

THE REGIONAL MUNICIPALITY OF DURHAM

2019

BUSINESS PLANS AND BUDGETS

CONSOLIDATED
WATER SUPPLY SYSTEM
AND
SANITARY SEWERAGE SYSTEM

Council Approved January 30, 2019

TABLE OF CONTENTS

2019 BUSINESS PLANS & BUDGETS

CONSOLIDATED BUDGETS FOR

WATER SUPPLY SYSTEM AND SANITARY SEWERAGE SYSTEM

NOTE: On this page, just click on the particular Section and you will be linked to the corresponding page

	Page Number	ļ
REPORT 2019-F-2	3	
WORKS – WATER SUPPLY SYSTEM	11	
WORKS – SANITARY SEWERAGE SYSTEM	216	
UTILITY FINANCE	373	
REGIONAL CORPORATE COSTS FOR WATER & SEWER	387	



The Regional Municipality of Durham Report

To: Finance and Administration Committee

From: Commissioner of Finance

Report: #2019-F-2

Date: January 15, 2019

Subject:

2019 Current and Capital Business Plans and Budgets and Nine-Year Capital Forecasts for the Water Supply and Sanitary Sewerage Systems

Recommendations:

That the Finance and Administration Committee recommends to Regional Council:

A) That the 2019 Current and Capital Business Plans and Budgets for the Water Supply System, with a total gross expenditure of \$182.21 million (net user rate supported expenditure of \$107.93 million) and related financing as set out below, be approved:

<u>EXPENDITURES</u>	2018 Gross Budget (\$ 000's)	2019 Gross Budget (\$ 000's)	Variance Incr/(Decr) (\$ 000's)
Operations			
Operations:	2.640	2 572	(77)
Watermain Cleaning and Repairs	3,649	3,572 3,211	(77)
Valves and Hydrants Water Connections	3,208	4,370	3 153
Water Meters	4,217 755	4,370 666	(89)
Depot Operations	5,724	5,758	34
Plants East	2,780	2,926	146
Plants Central	13,118	13,263	145
Plants North	2,879	3,026	147
Sunvalley	2,879	29	1
Engineering and Staff Support	6,676	7,335	659
Facilities Management	6,532	6,603	71
Administration	304	315	11
Headquarters Shared Costs	1,050	1,073	23
Utility Finance	3,440	3,658	218
Share of Regional Corporate Costs	6,347	6,145	(202)
Contribution to Asset Management Reserve Fund	4,985	5,234	249
Subtotal Operations	65,692	67,184	1,492
Capital/Debt Charges:			
TCA Capital	2,359	3,361	1,002
TCA Construction	114,533	109,973	(4,560)
Debt Charges		1,694	1,694
Subtotal Capital/Debt Charges	116,892	115,028	(1,864)
TOTAL EXPENDITURES	182,584	182,212	(372)
FINANCING			
Contributions from Reserve Funds:			
Residential Development Charges - Growth Related Capital	27,245	57,358	30,113
Commercial Development Charges - Growth Related Capital	2,417	1,769	(648)
Industrial Development Charges - Growth Related Capital	1,400	-	(1,400)
Industrial Development Charges - Debt Charges	=	536	536
Institutional Development Charges - Debt Charges	-	28	28
Water Rate Stabilization Reserve Fund	-	2,000	2,000
Asset Management Reserve	4,509	4,985	476
Fees and Service Charges	2,708	2,791	83
Financing From Others:			
Region of York - TCA Construction	1,550	325	(1,225)
Oversizing Costs Related to Seaton/Federal Lands	18,785	4,488	(14,297)
Debenture Proceeds:			
Newcastle Water Supply Plant, Clarington	17,580	-	(17,580)
Financing From Non-User Revenue Sources	76,194	74,280	(1,914)
User Revenues Financing (including frontage charges)	106,390	107,932	1,542
TOTAL FINANCING	182,584	182,212	(372)
			(0.2)

B) That the Nine-Year Capital Forecast for 2020 to 2028 inclusive, in the amount of \$1.05 billion as detailed in the Water Supply System Capital Budget, be received for information;

C) That the 2019 Current and Capital Business Plans and Budgets for the Sanitary Sewerage System with a total gross expenditure of \$235.10 million (net user rate supported expenditure of \$102.12 million) and related financing as set out below, be approved:

	2018 Gross Budget (\$ 000's)	2019 Gross Budget (\$ 000's)	Variance Incr/(Decr) (\$ 000's)
EXPENDITURES	,	,	
Operations:			
Cleaning, Repairs and Maintenance Holes	2,025	2,112	87
Sewer Connections	2,882	2,944	62
Depot Operations	3,091	3,198	107
WPCPs and Pumping Stations	22,786	23,236	450
Duffin Creek WPCP	35,353	35,551	198
Regional Environmental Laboratory	2,413	2,571	158
Engineering and Staff Support	6,261	6,769	508
Facilities Management	6,810	7,075	265
Administration	307	318	11
Headquarters Shared Costs	1,050	1,073	23
Utility Finance	3,440	3,658	218
Share of Regional Corporate Costs	5,894	5,687	(207)
Contribution to Asset Management Reserve Fund	8,234	8,646	412
Subtotal Operations	100,546	102,838	2,292
Capital/Debt Charges:			
Duffin Creek WPCP - TCA Capital	1,880	1,480	(400)
Regional Environmental Lab - TCA Capital	480	172	(308)
TCA Capital	2,582	2,409	(173)
TCA Construction	49,518	106,437	56,919
Debt Charges	21,434	21,761	327
Subtotal Capital/Debt Charges	75,894	132,259	56,365
TOTAL EXPENDITURES	176,440	235,097	58,657
FINANCING			
Contributions from Reserve Funds:			
Residential Development Charges - Growth Related Capital	8,625	11,859	3,234
Residential Development Charges - Debt Charges	11,167	11,499	332
Commercial Development Charges - Growth Related Capital	737	1,266	529
Commercial Development Charges - Debt Charges	1,440	1,439	(1)
Industrial Development Charges - Growth Related Capital	1,800	1,000	(800)
Asset Management Reserve	6,900	8,234	1,334
Regional Environmental Lab Equipment Replacement Reserve	460	135	(325)
Fees and Service Charges	6,066	6,811	745
Financing From Others:			
Region of York - TCA	1,468	1,132	(336)
Region of York - TCA Construction	11,498	23,514	12,016
Developer Contribution	, -	13,080	13,080
Region of York - Operating	26,964	27,109	145
Debenture Proceeds:			
Courtice Trunk Sanitary Sewer, Clarington		25,900	25,900
Financing From Non-User Revenue Sources	77,125	132,978	55,853
User Revenues Financing (including frontage charges)	99,315	102,119	2,804
TOTAL FINANCING	176,440	235,097	58,657

- D) That the Nine-Year Capital Forecast for 2020 to 2028 inclusive, in the amount of \$1.32 billion as detailed in the Sanitary Sewerage System Capital Budget, be received for information;
- E) That capital project approval be granted for expenditures and financing for the 2019 capital projects detailed within the 2019 Water Supply and Sanitary Sewerage Systems Business Plans and Budgets where contract awards are consistent with the Regional Budget Management Policy; and
- F) That the necessary By-laws with respect to the 2019 Current and Capital Business Plans and Budgets for the Water Supply and Sanitary Sewerage Systems be presented to Regional Council.

Report:

- 1. Overview of Recommended 2019 Water Supply and Sanitary Sewerage Systems Business Plans and Budgets
- 1.1 The consolidated 2019 Water Supply and Sanitary Sewerage Systems Business Plans and Budgets are included for approval and for recommendation to Regional Council on January 30, 2019. The recommended budgets can be financed from the approved water and sewer user rate increase of 1.8 per cent overall (1.1 per cent for water and 2.6 per cent for sewer).
- 1.2 The 2019 Current and Capital Budgets and the Nine-Year Capital Forecasts for the Water Supply and Sanitary Sewerage Systems, as recommended in this report, reflect the financial parameters of the approved user rate increase (Report #2018-COW-178) as well as the 2019 Water Supply and Sanitary Sewerage Servicing and Financing Study (Report #2018-COW-177).
- 2. Highlights of the 2019 Water Supply and Sanitary Sewerage Systems Business Plans and Budgets
- 2.1 Approximately \$107.93 million and \$102.12 million in user rate funding is required for the 2019 Water Supply and Sanitary Sewerage Systems Programs, respectively.
- 2.2 The 2019 Water Supply and Sanitary Sewerage Systems Budget increases are mainly due to the following:
 - priority staffing of six (6) positions, shared with Works General Tax and Solid Waste Management (2.3 FTEs in water and 2.3 FTEs in sewer at a combined 2019 cost of \$254k or \$508k annualized for the Water Supply and Sanitary Sewerage Systems share) as indicated below:
 - One (1) District Technician to assist the Plant Superintendent and staff with ensuring compliance with Ministry of the Environment, Conservation and Parks (MECP) regulations;

- One (1) Senior Project Coordinator in Construction Management services to aid with design reviews of capital construction projects, review and prepare tender, project management and quality control;
- One (1) Project Supervisor in Construction Management services to supervise capital construction for projects in the roads, water supply and sanitary sewerage portfolios;
- Two (2) Technical Assistants to provide support for the administration of corporate facility maintenance contracts; and
- One (1) Laboratory Information Management System (LIMS)
 Administrator to manage the recently acquired LIMS software, which automates quality control of samples in the Lab.
- annualization of 1.8 FTEs for water and 1.3 FTEs for sewer from 2018 (\$183k);
- annual economic increases related to salaries and benefits (\$851k) and operating inflationary adjustments (\$473k);
- net increase in operating TCA capital from current costs (\$777k), significant capital projects including:
 - Network upgrades Voice Over Internet Protocol at various Water Supply and Water Pollution Control Plants (\$1.0 million);
 - HVAC upgrades at Grandview Street Water Pumping Station (\$415k);
 - Asbestos Abatement at Cannington Wells (\$175k)
 - Two (2) new 3 Ton Crew Cab Trucks (\$300k); and
 - Two (2) new Tandem Combination Dump Truck / Snow Plow (\$480k).
 These trucks are also partially funded by Works-General Tax (\$240k);
 and
- Construction of Municipal Services total capital program of \$216.4 million (a \$0.4 million decrease in user revenue financing from 2018 as a \$2.0 million contribution from the water supply treatment plant / rate stabilization was applied in 2019).
- 2.3 New positions and TCA items that are shared with Works General Tax and Waste will be considered approved once the corresponding funding shares from the property tax supported budgets have been approved by Regional Council.
- 2.4 The 2019 Water Supply Capital Program of \$113.3 million (includes \$110.0 million in construction of municipal services and \$3.3 million in expenditures including vehicles, computer equipment and facility upgrades) is recommended to be financed from user rate revenue, development charge revenue, a contribution from the asset management reserve fund, and developer contributions.
- 2.5 The 2019 Sanitary Sewerage Capital Program of \$110.5 million (\$106.4 million in construction of municipal services and \$4.1 million in other capital assets such as vehicles, computer equipment and facility upgrades) can be funded from user rate revenue, development charge revenue, a contribution from the asset management reserve, debentures, developer contributions and \$24.6 million from the Region of York for their share of system improvements and other TCA capital at the Duffin Creek WPCP and Regional Environmental Laboratory.

