Road resurfacing in conjunction with underground improvements	6
I	P20-132	Abby Mews - engineering & partial construction	Engineering services and partial construction to address Lake Ontario shoreline with identified deficiencies in proximity to private structures	6
B	P20-069	2020 Active Transportation	Multi year initiative to implement recommendations of the Active Transportation Committee	City Wide
B	P20-080	2020 Resurfacing Program - Various	Locations under review	City Wide
B	P20-097	Traffic Signals (including pedestrian crossings)	Annual program based on Region's condition assessments and priorities	City Wide
C	P20-041	2020 New Sidewalk Program	Annual- priority location(s) to be determined	City Wide
D	P20-006	Catch Basins and Storm Service installations	Installation of catch basins, catch basin leads and storm laterals to alleviate isolated surface flooding	City Wide
D	P20-015	Design for possible future storm sewer projects	Engineering services for future storm sewers construction projects as required	City Wide
D	P20-016	Storm Sewer Spot Repairs	Spot repairs of storm sewers at various locations	City Wide
E	P20-010	Extraneous Flow Elimination	Study to determine sources of inflow and infiltration into sanitary sewer system	City Wide
E	P20-011	Sewer Spot Repair	Spot repairs for sanitary sewers as required	City Wide

2020 CAPITAL BUDGET SORTED BY WARD-LINEAR PROJECTS
(SCHEDULE AD)

Schedule	Project No.	Project Name/Location	Details	WARD
E	P20-012	Sanitary Sewer Flushing and Reaming	Sewer flushing and reaming for physical cleaning of selected sewer sections with operational issues	City Wide
E	P20-014	CCTV Sewer Inspections	CCTV inspections of existing sewers to identify condition and future works	City Wide
E	P20-015	Design for Possible Future	Engineering services for future construction projects	City Wide
E	P20-019	Sewershed Analysis	Engineering services required for sewershed capacity analysis as required	City Wide
F	P20-018	2020 Flow Monitoring, Studies and Scada upgrade (eligible)	Update equipment and software that has reached the end of its service life	City Wide
G	P20-116	Storz Hydrant Port Conversions	Phase 1 of multi-year conversion of existing hydrant ports to Sortz type connections in priority areas	City Wide
G	P20-118	Valves, Hydrant and Services	Replacement of existing valves, hydrants, and services etc. in conjunction with other works	City Wide
G	P20-119	Design for 2021 Projects	Engineering Services for possible 2021 projects	City Wide
H	P20-122	First Ave. Louth, s/o Pelham @ 12 Mile Creek - eng. Services	Funds for rehab/replacement analysis for structure with identified deficiencies	City Wide

Page intentionally left blank

2020 CAPITAL BUDGET SORTED BY WARD-FACILITES PROJECTS
(SCHEDULE AE)

Schedule	Project No.	Project Name/Location	Details	WARD
M	P18-160-1	Merritton Arena - Dehumidificaton system replacement	Additional funds required to acquire system	1
M	P20-140	Merritton & Garden City Arena Complex - Arena maintenance	Address select equipment replacement at Garden City, and replacement of Low-E Ceiling at Merritton which are both at end of service life	1
M	P20-141	Merritton Arena - Accessibility improvements washrooms & other	Implement accessibility within the facility, incorporation of FADS compliant washroom to improve level of service	1
M	P20-142	Merritton Arena - Compressor maintenance & condenser replacement	Replace equipment which is at end of service life	1
M	P20-151	Merritton Park - Dugout capital maintenance	Address on-going maintenance concerns, and maintain level of service	1
M	P20-152	Merritton Park - Replace scoreboard & press box		1
M	P20-156	Victoria Lawn Cemetery - Garden of Memories - Roofing and Structural Repairs	Address building deficiencies	1
M	P20-143	Seymour Hannah Arena - Replacement of one compressor, water pump, cooling pump & control panel upgrade	Replace 1 of 4 compressors and associated equipment which is at end of service life	2
M	P20-144	Seymour Hannah Arena - Replace event doors	Mitigate on-going repairs	2