- 2.6 Regional Council approved the establishment of an Asset Management Reserve Fund in 2004 to provide financing for future high priority replacement and rehabilitation needs to the Water Supply and Sanitary Sewerage systems. The 2019 Water Supply and Sanitary Sewerage Systems Capital Budgets include draws of \$5.0 million for Water Supply and \$8.2 million for Sanitary Sewerage from the Asset Management Reserve Funds.
- 2.7 Some of the major components of the 2019 Water Supply and Sanitary Sewerage Systems Capital Program include:

Table 1
2019 Major Water Supply and Sanitary Sewerage Systems Capital
Program

	T & T	T	T =
Water Supply	\$million	Sanitary Sewer	\$million
Newcastle Water Supply Plant	\$10.2	Duffin Creek Water Pollution Control	
Expansion and Replacement of		Plant (WPCP):	
existing Plant (\$10.2 million		- Stage III Solids expansion (\$13.0	\$4.9
additional funding in 2019, \$43.9		million, York Share - \$8.1 million)	
million in prior funding, total		- Replacement of Reactors 1 & 2 (\$6.0	1.6
estimated cost of \$54.1 million)		million, York Share - \$4.4 million)	0.4
		- Condition Assessment (\$0.6 million,	0.1
		York Share - \$0.5 million)	0.0
		- Regional Environmental Laboratory	0.3
		Upgrades (\$0.6 million, York share -	
Rehabilitation at Oshawa Water		\$0.3 million)	
Supply Plant:		Plant upgrades: - Newcastle WPCP capacity re-rating	1.2
- Valve Chamber upgrades	0.1	- Uxbridge WPCP optimization,	2.5
- Header and piping upgrades	0.1	upgrades / rehabilitation	2.5
- Filter rehabilitation works	2.5	- Corbett Creek WPCP upgrades	2.5
- I liter reliabilitation works	2.5	- Courtice WPCP digester rehabilitation	1.7
		works, Clarington	1.7
Watermain replacement /	21.0	Sanitary sewer replacement to address	13.2
rehabilitation to address critical		critical needs	
needs			
		Rehabilitation of trunk sewer - York	
		Durham Sanitary Sewer System,	1.0
		Pickering (\$10.0 million, York Share -	
		\$9.0 million)	
New feedermains (growth related):		New trunk sanitary sewers (growth	
- Conlin Rd., Oshawa	18.3	related):	
- Rossland Rd., Ajax	8.4	- Courtice Trunk Sewer (Phase 3) -	25.9
- Harwood Ave., Ajax	4.1	Courtice, Clarington	
- Harmony Rd., Oshawa	4.1	- Central Duffin Collector Sewer (Brock	11.8
- Victoria St., Whitby	3.0	Rd.), Pickering	0.0
- Bloor St., Oshawa	5.5	- Baseline Rd., Bowmanville	3.0
- Bloor St., Courtice	6.3	- Foster Creek trunk sanitary sewer,	1.2
- Courtice Zone 1, Clarington	4.2	Newcastle	4.0
Replacement of water meters	3.1	Seaton Sanitary Sewage Pumping	4.0
Water filling stations	0.4	Station and forcemain, Pickering Water Street Sanitary Sewage Pumping	1.7
Water filling stations	0.4	Station, Port Perry, Scugog	1.7
		Juliani, Full Felly, Julyuy]

3. Debt Charges

- 3.1 There are new debt charges for Water Supply (\$1.7 million in 2019), related to the Newcastle Water Supply Plant expansion / replacement capital project. Debt financing is anticipated to increase over the forecast period related to anticipated debt financing for the Whitby, Bowmanville and Ajax Water Supply Plant expansion projects. Debt charges are expected to peak at \$23.6 million in 2025, a portion (approximately \$15.7 million) of which is recoverable from development charges.
- 3.2 There are on-going debt charge commitments for sewer, mainly related to the Stage III Expansion at the Duffin Creek Water Pollution Control Plant (Bio-solids Management) and the Courtice, Port Darlington and Nonquon Water Pollution Control Plants. The 2019 debt charges for the Sanitary Sewerage budget totaling \$21.8 million includes \$11.5 million to be recovered from residential sewer development charge revenue (approximately 1,250 new units) and approximately \$1.5 million in debt charges will be recovered from commercial sewer development charges. Approximately \$8.8 million is to be recovered from user rates.
- 3.3 Debt charges for Sanitary Sewerage are anticipated to remain fairly level over the forecast period (2020-2028) with new debt anticipated for the Courtice Trunk Sanitary Sewer and Duffin Creek WPCP, offset by a decrease in debt charges as debt is retired for the Duffin Creek WPCP and Courtice WPCP.

4. Utility Finance

- 4.1 The Utility Finance Division of the Finance Department is included in the Water Supply and Sanitary Sewerage budget as it is fully funded by water and sewer user rates. This area provides three main services:
 - Customer services (including collections and cash processing) to provide customer services to approximately 176,000 water/sanitary sewer customers, respond to over 115,900 inquiries (telephone, e-mails and in-person) and collection of approximately \$210 million annually;
 - Billing and Analysis responsible to issue over 700,000 water/sewer bills annually for over 176,000 customers and setting up new customer accounts; and
 - Meter Reading responsible for obtaining water meter readings associated with residential and non-residential customer accounts, as well as investigating and assisting customers to identify water consumption problems.
- 4.2 The increase in the 2019 Utility Finance costs are mainly related to the implementation of the new water billing system and customer portal (\$770k). These costs are partially offset by a decrease in the corporate costs of the previous billing system (-\$92k).

5. Risks

- 5.1 There are a number of risks to both the proposed 2019 Water Supply and Sanitary Sewerage Systems programs and over the forecast period (2020-2028) as follows:
 - Potential for further reduction in water usage resulting in lower user revenue, without corresponding cost reductions;
 - Slow development growth, restricting the funding available for growthrelated capital costs;
 - Higher energy costs (i.e. electricity and natural gas); and
 - Increasing construction costs resulting in higher user rate requirements.

6. Conclusion

- 6.1 The 2019 Water Supply and Sanitary Sewerage Systems Business Plans and Budgets can be financed within the proposed overall water supply and sanitary sewerage user rate increase of 1.8 per cent and other related funding including development charges and fees/charges.
- 6.2 Accordingly, the 2019 Business Plans and Budgets for Water Supply and Sanitary Sewerage Systems are recommended for approval.

7. Attachments

7.1 Detailed Consolidated 2019 Business Plans & Budgets for Water Supply and Sanitary Sewerage Systems are available on-line through the link provided on the January 15, 2019 Finance and Administration Committee agenda or in hard copy by contacting the Finance Department at (905) 668-7711 ext. 2304.

Respectfully submitted,

Original Signed By
Nancy Taylor, BBA, CPA, CA
Commissioner of Finance

Recommended for Presentation to Committee

Original Signed By
Elaine C. Baxter-Trahair
Chief Administrative Officer

TABLE OF CONTENTS

2019 BUSINESS PLANS & BUDGETS

WORKS – WATER SUPPLY SYSTEM

NOTE: On this page, just click on the particular Section and you will be linked to the corresponding page

	Page Number
STRATEGIC PLANNING	12
PROGRAM SUMMARY	14
EXPLANATION OF PROGRAM CHANGES	16
PROGRAM DETAILS	
Watermain Cleaning and Repairs	
Water Meters Depot Operations	32
6. Plants East	39
Plants North Sunvalley	47
. 10. SCADA Systems	
12. Facilities Management	58
14.TANGIBLE CAPITAL ASSETS PROGRAM SUMMARY	64
1. Tangible Capital Assets – New	
Tangible Capital Assets – Replacement Construction	
a. 2019 Construction Program b. 2020 Construction Program	69
c. 2021 Construction Program	76
d. 2022 Construction Programe. 2023 Construction Program	82
f. 2024 Construction Programg. 2025 Construction Program	
h. 2026 Construction Programi. 2027 Construction Program	89
j. 2028 Construction Programk. 2019 Capital Budget Project Details	93
I. 2019 Capital Budget and Nine Year Forecast	



2019 Business Plan

Works - Water Supply System

Major Services & Activities

Water Distribution System Maintenance

- Prevent loss of water causing excessive flow rates, low pressure, increased pumpage and treatment through maintenance and repair activities, and the extensive replacement of polybutylene services.
- To ensure that all hydrants and valves are in working condition when they are operated.
- Maintain (clean and repair) and operate the Region's linear water distribution system in an efficient and cost effective manner.
- Maintain the inventory of water meters to accurately measure the consumption of water to maximize revenue for the Region.
- Aggressive residential meter replacement program to address meters over 20 years old that are still in service.

Water Supply and Treatment

- Maintain a healthy community.
- Plan, design and construct water supply infrastructure.
- Operate and maintain the water supply system across the Region providing potable water through infrastructure including surface water plants, elevated tanks, standpipes, wells, reservoirs and pumping stations.
- Maintain records of water quality, water flow and the cost of water supply operations.
- Maintain Drinking Water Quality Management System under the Safe Drinking Water Act.
- Maintain all programs for compliance with Ministry of the Environment, Conservation and Parks Acts and Regulations.
- Plan, implement and maintain requirements under the Clean Water Act for Source Water Protection.

The following information highlights the Department's focus on the Durham Region Strategic Plan:

Strategic Goal C.2 - Protect, enhance and where appropriate restore significant water resources, agricultural land, natural heritage and environmentally sensitive areas.

Key Deliverables

Responsibility - Co-Lead

◆ Continue to protect the Region's drinking water supply (source water protection)

STRATEGIC PLANNING



2019 Business Plan

Works - Water Supply System

Strategic Goal C.4 - Demonstrate leadership in sustainable asset management and environmentally friendly municipal practices.

Key Deliverables

Responsibility - Co-Lead

 Plan, forecast and manage provision, operation, maintenance and capital costs for existing and new infrastructure

Strategic Goal C.5 - Work more closely with local municipalities and other partners to manage growth through effective, progressive and integrated long-term planning.

Key Deliverables

Responsibility - Co-Lead

- Identify opportunities to improve the planning and approval process to promote alignment and integration with area municipalities
- Continue to offer planning support to local municipalities to ensure compliance with Regional and Provincial plans

Strate	gic Goals
Goal	Description Responsibility - Support
A.1	Propel the business and investment climate forward in Durham Region to enable more local employment.
B.3	Cultivate strong, safe and secure communities and healthy workplaces.
C.1	Invest in efforts to mitigate and adapt to climate change to build resiliency across the region.
D.1	Deliver Regional services in a financially prudent and sustainable manner.
D.2	Foster awareness of Regional programs and services.
D.3	Improve communication and collaboration across the Region and in particular with local municipalities.
D.4	Promote a culture of openness and encourage public engagement in governance and decision making.
D.5	Demonstrate accountability and transparency by measuring performance and reporting on results.
D.6	Invest in the organization by attracting and retaining a skilled and diverse workforce.
D.7	Focus resources on continuous improvement and innovation.



2019 Business Plan

Works - Water Supply System

By	Program	20	18	2019		
	(\$,000's)	Estimated	Approved	Base	Program	Proposed
	(\$,000 \$)	Actuals	Budget	Budget	Change	Budget
Exp	ense Programs	\$	\$	\$	\$	\$
OPE	RATIONS:					
1	Watermain Cleaning and					
	Repairs	3,845	3,649	3,666	(94)	3,572
2	Valves and Hydrants	2,589	2,837	2,863	(103)	2,760
3	Water Connections	4,126	3,783	3,813	155	3,968
4	Water Meters	567	599	604	(65)	539
5	Depot Operations	5,447	5,550	5,754	(80)	5,674
	Subtotal	16,574	16,418	16,700	(187)	16,513
PLA	NTS:					
6	Plants East	2,657	2,691	2,722	115	2,837
7	Plants Central	12,816	12,937	12,796	289	13,085
8	Plants North	2,720	2,792	2,816	110	2,926
9	Sunvalley	-	-	-	-	-
10	SCADA Systems				-	-
	Subtotal	18,193	18,420	18,334	514	18,848
CON	MMON SERVICES:					
11	Engineering and Staff Support	5,707	6,186	6,342	360	6,702
12	Facilities Management	6,262	6,503	6,361	213	6,574
13	Administration	302	304	316	(1)	315
	Headquarters Shared Cost	1,050	1,050	1,073	-	1,073
	Subtotal	13,321	14,043	14,092	572	14,664
,	Total Operating Program					
	Expenses	48,088	48,881	49,126	899	50,025



2019 Business Plan

Works - Water Supply System

Ву	Program	20	18		2019	
	(\$,000's)	Estimated Actuals	Approved Budget	Base Budget	Program Change	Proposed Budget
14	Tangible Capital Assets:	-				
1W	Facilities Management - New	246	246	-	82	82
2W	- Replacement	1,211	1,211	261	1,355	1,616
3W	Fleet/Equipment - New	134	134	-	687	687
4W	- Replacement	761	761	966	-	966
5W	Construction of Municipal					
	Services	41,047	41,047	41,047	(2,000)	39,047
Net	Tangible Capital Assets	43,399	43,399	42,274	124	42,398
Net	Program Expenses	91,487	92,280	91,400	1,023	92,423
				(\$880)		
Sur	nmary of Increase (Decrea	ise)		-0.95%		\$143
	-	•				0.15%

Summary of Base Budget Changes

	\$	Comments
Salaries & Benefits	466	Economic increases
Salaries & Benefits	103	Annualization (1.765 positions)
Salaries & Benefits	45	2019 Position upgrade (1.000 position)
Operating Expenses	(73)	Remove one-time items
Operating Expenses	(152)	Utility savings
Operating Expenses	209	Inflationary adjustments
Fees & Services	(4)	Inflationary adjustments
Minor Assets & Equipment	(7)	Remove one-time items (various)
Major Repairs & Renovations	(342)	Remove one-time items (various)
Tangible Capital Assets	(1,125)	Remove one-time items (various)
	(880)	



2019 Program Changes

Works - Water Supply System

\$ 000's

Maintenance Operations

Waterwale Olevier and Bandine	
 Watermain Cleaning and Repairs Increases to reflect actual costs and forecasted requirements in watermain repairs (\$55k) and hydrant flushes (\$24k) 	79
 Decrease to reflect actual costs and forecasted requirements in leak detection, swabs, and cathodic protection 	(173)
	(94)
Valves and Hydrants	
 Decrease in hydrant permit expenses (-\$10k) and increase in revenue collected for hydrant permits (-\$76k) based on historical actuals and new fee schedule implemented in 2018 	(86)
 Decreases to reflect actual costs and forecasted requirements related to repairing and reconditioning valves (-\$37k), hydrant painting (-\$36k), maintenance of valve records (-\$27k), and installation of anti-tampering devices (-\$26k) 	(126)
 Increases to reflect actual costs and forecasted requirements related to valve operation and inspections (\$39k), maintenance of valve boxes (\$34k), hydrant inspection and operation (\$14k) and various other hydrant activities (\$22k) 	109
	(103)
Water Connections	
 Increase to reflect actual costs and forecasted requirements for water connection repair services 	239
 Decrease to reflect actual costs and forecasted requirements for the inspection (-\$38k) and repair (-\$46k) of service boxes 	(84)
	155
Water Meters	
 Adjustments to reflect actual costs and forecasted requirements related to large water meter repairs (-\$63k), and other water meter maintenance activities (-\$2k) 	(65)
	(65)
Depot Operations	
• Decrease in temporary pay and overtime based on actual costs and forecasted requirements	(48)
 Decrease in general office supervisory activities as a result of increasing field supervision 	(61)
 Increase in the general locating program based on projected demands Increase in general complaint investigation based on actual costs and forecasted 	37
requirements	37
 Decrease in technical training for Depot Operations due to reduced requirements for specialized training 	(50)
 Adjustments to reflect actual costs and forecasted requirements in various programs 	5
	(80)



2019 Program Changes

Works - Water Supply **System**

\$ 000's

Water Supply Plants

Plants East (Bowmanville, Orono, Newcastle)	
 Increase in payroll costs for the conversion of an existing District Technician position to a District Plant Supervisor position 	45
 One-time increase in professional services to update and revise the Plant Operations Manual 	43
 Increase in fleet maintenance and utilization costs based on review of historical actuals and forecasted requirements 	33
◆ Decreases in overtime (-\$20k) and equipment maintenance repairs (-\$20k) based on review of historical actuals and forecasted requirements	(40)
Major repairs for well maintenance and equipment	30
Adjustments to reflect actual costs and forecasted requirements in various accounts	4
	115
Plants Central (Ajax, Oshawa, Whitby)	
 Increase in SCADA-related costs, including temporary staff (\$88k) and software maintenance (\$34k) 	122
 Increase in program materials and supplies to address ongoing plant maintenance and equipment repair requirements 	113
 One-time increase in professional services to update and revise the Plant Operations Manual 	44
 Increase in chemicals to reflect actual costs and forecasted requirements 	44
 Decrease in fleet maintenance and utilization costs based on review of historical actuals and forecasted requirements 	(22)
 Adjustments to reflect actual costs and forecasted requirements in various accounts 	(12)
	289
Plants North (Uxbridge, Scugog, Brock)	
 Proposed new position representing 1.000 FTE, to start July 1st, 2019: 	
 One (1) District Technician to assist the Plant Superintendent and staff with ensuring compliance with Ministry of the Environment, Conservation and Parks (MECP) regulations (Annualized impact is \$112.0k) (1.000 FTE) 	56
One-time increase in professional services to update and revise the Plant Operations Manual	48
 Adjustments to reflect actual costs and forecasted requirements in various accounts 	6
	110
CADA Systems	
Increase in education and training based on forecasted requirements	5
◆ Adjustments to reflect actual costs and forecasted requirements in various accounts	(1)
 Allocation of above changes to all Water Supply Plants and Water Pollution Control Plants 	(4)
	-



2019 Program Changes

Works - Water Supply System

\$ 000's

Engineering and Staff Support

ingineering and Stair Support	
 Proposed new positions representing 0.770 FTEs, to start July 1st, 2019: One (1) Senior Project Coordinator in Construction Management services to aid with design reviews of capital construction projects, review and prepare tenders, project management and quality control. This position will be shared with General Tax and Sanitary Sewerage (Annualized impact is \$44.6k) (0.385 FTE) 	22
 One (1) Project Supervisor in Construction Management services to supervise capital construction for projects in the roads, water supply and sanitary sewerage portfolios. This position will be shared with General Tax and Sanitary Sewerage (Annualized impact is \$55.4k) (0.385 FTE) 	28
◆ Increase in recoveries from capital projects due to proposed new positions listed above	(40)
 Reallocation of resources from Duffin Creek Water Pollution Control Plant based on the nature of work performed (0.160 FTE) 	30
 Increase in temporary staff and overtime costs in Technical Support (\$16k) and Construction Management Services (\$20k) reflective of increased investments in infrastructure renewal 	36
◆ Increase in recoveries from capital projects due to above increase in staff resources	(16)
 Increase in memberships and dues based on review of historical actuals and forecasted requirements 	21
 One-time increase in professional fees for a cross connection survey report related to the backflow prevention program, which is required every five years 	90
◆ One-time increase in professional fees for a water efficiency plan to be prepared in 2019	55
 Increase in fleet maintenance and utilization costs based on review of historical actuals and forecasted requirements 	20
Transfer of revenue from surcharge agreements to the Sanitary Sewerage budget	166
◆ Increase in miscellaneous program services related to development approvals, based on	
historical actuals and forecasted requirements. This increase is more than offset by subdivision inspection fees collected	265
 Increase in subdivision inspection fees collected based on historical actuals and forecasted requirements 	(296)
◆ Adjustments to reflect actual costs and forecasted requirements in various accounts	(21)
	360

Total Program Changes



2019 Program Changes

Works - Water Supply System

\$ 000's

124

1,023

Facilities Management

detailed information

 Proposed new positions representing 0.542 FTEs, to start July 1, 2019: Two (2) Technical Assistants to provide support for the administration of corporate facility maintenance contracts. Both of these positions are conversions of long-term temporary resources to permanent full-time positions. These positions are shared with General Tax, 23 Sanitary Sewerage and Solid Waste Management (Annualized impact is \$46.7k) (0.542 FTEs) Decrease in temporary salary budget related to conversions of part-time positions to full-time, (23)as listed above Increase in property rental fees for new lease agreement related to a Zone 4 Reservoir site in 37 Seaton One-time increase in plumbing inspections to complete cross connection surveys related to 37 the Region's backflow prevention program; surveys must be completed every five years Major repairs and renovations, including: epoxy flooring in acid dilution room and sodium hypochlorite containment area at Ajax Water Supply Plant (\$97k) and repair of the mezzanine 121 structure at Scugog Depot (\$24k) Adjustments to reflect actual costs and forecasted requirements in various accounts, 18 including; vehicle operations (\$30k), and various other accounts (-\$12k) 213 Administration Adjustments to reflect actual costs and forecasted requirements in various accounts (1) **Tangible Capital Assets** Program changes include the acquisition of new assets and the replacement of assets related

to depot operations, plant and facilities management, fleet, equipment and construction

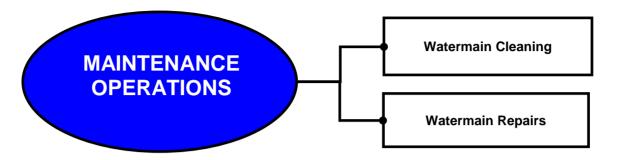
projects, including the construction of municipal services. Refer to capital schedules for

PROGRAM 1 WATERMAIN CLEANING AND REPAIRS



2019 Program Detail

Works - Water Supply System



Purpose:

 To maintain (clean and repair) and operate the Region's water distribution system in an efficient and cost effective manner for the Region's approximately 175,763 customers and maintain required water for fire protection

Description of Program Activities:

- The Region maintains and operates approximately 2,489 km of watermains
- Dead-end watermains are flushed regularly as determined by Ministry of the Environment,
 Conservation and Parks (MECP) legislation. Flushing at hydrants and blow offs provides the public with a potable water supply for domestic, institutional, commercial and industrial use
- Where conditions warrant, such as severe loss of head pressure, sediment build-up or customer complaints about water quality, watermains are cleaned by foam swab methods. Foam swabbing is conducted on a scheduled frequency and as recommended through system reviews. The frequency of cleaning is also dependent upon the operating conditions
- Repairs to watermain breaks are funded through this program. All major watermain breaks are isolated and repaired immediately upon inspection. All minor leaks are repaired as part of the regular program.
 Watermain repairs are budgeted at levels that reflect current break patterns, the aging system and increasing inventories
- Watermains will be cathodically protected against corrosion through the preventative maintenance contract

Description of Program Resources:

Resources delivering program services are shared with all activity based maintenance activities in the Water Supply, Sanitary Sewerage and General Tax operating budgets. Resource utilization is charged to the activity based programs through maintenance work orders

PROGRAM 1 WATERMAIN CLEANING AND REPAIRS



2019 Program Detail

Works - Water Supply System

Performance Measurements:

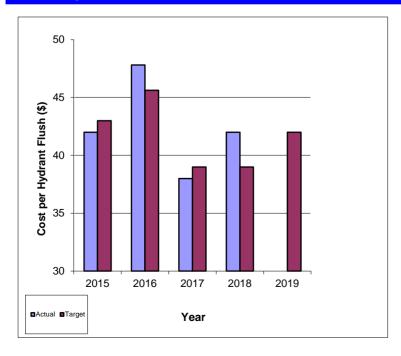
- All major watermain breaks are isolated and repaired immediately upon detection
- Where conditions warrant, watermains are cleaned by foam swab method
- Preventative Maintenance Contract for cathodic protection of ferrous watermains involves the installation of sacrificial anodes. These prevent corrosion on the exterior surface of the pipe, which in turn prevents corrosion breaks and extends the life of the watermain. The cathodic protection program targets all ductile and cast iron watermains in the Region, and is administered through Technical Support. Each year a contract is awarded for the installation of anodes and test stations
- The Region has an ongoing Leak Detection program, administered through Technical Support. The surveys are performed on watermains not greater than 200mm in diameter every 5 years and on watermains greater than 200mm in diameter but not greater than 400mm in diameter every 10 years. Each year a contract is awarded for the survey
- Flushing and Testing of Dead End Watermains: All designated hydrants and blow offs at dead-ends or other extremities shall be flushed on a regular program basis (annually) and tested to ensure that the potable water meets the Ontario Drinking Water Standards. Static water pressure is taken and recorded at each designated hydrant at the time of flushing. Hydrant flushing is done on a complaint basis. Records of problem areas are maintained for investigation and future cleaning or rehabilitation

Units of Service (Flushing Hydrants and Repairing Watermains)

b) Repair Watermains

Target 2018	Proj Actual 2018	Target 2019
12,300	11,743	12,051
498	491	497

Efficiency:



Cost Per Unit of Service - Flushing Hydrants

Cost per unit includes all labour, materials and equipment utilized in repair activities

PROGRAM 1 WATERMAIN CLEANING AND REPAIRS



2019 Program Detail

Works - Water Supply System

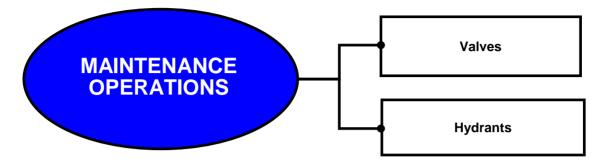
Detailed Cost of Program:	20	18		2019	
(\$,000's)	Estimated	Approved	Base	Program	Proposed
	Actuals	Budget	Budget	Change	Budget
Flush at Hydrant - Blowoff	496	482	485	24	509
Repair Watermains	2,729	2,612	2,626	55	2,681
Watermain - Leaks, Swabs, Cathodic Protection Net Program Expenses	620 3,845	555 3,649	555 3,666	(173) (94)	382 3,572

PROGRAM 2 VALVES AND HYDRANTS



2019 Program Detail

Works - Water Supply System



Purpose:

 To maintain and operate the Region's water valves and hydrants in an efficient and cost effective manner and ensure that all hydrants and valves are in working condition when they are operated

Description of Program Activities:

- There are 26,704 valves (including air relief valves) and 15,774 hydrants in the Region
- Valves 300 mm or larger in size are operated to ensure proper working conditions
- Existing valves are replaced as required
- Valve boxes are maintained and repaired as required
- Valve chambers are repaired as required
- Hydrants are repaired as required

Description of Program Resources:

Resources delivering program services are shared with all activity based maintenance activities in the Water Supply, Sanitary Sewerage and General Tax operating budgets. Resource utilization is charged to the activity based programs through maintenance work orders



Works - Water Supply System

Performance Measurements:

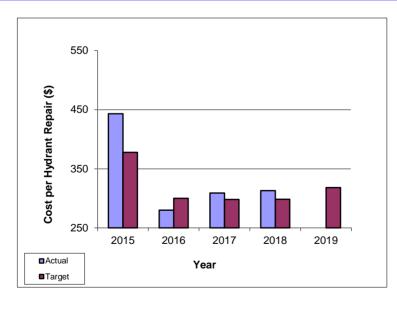
- All line valves 300 mm in diameter and larger are operated annually
- All line valves less than 300 mm in diameter are operated every four years
- All valve chambers to be pumped dry and inspected annually
- All hydrants to have control valves installed on a program basis
- All hydrants to be inspected and tested annually in accordance with Regional standards

Units of Service (Valve and Hydrant Repairs, Hydrant Inspections)

- a) Valve Repairs
- b) Hydrant Inspections
- c) Hydrant Repairs

Target 2018	Proj Actual 2018	Target 2019
271	235	231
41,631	38,694	40,095
2,136	2,034	2,050

Efficiency:



Cost Per Unit of Service Hydrant Repairs

Cost per unit includes all labour, materials and equipment utilized in the repair activities. The cost is an average across the depots, which encounter varying conditions and maintenance issues on a repair by repair basis.

PROGRAM 2 VALVES AND HYDRANTS



2019 Program Detail

Works - Water Supply System

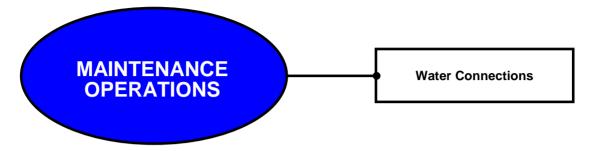
Detailed Cost of Program:	20	18		2019	
(\$,000's)	Estimated	Approved	Base	Program	Proposed
(ψ,000 3)	Actuals	Budget	Budget	Change	Budget
On anation & Incorporation	070	200	070	20	400
Operation & Inspection	376	368	370	39	409
Repair - Recondition Valves	516	542	544	(37)	507
Maintain Valve Boxes	415	390	392	34	426
Valve Records - Operations Staff	99	135	136	(27)	109
Hydrant Inspection & Operation AntiTamper Device (Install /	712	719	736	14	750
Remove)	7	36	36	(26)	10
Hydrant Repair	636	637	639	13	652
Hydrant Painting	116	153	152	(36)	116
Hydrant Fire Flow Testing	29	21	21	6	27
Hydrant Other	103	102	102	3	105
Hydrant Permits	(420)	(266)	(265)	(86)	(351)
Net Program Expenses	2,589	2,837	2,863	(103)	2,760

PROGRAM 3 WATER CONNECTIONS



2019 Program Detail

Works - Water Supply System



Purpose:

• To maintain and operate the Region's water connections in an efficient and cost effective manner for the Region's approximately 175,763 customers and provide potable water for domestic use and fire protection; prevent damage to private and public property; protect public investment in the water system by maintaining maximum capacities and extending useful life of system; and to prevent loss of water causing excessive flow rates, low pressure, increased pumpage and treatment

Description of Program Activities:

Water service connections are repaired or renewed as required

Description of Program Resources:

Resources delivering program services are shared with all activity based maintenance activities in the Water Supply, Sanitary Sewerage and General Tax operating budgets. Resource utilization is charged to the activity based programs through maintenance work orders



Works - Water Supply System

Performance Measurements:

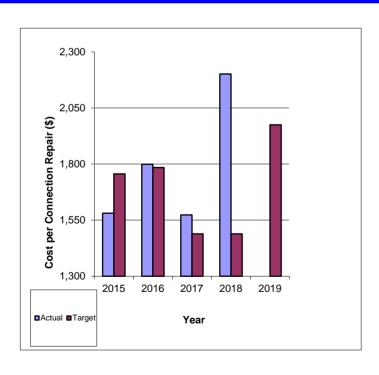
- All major service connection breaks on street are isolated and repaired upon detection
- All service valves on water services 100 mm in diameter and larger are operated every four years
- All curb stops on water services 50 mm in diameter and less are operated/repaired based on customer complaints
- Polybutylene Service Connections: An extensive program to replace polybutylene service connections is underway with the goal to have all these connections replaced by 2020

Units of Service

a) Water Service Connection Repairs

Target	Proj Actual	Target
2018	2018	2019
1,565	1,207	1,313

Efficiency:



Cost Per Unit of Service - Water Service Connection Repairs

Cost per unit includes all labour, materials and equipment utilized in the repair activities. The cost is an average across the depots, which encounter varying conditions and maintenance issues on a repair by repair basis.

PROGRAM 3 WATER CONNECTIONS



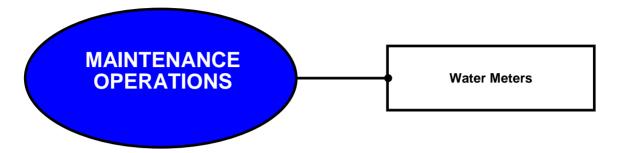
2019 Program Detail

Works - Water Supply System

Detailed Cost of Program:	20	18		2019	
(\$,000;s)	Estimated Actuals	Approved Budget	Base Budget	Program Change	Proposed Budget
Water Service Repair	2,657	2,330	2,354	239	2,593
Inspect Service Boxes	208	245	247	(38)	209
Water Service Box Repair	1,261	1,208	1,212	(46)	1,166
Net Program Expenses	4,126	3,783	3,813	155	3,968



Works - Water Supply System



Purpose:

 To maintain the inventory of water meters and the water supply system to accurately measure the consumption of water to maximize revenue for the Region

Description of Program Activities:

- Existing residential meters are scheduled to be replaced when they are 20 years old depending on available funds and the conditions of the meters
- Meters larger than 17 mm will be tested, repaired and replaced as required in accordance with the existing service levels
- Meters will be removed due to demolitions and winter conditions as required

Description of Program Resources:

Resources delivering program services are shared with all activity based maintenance activities in the Water Supply, Sanitary Sewerage and General Tax operating budgets. Resource utilization is charged to the activity based programs through maintenance work orders

Performance Measurements:

- Water meters are replaced on a routine program at intervals based on the following cycle:
 - 17 mm every 20 years; 19 mm every 15 years; 25 mm every 10 years; and 40 mm every 10 years
- ◆ Water meters 50 mm in size are replaced with a recalibrated meter every 8 years
- Water meters are tested, overhauled, recalibrated or replaced at intervals in accordance with the following:
 - 75 mm every 3 years; 100 mm every 2 years; 150 mm every year; and over 150 mm every 6 months



Works - Water Supply System

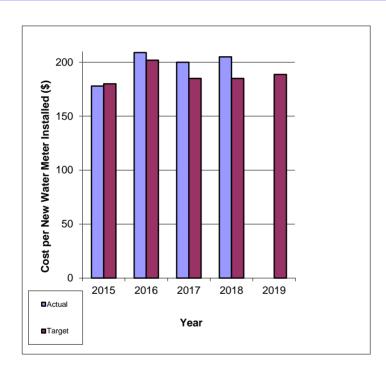
Units of Service

- a) Residential Meter Install and Replace (Capital Item)
- b) Large Meter Repair

Target 2018	Proj Actual 2018	Target 2019
6,300	6,300	6,300
880	732	757

Installation of Water Meters is budgeted under Capital Projects

Efficiency:



Cost Per Unit of Service - Installation of New Residential Water Meters

Cost per unit includes all labour, materials and equipment utilized. Installation and replacement of water meters is categorized as capital.