2020 CAPITAL BUDGET SORTED BY WARD-FACILITES PROJECTS
(SCHEDULE AE)

Schedule	Project No.	Project Name/Location	Details	WARD
M	P20-145	Seymour Hannah Arena - Upgrade arena lighting to LED	Replace outdated fixtures to minimize recurring maintenance issues, and improve energy efficiency	2
M	P20-154	Walkinshaw - Washroom Roof replacement	Replace existing washroom which is at end of life and does not meet accessibility requirements, and to improve level of service at Sunset Beach	2
M	P20-155	West Park - New Musco Controls	Address roofing deficiency	2
M	P20-137	PRCS Admin Bldg - Environmental study of site	Determine existing conditions of the site, and identify future remediation works	3
M	P20-146	Kiwanis Aquatic Centre - Regrout Leisure pool & lifeguard area	Final phase of regrouting to maintain level of service	3
M	P20-147	Kiwanis Aquatic Centre - Replace pressure relief valves on AHU-01	Replacement of equipment to comply with legislation	3
M	P20-150	Lancaster Park - Soccer & Diamond 1 structure Capital maintenance	Address on-going maintenance concerns, roofing deficiencies, and to prolong service life of both buildings	3
M	P17-135	Yates St. - Structural Repairs/Reinforcing to Stone Retaining Wall - Phase 2	Address additional structural concerns, and mitigate risk of future repairs	4
M	P20-133	City Hall - Critical repairs (atrium, James St. doors and roof)	Address roofing deficiency, and recurring repairs to doors and glass seals	4
M	P20-134	City Hall - Office/space renovation	Space renovation to maintain level of service	4
M	P20-158	Meridian Centre - Ice surface LED lighting conversion	Replace outdated fixtures to minimize recurring maintenance issues, and improve energy efficiency	4
M	P20-159	Meridian Centre - Chiller capital maintenance (regasketing - 3 units)	Replace outdated fixtures to minimize recurring maintenance issues, and improve energy efficiency	4

2020 CAPITAL BUDGET SORTED BY WARD-FACILITES PROJECTS
(SCHEDULE AE)

Schedule	Project No.	Project Name/Location	Details	WARD
M	P20-160	Meridian Centre - HVAC repairs - AHU 18 - replace 2 defective compressors	Preventative maintenance on equipment to prolong service life	4
M	P20-161	Meridian Centre - Suite level carpet replacement	Address equipment deficiency	4
M	P20-162	Meridian Centre - Front sliding door replacement	Replace carpet which is at end of useful life, and to maintain level of service	4
M	P20-163	Meridian Centre - Additional Items from SMG	Address incomplete system, and to minimize additional rigging costs	4
M	P20-153	Sunset Beach - Phase One - Park Design and Washrooms	Replace elements which are at end of useful life, and to maintain level of service	5
M	P20-135	Lake St. Srvc Centre - Replace lighting in truck bays for efficiency	Replace outdated fixtures to minimize recurring maintenance issues, and improve energy efficiency	6
M	P20-136	Lake St. Srvc Centre - Security for facility - Phase 2 (cameras only)	Improve level of service, and site security	6
M	P20-138	Bill Burgoyne Arena - Accessibility improvements washrooms & other	Implement accessibility within the facility, incorporation of FADS compliant washroom to improve level of service	6
M	P20-139	Bill Burgoyne Arena - Board & Floor replacement	Replace ice slab and boards which are approaching end of service life, and to improve efficiency/performance of ice plant.	6
M	P20-157	Public Libraries - Door replacements (incl. Mag lock)	Address building deficiencies	6

2020 CAPITAL BUDGET SORTED BY WARD-FACILITES PROJECTS
(SCHEDULE AE)

Schedule	Project No.	Project Name/Location	Details	WARD
L	PRC20-04	Totem Pole Restoration & reinstallation	Replace Totem Pole asset which is at end of useful life. In 2011 and 2018 testing was conducted on the Totem Pole, confirming that the interior of the pole has significant deterioration. Funding to address identified structural deficiencies	6
M	P20-148	Burgoyne & Kiwanis - Water bottle filling stations	Addition of water bottle filling stations at Burgoyne Woods and Kiwanis Field to improve level of service	6/3