PROGRAM 4 WATER METERS



2019 Program Detail

Works - Water Supply System

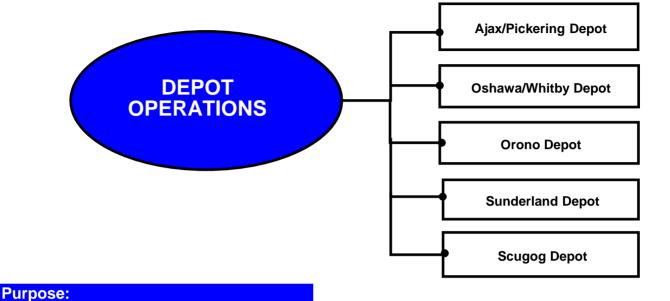
Detailed Cost of Program:	20	18		2019	
(\$,000's)	Estimated	Approved	Base	Program	Proposed
	Actuals	Budget	Budget	Change	Budget
Meter Repair - Calibration	95	97	98	(3)	95
Large Meter Repair	450	481	485	(63)	422
Remove Meters	22	21	21	1	22
Net Program Expenses	567	599	604	(65)	539

PROGRAM 5 DEPOT OPERATIONS



2019 Program Detail

Works - Water Supply System



 To provide leadership and direction to the Works depots, effectively monitoring and managing activities including water connections, water meters, and watermain cleaning and repairs, ensuring compliance with approved budgets and policy guidelines

Description of Program Activities:

- To provide the administrative services required to support depot-related maintenance activities (i.e. water connections, water meters, watermain cleaning and repairs)
- Maintain proper inventory records

Description of Program Resources:

◆ 2019 Full Time Employees 15.844

◆ 2018 Full Time Employees 15.844 Restated



Works - Water Supply System

Detailed Cost of Program:	20	18		2019	
(\$,000's)	Estimated	Approved	Base	Program	Proposed
(\$,000 \$)	Actuals	Budget	Budget	Change	Budget
Operating Expenses					
Personnel Expenses	1,921	1,906	2,077	(29)	2,048
Payroll Maintenance Management - Charge	2,372	2,494	2,528	(94)	2,434
Payroll Maintenance Management - Recovery	(1)	(17)	(17)	17	_
Net Personnel Expenses	4,292	4,383	4,588	(106)	4,482
Personnel Related	548	639	638	(61)	577
Communications	162	166	166	12	178
Supplies	193	195	196	(4)	192
Materials & Services	97	84	85	(11)	74
Buildings & Grounds Operations	45	60	60	-	60
Equipment Maintenance & Repairs	3	3	3		3
Vehicle Operations	402	395	394	(9)	385
Professional Services	2	393 1	1	(1)	303
Minor Assets & Equipment	4	4	3	(1)	3
Major Repairs & Renovations	-	-	-	21	21
Contribution to Reserve &				21	21
Reserve Funds	_	11	11	(11)	_
Operating Expenses Subtotal	5,748	5,941	6,145	(170)	5,975
Transfers from Related Entities		_			
NextGen Charges	27	27	27	2	29
Transfers from Related Entities					
Subtotal	27	27	27	2	29
Inter-Departmental Transfers & Recoveries					
Recovery from Fleet	(212)	(244)	(244)	(2)	(246)
Inter-Departmental Transfers &					
Recoveries Subtotal	(212)	(244)	(244)	(2)	(246)
Gross Operating Expenses	5,563	5,724	5,928	(170)	5,758

PROGRAM 5 DEPOT OPERATIONS



2019 Program Detail

Works - Water Supply System

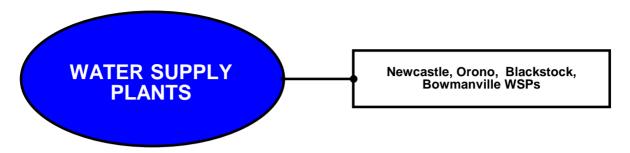
Detailed Cost of Program:	20	18		2019	
(\$,000's)	Estimated	Approved	Base	Program	Proposed
(φ,000 δ)	Actuals	Budget	Budget	Change	Budget
Tangible Capital Assets					
New	121	121	-	494	494
Replacement	-	-	8	-	8
Total Tangible Capital Assets	121	121	8	494	502
Total Expenses	5,684	5,845	5,936	324	6,260
Revenues					
Fees & Service Charges	(94)	(160)	(160)	99	(61)
Sundry Revenue	(22)	(14)	(14)	(9)	(23)
Total Revenues	(116)	(174)	(174)	90	(84)
Net Program Expenses	5,568	5,671	5,762	414	6,176

^{*} Tangible Capital Assets are stated separately on the Program Summary

Net Program Expenses Per Above	6,176
Less: Tangible Capital Assets	(502)
Net Operating Program Expenses Per Program Summary	5,674



Works - Water Supply System



Purpose:

- To supply the public with safe, potable, aesthetically acceptable water
- To ensure all quality and quantity requirements are addressed

Description of Program Activities:

- Operate the water supply system for the communities in the Municipality of Clarington and the Township of Scugog (Blackstock), consisting of 2 surface water plants, 1 elevated tank, 2 standpipes, 4 wells, 4 storage facilities and 3 pumping stations
- Continuously monitor water quality
- Maintain pressures, flows and levels in the distribution system
- Maintain records of plants and system flows, pressures, levels and all other operating parameters
- Perform both scheduled and breakdown maintenance on all equipment
- Provide training for staff on process, safety, new equipment and all other related topics
- Collect water samples throughout the system for quality assurance purposes
- Administer programs required under the Ministry of the Environment, Conservation and Parks (MECP) Acts and Regulations
- Participate in the construction of facilities within the service area

Description of Program Resources:

2019 Full Time Employees 9.3302018 Full Time Employees 9.330



Works - Water Supply System

Performance Measurements:

- Cost per megalitre of water treated
- Number of emergency callouts
- Number of boil water advisories issued annually

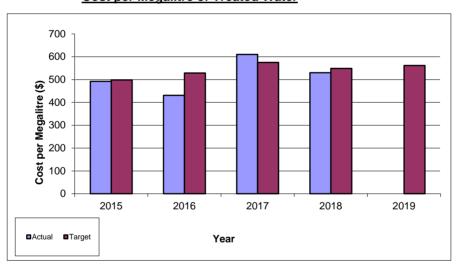
Units of Service

- a) Megalitres of water treated at the plant
- b) Number of Emergency Callouts
- c) Number of Boil Water Advisories

Target	Proj Actual	Target
2018	2018	2019
4,900	5,000	5,000
350	375	375
0	0	0

Efficiency:

Cost per Megalitre of Treated Water





Detailed Cost of Program:	20	18		2019	
(\$,000's)	Estimated	Approved	Base	Program	Proposed
(\$,000 \$)	Actuals	Budget	Budget	Change	Budget
Operating Expenses			•		
Personnel Expenses	1,252	1,327	1,357	25	1,382
Personnel Related	25	33	32	1	33
Communications	88	85	86	3	89
Supplies	197	171	170	-	170
Utilities	543	538	538	-	538
Chemicals	70	53	53	2	55
Computer Maintenance &					
Operations	12	12	12	-	12
Materials & Services	14	16	16	(1)	15
Equipment Maintenance &				` ,	
Repairs	102	125	125	(23)	102
Vehicle Operations	40	20	20	33	53
Professional Services	19	19	20	43	63
Major Repairs & Renovations	7	-	-	30	30
Operating Expenses Subtotal	2,369	2,399	2,429	113	2,542
Inter-Departmental Transfers & Recoveries					
Works - SCADA Group Charge Works - Regional Environmental	190	198	200	-	200
Lab Charge Works - Ajax WSP - Labour	131	138	138	-	138
Charge	47	45	44	2	46
Inter-Departmental Transfers &					
Recoveries Subtotal	368	381	382	2	384
Gross Operating Expenses	2,737	2,780	2,811	115	2,926
Tangible Capital Assets					
New	-	-	-	104	104
Replacement	105	105	220	-	220
Total Tangible Capital Assets	105	105	220	104	324
Total Expenses	2,842	2,885	3,031	219	3,250



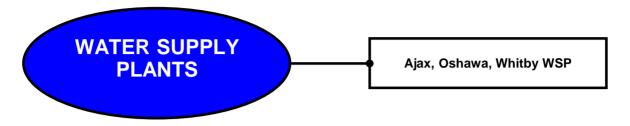
Detailed Cost of Program:	20	18		2019	
(\$,000's)	Estimated Actuals	Approved Budget	Base Budget	Program Change	Proposed Budget
Revenues Fees & Service Charges	(80)	(89)	(89)	-	(89)
Total Revenues	(80)	(89)	(89)	-	(89)
Net Program Expenses	2,762	2,796	2,942	219	3,161

^{*} Tangible Capital Assets are stated separately on the Program Summary

Net Program Expenses Per Above	3,161
Less: Tangible Capital Assets	(324)
Net Operating Program Expenses Per Program Summary	2,837



Works - Water Supply System



Purpose:

- To supply the public with safe, potable, aesthetically acceptable water
- To ensure all quality and quantity requirements are addressed

Description of Program Activities:

- Operate and maintain 3 water supply plants, 13 remote water pumping stations and 11 storage facilities in compliance with provincial legislation
- Continuously monitor water quality
- Maintain pressures, flows and levels in the distribution system
- Maintain records of plants and system flows, pressures, levels and all other operating parameters
- · Perform both scheduled and breakdown maintenance on all equipment
- Provide training for staff on process, safety, new equipment and all other related topics
- Collect water samples throughout the system for quality assurance purposes
- Administer programs required under the Ministry of the Environment, Conservation and Parks (MECP) Acts and Regulations
- Participate in the construction of facilities within the service area
- Maintain standby diesel equipment in water supply plants, water pollution control plants, pumping stations, long-term care facilities, Regional Headquarters and paramedic response stations
- Maintain and expand SCADA systems throughout water supply plants, water pollution control plants, pumping stations and storage facilities

Description of Program Resources:

2019 Full Time Employees 45.4302018 Full Time Employees 45.430



Works - Water Supply System

Performance Measurements:

- Cost per megalitre of water treated
- Number of emergency callouts
- Number of boil water advisories issued annually

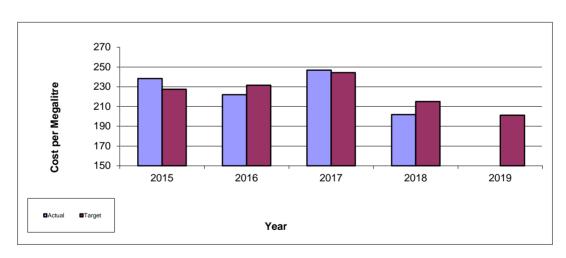
Units of Service

- a) Megalitre of water treated at the plant
- b) Number of Emergency Callouts
- c) Number of Boil Water Advisories

Target	Proj Actual	Target
2018	2018	2019
60,000	63,340	65,000
275	250	250
0	0	0

Efficiency:

Cost per Megalitre of Treated Water





Detailed Cost of Program:	20	18		2019	
(\$ 000¦a)	Estimated	Approved	Base	Program	Proposed
(\$,000's)	Actuals	Budget	Budget	Change	Budget
Operating Expenses					
Personnel Expenses	5,137	5,299	5,321	68	5,389
Personnel Related	98	136	136	(11)	125
Communications	202	196	197	21	218
Supplies	719	724	725	120	845
Utilities	4,740	4,731	4,595	-	4,595
Chemicals	578	570	570	44	614
Computer Maintenance &					
Operations	145	90	89	34	123
Materials & Services	66	83	83	(17)	66
Equipment Maintenance &				, ,	
Repairs	472	506	506	-	506
Vehicle Operations	364	361	360	(22)	338
Professional Services	53	56	56	42	98
Major Repairs & Renovations	30	30	_	-	-
Operating Expenses Subtotal	12,604	12,782	12,638	279	12,917
Inter-Departmental Transfers &					
Recoveries					
Works - SCADA Group Charge	306	317	320	1	321
Works - Regional Environmental	400	000	000		000
Lab Charge Recovery - Works - Ajax WSP-	199	209	209	-	209
Labour	(144)	(167)	(167)	7	(160)
Recovery - Sunvalley	(23)	(23)	(24)	-	(24)
Inter-Departmental Transfers &		`			· · · · ·
Recoveries Subtotal	338	336	338	8	346
Gross Operating Expenses	12,942	13,118	12,976	287	13,263
Tangible Capital Assets					
New				29	29
Replacement	200	200	290	29	29 290
Total Tangible Capital Assets	200	200	290	29	<u>290</u> 319
Total Tallyible Capital Assets	200	200	290		318
Total Expenses	13,142	13,318	13,266	316	13,582

PROGRAM 7 PLANTS CENTRAL



2019 Program Detail

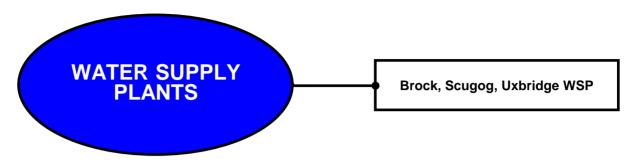
Detailed Cost of Program:	20	18		2019	
(\$,000's)	Estimated Actuals	Approved Budget	Base Budget	Program Change	Proposed Budget
Revenues Fees & Service Charges	(05)	(402)	(402)		(400)
Sundry Revenue	(85) (41)	(103) (78)	(102) (78)	2	(102) (76)
Total Revenues	(126)	(181)	(180)	2	(178)
Net Program Expenses	13,016	13,137	13,086	318	13,404

^{*} Tangible Capital Assets are stated separately on the Program Summary

Net Program Expenses Per Above	13,404
Less: Tangible Capital Assets	(319)
Net Operating Program Expenses Per Program Summary	13,085



Works - Water Supply System



Purpose:

- ◆ To supply the public with safe, potable, aesthetically acceptable water
- ◆ To ensure all quality and quantity requirements are addressed

Description of Program Activities:

- Operate the water supply system for 7 communities consisting of 21 wells, 1 surface water plant, 5 towers/standpipes and 2 storage facilities
- Continuously monitor water quality
- ◆ Maintain pressures, flows and levels in the distribution system
- Maintain records of plants and system flows, pressures, levels and all other operating parameters
- ◆ Perform both scheduled and breakdown maintenance on all equipment
- Provide training for staff on process, safety, new equipment and all other related topics
- Collect water samples throughout the system for quality assurance purposes
- Administer programs required under the Ministry of the Environment, Conservation and Parks (MECP)
 Acts and Regulations
- ◆ Participate in the construction of facilities within the service area

Description of Program Resources:

2019 Full Time Employees 9.8302018 Full Time Employees 8.830

One (1) District Technician to assist the Plant Superintendent and staff with ensuring compliance with Ministry of the Environment, Conservation and Parks (MECP) regulations (1.000 FTE)

Performance Measurements:

- Cost per megalitre of water treated
- Number of emergency callouts
- Number of boil water advisories issued annually



Works - Water Supply System

Performance Measurements: (continued)

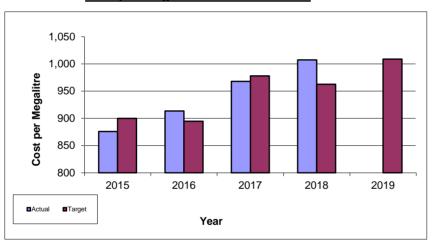
Units of Service

- a) Megalitre of water treated at the plant
- b) Number of Emergency Callouts
- c) Number of Boil Water Advisories

Target	Proj Actual	Target
2018	2018	2019
2,900	2,700	2,900
270	209	250
0	0	0

Efficiency:

Cost per Megalitre of Treated Water





Detailed Cost of Program:	20	18		2019	
(\$,000's)	Estimated	Approved	Base	Program	Proposed
	Actuals	Budget	Budget	Change	Budget
Operating Expenses					
Personnel Expenses	1,072	1,120	1,152	80	1,232
Personnel Related	46	45	45	1	46
Communications	98	102	102	-	102
Supplies	292	337	338	(25)	313
Utilities	465	466	457	-	457
Chemicals	118	115	115	5	120
Computer Maintenance &					
Operations	7	7	7	-	7
Materials & Services	20	23	23	(4)	19
Equipment Maintenance &					
Repairs	176	172	172	(10)	162
Vehicle Operations	89	95	94	9	103
Professional Services	10	17	17	48	65
Operating Expenses Subtotal	2,393	2,499	2,522	104	2,626
Inter-Departmental Transfers &					
Recoveries					
Works - SCADA Group Charge	170	179	180	-	180
Works - Regional Environmental	231	190	100	20	210
Lab Charge Works - Ajax WSP - Labour	231	190	190	20	210
Charge	11	11	11	(1)	10
Inter-Departmental Transfers &				` '	
Recoveries Subtotal	412	380	381	19	400
Gross Operating Expenses	2,805	2,879	2,903	123	3,026
Tangible Capital Assets					
New	-	-	-	60	60
Replacement	70	70	245	-	245
Total Tangible Capital Assets	70	70	245	60	305
Total Expenses	2,875	2,949	3,148	183	3,331
		_,0-10	<u> </u>		0,001



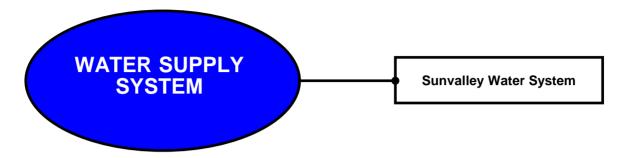
Detailed Cost of Program:	20	18		2019	
(\$,000's)	Estimated Actuals	Approved Budget	Base Budget	Program Change	Proposed Budget
Revenues Fees & Service Charges	(85)	(87)	(87)	(13)	(100)
Total Revenues	(85)	(87)	(87)	(13)	(100)
Net Program Expenses	2,790	2,862	3,061	170	3,231

^{*} Tangible Capital Assets are stated separately on the Program Summary

Net Program Expenses Per Above	3,231
Less: Tangible Capital Assets	(305)
Net Operating Program Expenses Per Program Summary	2,926



Works - Water Supply System



Purpose:

- To supply the Sunvalley Community (17 households) with safe, potable, aesthetically acceptable water
- To ensure all quality and quantity requirements are addressed

Description of Program Activities:

- Operate the private water system in this community in the City of Oshawa as ordered by the Ministry of the Environment, Conservation and Parks (MECP)
- ◆ Carry out maintenance (preventative, breakdown)
- Maintain records (quality, flow, financial)
- Train staff in process, safety and other related topics
- Collect samples throughout the system

Performance Measurements:

- Cost of operation
- Number of emergency callouts
- Number of customer complaints
- Number of boil water advisories issued annually

Units of Service

- a) Number of Emergency Callouts
- b) Number of Customer Complaints

Target 2018	Proj Actual 2018	Target 2019
4	4	4
0	0	0



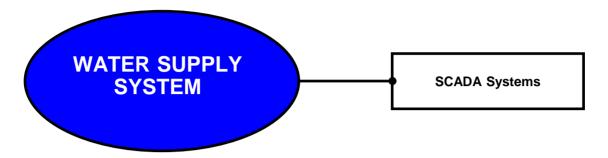
Detailed Cost of Program:	20	18	2019				
(\$,000's)	Estimated Actuals	Approved Budget	Base Budget	Program Change	Proposed Budget		
Operating Expenses							
Supplies	1	2	2	-	2		
Materials & Services	-	1	1	-	1		
Minor Assets & Equipment		2	2	-	2		
Operating Expenses Subtotal	1	5	5	-	5		
Inter-Departmental Transfers & Recoveries Ajax Water Supply Plant Charge	23	23	24	-	24		
Inter-Departmental Transfers & Recoveries Subtotal	23	23	24	-	24		
Total Expenses	24	28	29	-	29		
Revenues							
Fees & Service Charges	(24)	(28)	(29)	-	(29)		
Total Revenues	(24)	(28)	(29)	-	(29)		
Net Program Expenses				-	-		

PROGRAM 10 SCADA SYSTEMS



2019 Program Detail

Works - Water Supply System



Purpose:

 The centralized SCADA Systems group located at the Oshawa Water Supply Plant coordinates and plans maintenance and upgrades to the Supervisory Control and Data Acquisition (SCADA) system throughout the Water Supply and Water Pollution Control Plants

Description of Program Activities:

- Address day-to-day issues as well as deal with emergency situations with 24/7 availability
- Administration and quality control as it relates to SCADA projects
- Develop and maintain SCADA operating procedures
- Ensure SCADA standards are adhered to in new asset creation, upgrades and modifications
- Update and modify Programmable Logic Controller (PLC) programs
- Provide testing, documenting and install patches throughout SCADA systems
- Maintain database of data to develop trends for analysis and diagnostics
- Deployment, troubleshoot, and maintenance of LAN and WAN communication equipment both wired and wireless
- Secure SCADA network from unauthorized use
- Research and test new SCADA technologies
- Commission and decommissioning of SCADA projects and upgrades
- Assist engineering department with SCADA projects and new initiatives
- Maintain, replace, and back-up all equipment connected to the SCADA network
- Contract administration for external support agreements

Description of Program Resources:

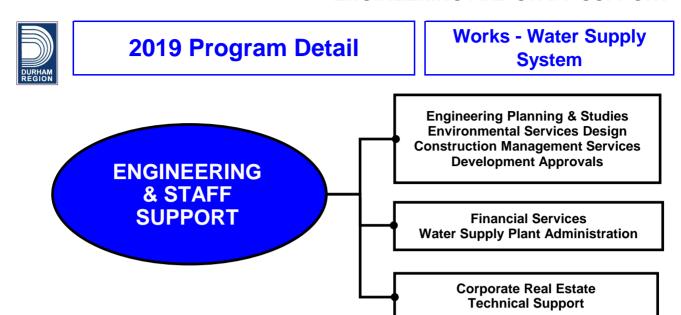
2019 Full Time Employees 13.6602018 Full Time Employees 13.660



Detailed Cost of Program:	2018		2019				
(\$,000's)	Estimated Actuals	Approved Budget	Base Budget	Program Change	Proposed Budget		
Operating Expenses							
Personnel Expenses	1,532	1,721	1,738	-	1,738		
Personnel Related	128	147	148	6	154		
Communications	2	3	3	-	3		
Supplies	38	41	40	(3)	37		
Computer Maintenance & Operations	4	5	5	1	6		
Materials & Services	28	20	20	-	20		
Equipment Maintenance & Repairs Professional Services	22	18	18	-	18		
	35	28	28		28		
Operating Expenses Subtotal	1,789	1,983	2,000	4	2,004		
Inter-Departmental Transfers & Recoveries	(4.700)	(4.000)	(0.000)	(4)	(0.004)		
SCADA Systems Recovery	(1,789)	(1,983)	(2,000)	(4)	(2,004)		
Inter-Departmental Transfers & Recoveries Subtotal	(1,789)	(1,983)	(2,000)	(4)	(2,004)		
Gross Operating Expenses	-	-	-	-	-		
Tangible Capital Assets Replacement	400	400	04		04		
•	100	100	21	-	21		
Total Tangible Capital Assets	100	100	21	-	21		
Net Program Expenses	100	100	21	-	21		

^{*} Tangible Capital Assets are stated separately on the Program Summary

(21)
_



Represents the portions of various divisions of the Works Department that are attributable to the Water Supply System including:

Engineering Planning and Studies

Purpose:

• To provide overall leadership and guidance to the various Departments of the Region of Durham which affect long-range planning of the Municipal Water Supply and Distribution Systems and Municipal Wastewater Collection and Treatment Systems; to service existing customers and future customers forecast under the anticipated growth recognized in the Durham Region Official Plan

Environmental Services Design

• To plan, design and initiate construction of water supply system infrastructure to provide service for existing and new customers, in compliance with all applicable legislation and regulations. Water supply infrastructure includes water supply plants, pumping stations, water storage facilities and watermains and appurtenances. To develop and maintain an information database on the linear and vertical assets of the Region's water infrastructure and to regularly update other Divisions and Departments on the condition of these assets which include watermains, water supply plants, pumping stations, storage reservoirs and elevated tanks

Construction Management Services

To plan, design and construct Regional infrastructure including all roads, sanitary and storm sewers and associated services, watermains and associated services, bridges, culverts, water supply plants and associated wells, pumping stations and modifications, water pollution control plants and associated pumping stations and modifications, all as budgeted for in the current year's business plan including all similar construction necessitated by emergencies

Development Approvals

 To assist and facilitate well planned industrial, commercial and residential development proposals within Durham Region by providing cost effective municipal water, sanitary sewerage and Regional road services, while protecting the interests of the Region and the public

Financial Services

To provide overall leadership and direction to the various divisions of the Works Department in effectively
monitoring and managing expenditures to ensure compliance with approved budgets and policy guidelines



2019 Program Detail

Works - Water Supply System

Purpose: (continued)

Water Supply Plant Administration

• To provide management of the Plant Operations Division including; the co-ordination and monitoring of expenditures, dealing with personnel and administrative issues and planning for the long term operational needs of the division in accordance with policies, guidelines and legislation

Corporate Real Estate

 To administer and manage the real estate function for the Region including the rental of properties and the purchase of land to facilitate construction of municipal services

Technical Support

- A technical working group directing and supporting the following programs:
 - Sewer-Use By-Law Enforcement
 - Water/Wastewater Treatment Operations
 - Maintenance Operations (including landfill monitoring)
 - Water Energy Efficiency Programs
 - Data System Management
 - Source Water Protection

Description of Program Activities:

The duties and services provided are required to comply with all applicable legislation and represent those areas of the Works Department which relate directly to the provision and management of the water distribution and supply infrastructure. The activities include: engineering planning and studies, detailed design, construction and asset management and ongoing post commissioning support.

Engineering Planning and Studies

- Develop and implement a comprehensive servicing strategy for the water supply and sanitary sewerage systems throughout the Region through the completion of Official Plan Servicing Studies and providing input into the Development Charges Studies
- Coordinate the use and protection of our valuable groundwater resources through development of wellhead protection areas, review of land uses within these areas, and liaison with neighbouring municipalities on groundwater management practices
- Complete Environmental Assessments, as required, for water supply and sanitary sewerage capital projects prior to Capital Projects proceeding to detailed design and construction
- Provide technical review of applications for new development and comment on availability of water supply and sanitary sewerage services, over-sizing, and ensure that the Region's standards are being met
- Act as Durham Region representatives on various internal and external Committees related to water supply and sanitary sewerage servicing

Environmental Services Design

Plan and implement the rehabilitation/replacement of existing infrastructure in conjunction with Regional and Area Municipality Road programs and independent of road programs. Conduct Asset Management studies to prioritize deficiencies and optimize use of financing for rehabilitation and replacement of existing water supply infrastructure. Design and initiate construction of water supply infrastructure to service existing and new development and in response to new regulations



2019 Program Detail

Works - Water Supply System

Description of Program Activities: (continued)

Construction Management Services

- To provide the administrative services which calculate the budgets for infrastructure projects, develop and award the tenders and oversee the construction projects
- To provide the contract administrative services required to complete the construction activities including the processing and executing of all required project documentation, bonding and insurance, and progress payments
- Fulfilling contract requirements such as issuing substantial and final completion certificates, maintaining statutory, deficiency, maintenance and finishing holdbacks and final contract releases
- To provide required quality control and quality assurance for all construction projects, including topographic surveying and layout, sewer and water infrastructure testing (SWAT), construction inspection, commissioning services, as constructed measurements and maintaining all as constructed drawings, testing of construction materials and providing geotechnical investigations and associated services
- To provide asset management services including the management and monitoring of the Region's infrastructure assets

Development Approvals

- Review and process development applications, including land severances, with minimum delay, ensuring that they meet Regional guidelines and standards and services are sized to meet long range Regional servicing objectives
- Negotiate and prepare draft servicing, subdivision or front ending agreements that are balanced and fair to ensure no adverse financial impact on the Region
- Assess feasibility, request for funding, coordinate collection charges, issue connection applications and payment agreements and initiate the passage of by-laws for Regional residents who request sewer and/or water service
- Co-ordinate the Development Charge collection process with local municipalities and the Finance Department to ensure timely issuance of building permits and adequate cash flow from development for the construction of Regional growth related infrastructure
- Control development to balance available capacities or identify required improvements to accommodate the development by coordinating comments and discussing issues with Local Area Municipalities, other Divisions and Departments

Financial Services

- Coordinate the preparation of the Works Department Annual Operating and Capital Budgets
- Manage and execute transactional items to recover costs from internal programs and divisions as well as outside agencies, developers and other area municipalities related to current and capital programs
- Liaison with the Finance Department and other senior levels of government regarding matters of Budget Management and policy related to funding and expenditures
- Ensure Works staff meet deadlines set by Regional Council and the Finance Department
- Provide clerical and administrative support related to committee reports and official correspondence
- Provide mail and reception services for the Works Department at Regional Headquarters
- Maintain proper inventory of office materials and supplies for staff use



2019 Program Detail

Works - Water Supply System

Description of Program Activities: (continued)

Water Supply Plant Administration

- Assist in the preparation of the Plant Operations budget
- Monitor and approve expenditures in accordance with approved budgets, policies and guidelines
- Manage divisional administrative needs in accordance with agreements, policies, guidelines and legislative requirements
- Develop policies, methods and guidelines for the efficient and effective operation of the Region's Water Supply Plant facilities
- Liaise with government, public and private agencies

Corporate Real Estate

- Negotiate property agreements for the acquisition of lands and property rights necessary for implementation of Regional programs including the construction of road, sanitary sewerage and water
- Co-ordinate the expropriation process where necessary
- Locate and negotiate lease agreements for facilities required by various Regional Departments and coordinate leasehold improvements to the facilities in conjunction with the client and with the Facilities Management Division
- Manage the rental of Region owned properties, including the collection of rent and the disposal of properties no longer required by the Region
- Compile and maintain records on all Region owned property including limited interest such as sanitary sewerage and water supply easements, leases, licenses, permission to enter agreements, pipe crossings and encroachments
- Co-ordinate, plan and schedule the re-registration of easements as directed by Provincial legislation
- Provide title information and cost estimates related to land and leasing, to other Divisions and Departments, as required

Technical Support

A technical working group directing and supporting the following programs:

◆ Sewer-Use By-Law Enforcement:

Enforcement of the Sewer-Use By-law 55-2013, to protect the infrastructure and the treatment facilities, to maintain compliance with regulatory requirements through monitoring, investigation, compliance programs and surcharge agreements and to maintain public/staff safety

◆ Water/Wastewater Treatment Operations:

Provide technical support in areas of treatment operations and design, monitoring and reporting for compliance requirements, response and investigation of consumer concerns and enquiries, training of staff, response to adverse water quality issues and related regulatory notifications

Maintenance Operations:

Provide technical support in areas of maintenance operations, including contract administration of maintenance and rehabilitation programs for watermains, budget preparation, review of new infrastructure to meet Regional Standards, review of new products, procedures, standards and guidelines

Water Energy Efficiency Programs:

The Water Energy Efficiency Program focuses on education of the public and outreach through newsletters, presentations, schools and the Central Lake Ontario Conservation Authority's (CLOCA) Children's Watershed Festival. This program also undertakes innovative water efficiency field studies through partnerships with area municipalities

The Energy Management Group assists plant operation in energy control, and demand reduction projects, conduct energy audits for major energy using Regional Facilities through power monitoring and energy use reduction projects



2019 Program Detail

Works - Water Supply System

Description of Program Activities: (continued)

Data System Management (GIS Group):

 The Data System Management (DSM) maintains the linear infrastructure data of the existing Water Supply, Sanitary Sewerage and Storm Sewer System using leading edge Geographical Information System (GIS) technology and provides services to inside and outside users for all cartographic or inventory needs. DSM develops and maintains applications for convenient data access to infrastructure data

Description of Program Resources:

2019 Full Time Employees 71.4882018 Full Time Employees 70.558

One (1) Senior Project Coordinator in Construction Management Services to aid with design reviews of capital construction projects, review and prepare tenders, project management and quality control. This position will be shared with General Tax and Sanitary Sewerage (0.385 FTE)

One (1) Project Supervisor in Construction Management Services to supervise capital construction for projects in the roads, water supply and sanitary sewerage portfolios. This position will be shared with General Tax and Sanitary Sewerage (0.385 FTE)

Reallocation of resources from Duffin Creek WPCP (0.160 FTE)

Performance Measurements:

- Resources to provide staff for administration/engineering support. Also includes general office expenditures such as telephone costs, office supplies and operating costs
- Resource Management through budgeting and forecasting future needs
- Timely receipt of all regulatory approvals to proceed with the refurbishment and construction of water related infrastructure projects
- Quality control through Construction Inspection and Contract Administration
- Monitoring the state of the water-related linear infrastructure to optimize the maintenance reinvestment required
- Coordination of all related activities including safety, real estate and data management
- Timely delivery of major water supply infrastructure projects to ensure growth and development can proceed as planned
- Minimizing over expenditures and ensuring that optimum value is obtained for all water infrastructure related expenditures
- Implementation of water infrastructure projects in full compliance with all applicable municipal, provincial and federal legislation



2019 Program Detail

Detailed Cost of Program:	of Program: 2018			2019				
(\$,000's)	Estimated	Approved	Base	Program	Proposed			
(\$,000 \$)	Actuals	Budget	Budget	Change	Budget			
Operating Expenses								
Personnel Expenses	7,913	8,363	8,597	134	8,731			
Payroll Maintenance								
Management - Recovery	(3,625)	(3,843)	(3,930)	(56)	(3,986)			
Net Personnel Expenses	4,288	4,520	4,667	78	4,745			
Personnel Related	254	283	284	8	292			
Communications	76	100	100	10	110			
Supplies	48	66	66	-	66			
Computer Maintenance &								
Operations	117	131	131	4	135			
Materials & Services	559	300	301	262	563			
Equipment Maintenance &								
Repairs	152	203	203	_	203			
Vehicle Operations	38	22	22	20	42			
Professional Services	423	521	520	140	660			
Minor Assets & Equipment	2	7	-	4	4			
Contribution to Reserve &	2	•		7	7			
Reserve Funds		2	2	(2)				
Operating Expenses Subtotal	5,957	6,155	6,296	524	6,820			
Operating Expenses Subtotal	5,957	0,155	0,290	324	0,020			
Inter-Departmental Transfers &								
Recoveries								
Corporate Communications								
Charge	162	163	178	3	181			
Corporate IT Charge	169	169	169	-	169			
Corporate HR Charge Works - Regional Environmental	85	85	85	-	85			
Lab Charge	129	149	149	(24)	125			
Recovery - Works - General Tax	(9)	(9)	(9)	(24)	(9)			
Recovery - Regional	(-)	(-)	(-)		(-)			
Environmental Lab	(36)	(36)	(36)	-	(36)			
Inter-Departmental Transfers &								
Recoveries Subtotal	500	521	536	(21)	515			
Gross Operating Expenses	6,457	6,676	6,832	503	7,335			

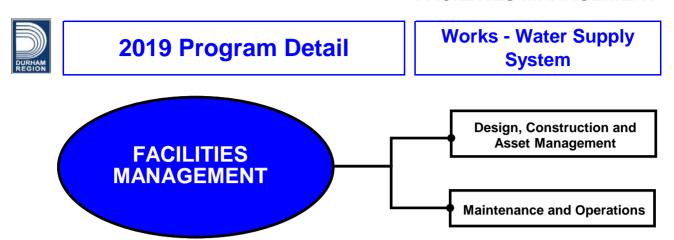


2019 Program Detail

Detailed Cost of Program:	20	18	2019				
(\$,000's)	Estimated	Approved	Base	Program	Proposed		
(ψ,000 3)	Actuals	Budget	Budget	Change	Budget		
Tangible Capital Assets							
New	13	13	-	1	1		
Replacement	285	285	182	-	182		
Total Tangible Capital Assets	298	298	182	1	183		
Total Expenses	6,755	6,974	7,014	504	7,518		
Revenues							
Fees & Service Charges	(554)	(256)	(255)	(296)	(551)		
Sale of Publications	(15)	(15)	(16)	-	(16)		
Sundry Revenue	(181)	(219)	(219)	153	(66)		
Total Revenues	(750)	(490)	(490)	(143)	(633)		
Net Program Expenses	6,005	6,484	6,524	361	6,885		

^{*} Tangible Capital Assets are stated separately on the Program Summary

Net Program Expenses Per Above	6,885
Less: Tangible Capital Assets	(183)
Net Operating Program Expenses Per Program Summary	6,702



Purpose:

- ◆ Provide overall lifecycle management for Regional facilities including:
 - Detailed design and construction of new facilities and leasehold improvements
 - Lifecycle maintenance planning and replacement strategies
 - Ongoing and preventative maintenance and overall operation of Regional facilities, properties and grounds through Regional and contracted forces
 - Centralized security services

Description of Program Activities:

The Region has 215 facilities with an estimated total area of 432,849 square metres (4.7 million square feet), which generate a significant number of repair and maintenance requests over the course of a year. Major Regional facilities with complex heating, ventilation and air conditioning systems and a large number of occupants create a unique and challenging environment for facility related work

Design, Construction and Asset Management

- The Design, Construction and Asset Management unit provides project management services for all facility capital construction and maintenance projects undertaken by the Region, including those delivered for Social Housing, Long-Term Care and Durham Regional Police Service. The Design, Construction and Asset Management unit is responsible for managing all facets of facility construction projects from their inception through to completion
- Office design and staff relocation are constant demands on any organization. The Design, Construction and Asset Management unit provides expertise to plan, supervise and implement these changes in a timely and professional manner with minimal effect on staff and the delivery of their programs
- As facilities age, a greater amount of time and resources is required to maintain them in an acceptable, reliable operating condition, and retain the inherent asset value. The Design, Construction and Asset Management unit is responsible for the Region wide condition and inspection program, which identifies and prioritizes the work required on Regional facilities, providing a life cycle management approach to prioritize state of good repair investments
- Services provided: Functional Review/Scope of Work determination; Budget estimates; Consultant selection; Council approvals as required; Design review oversight and management; Quotation and tenders; Construction management; Move/relocation management; Commissioning of facility; Warranty management; Project closeout; Post occupancy review; Leasehold renovations or office design and relocation services; Computer Assisted Drafting and Design (CAD) services; Long and short term accommodation studies; Maintain databases; Accommodation planning; Implementation of interior renovations; Furniture management



2019 Program Detail

Works - Water Supply System

Description of Program Activities (continued):

Maintenance and Operations

- Water Supply and Water Pollution Control Plants and Pumping Stations, Traffic, Maintenance and Transit Depots, Solid Waste/Recycling locations, Childcare Centres, Paramedic Stations and leased facilities require support, each with special facility maintenance and property needs based on the clientele and use
- All Regional facilities require service contracts to complement the daily operation of the facility so client programs may be delivered effectively, such as boiler/heating/air systems, elevators, backflow prevention, fire and life safety, ground maintenance and custodial/environmental services
- Services provided: Planned preventative maintenance; Contract administration; Occupant support; 24/7
 Emergency response; Custodial services
- In addition to the Region's 215 facilities, the Facilities Management division also looks after the security of the Regional Administration Headquarters building, including access control, security patrol and guard services, and CCTV installation, operation and maintenance
- Services provided: Security access control; Parking management; Response to Emergency Alarm System; Key control administration; Photo I.D. cards; 24/7 response to Security Systems Alarms

Description of Program Resources:

2019 Full Time Employees 20.1692018 Full Time Employees 19.627

Two (2) Technical Assistants to provide support for the administration of corporate facility maintenance contracts. Both of these positions are conversions of long-term temporary resources to permanent full-time positions. These positions are shared with General Tax, Sanitary Sewerage and Solid Waste Management (0.542 FTEs)

Performance Measurements:

- Compliance with all building code standards
- Monitoring of costs
- Investigation and resolution of all requests/complaints



2019 Program Detail

Detailed Cost of Program:	20	18	2019				
(\$,000's)	Estimated	Approved	Base	Program	Proposed		
,	Actuals	Budget	Budget	Change	Budget		
Operating Expenses					_		
Personnel Expenses	2,064	2,193	2,273	-	2,273		
Payroll Maintenance							
Management - Recovery	(503)	(543)	(555)	(12)	(567)		
Net Payroll Expenses	1,561	1,650	1,718	(12)	1,706		
Personnel Related	54	65	65	(1)	64		
Communications	36	19	19	2	21		
Supplies	62	47	47	-	47		
Utilities	139	145	139	-	139		
Computer Maintenance &							
Operations	14	15	15	-	15		
Materials & Services	75	76	76	-	76		
Buildings & Grounds Operations	1,031	1,045	1,301	37	1,338		
Equipment Maintenance &							
Repairs	94	85	85	-	85		
Vehicle Operations	34	41	41	30	71		
Professional Services	87	88	15	_	15		
Contracted Services	177	257	188	(3)	185		
Leased Facilities Expenses	-	-	_	37	37		
Financial Expenses	804	804	833	2	835		
Property Taxes	1,275	1,321	1,286	-	1,286		
Major Repairs & Renovations	284	311	-	121	121		
Operating Expenses Subtotal	5,727	5,969	5,828	213	6,041		
Inter-Departmental Transfers & Recoveries							
Works - General Tax Charge Works - Facilities Management	20	20	20	-	20		
Charge	544	543	542	-	542		
Inter-Departmental Transfers & Recoveries Subtotal	564	563	562	-	562		
Gross Operating Expenses	6,291	6,532	6,390	213	6,603		



2019 Program Detail

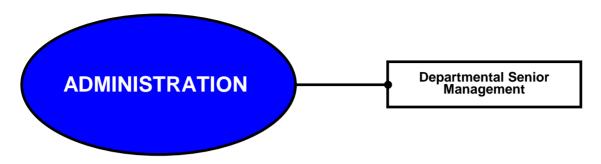
Detailed Cost of Program:	20	18	2019				
(\$,000's)	Estimated	Approved	Base	Program	Proposed		
(φ,000 \$)	Actuals	Budget	Budget	Change	Budget		
Tangible Capital Assets							
New	246	246	-	82	82		
Replacement	1,211	1,211	261	1,355	1,616		
Total Tangible Capital Assets	1,457	1,457	261	1,437	1,698		
Total Expenses	7,748	7,989	6,651	1,650	8,301		
Revenues							
Rents	(11)	(11)	(11)	-	(11)		
Revenue from Municipalities	(18)	(18)	(18)	-	(18)		
Total Revenues	(29)	(29)	(29) -		(29)		
Net Program Expenses	7,719	7,960	6,622	6,622 1,650		1,650 8,27	

^{*} Tangible Capital Assets are stated separately on the Program Summary

Net Program Expenses Per Above	8,272
Less: Tangible Capital Assets	(1,698)
Net Operating Program Expenses Per Program Summary	6,574



Works - Water Supply System



Purpose:

- Provide overall direction and strategic planning for the Works Department with respect to Planning, Design, Construction, Operation and Maintenance of the Region's Water Supply System
- To ensure that all legislated requirements are adhered to and all operations remain in compliance with regulatory bodies

Description of Program Activities:

- Advise the Works Committee, Senior Management and Regional Council on all Works Department related matters
- Manage the operations of the Works Department through its divisions: Construction Management Services, Compliance, Development Approvals, Engineering Planning and Studies, Environmental Services Design, Facilities Management, Financial Services, Maintenance Operations, Plants Operations, Transportation Design, Transportation Infrastructure, Traffic Engineering and Operations, Corporate Real Estate and Solid Waste Management
- Represent the Region's interests with other groups, including Provincial Ministries, other Regions and interest groups
- Provide administrative support to the general operations and special activities of the Works Department
- Coordination of Works Committee reports for presentation to Regional Council related to the Water Supply System

Description of Program Resources:

◆ 2019 Full Time Employees 1.600◆ 2018 Full Time Employees 1.600

PROGRAM 13 ADMINISTRATION



2019 Program Detail

Detailed Cost of Program:	20	18	2019				
(\$,000's)	Estimated Approved Actuals Budget		Base Budget	Program Change	Proposed Budget		
Operating Expenses	- /totadio	Daagot	<u> </u>	Onango	Daagot		
Personnel Expenses	295	296	308	-	308		
Personnel Related	7	8	8	(1)	7		
Net Program Expenses	302	304	316	(1)	315		

PROGRAM 14 TANGIBLE CAPITAL ASSETS PROGRAM SUMMARY



2019 Program Detail

By F	Program	20	18	2019				
(\$,000's)		Estimated	Approved	Base	Program	Proposed		
	(φ,000 δ)	Actuals	Budget	Budget	Change	Budget		
Tang	jible Capital Assets:		_			_		
1W	Facilities Management - New	246	246	-	82	82		
2W	- Replacement	1,211	1,211	261	1,355	1,616		
3W	Fleet/Equipment - New	134	134	-	687	687		
4W	- Replacement	761	761	966	-	966		
5W	Construction of Municipal							
	Services	41,047	41,047	41,047	(2,000)	39,047		
	Tangible Capital Assets							
Program Expenses		43,399	43,399	42,274	124	42,398		
				(\$1,125)				
Sun	nmary of Increase (Decrea	se)		-2.59%		(\$1,001)		
			<u> </u>			-2.31%		



Works - Water Supply Systems

Program Detail Page	Location	Item Description	Item #	Qty	Unit Cost	Gross Total Cost	Water Total	Other Financing	Net Water
05. Depot Operations	Ajax Depot	3 Ton Crew Cab Dump Box Truck	(blank)	2	\$ 150,000	\$300,000	\$150,000	\$0	\$150,000
		Tandem Combination Dump Truck/Snow Plow	(blank)	1	\$ 360,000	\$360,000	\$120,000	\$0	\$120,000
	Orono Depot	Audio Visual Equipment	(blank)	1	\$ 10,500	\$10,500	\$3,500	\$0	\$3,500
		Road Edge Widener	(blank)	1	\$ 58,000	\$58,000	\$19,333	\$0	\$19,333
		Skid Steer	(blank)	1	\$ 87,000	\$87,000	\$29,000	\$0	\$29,000
		Tandem Combination Dump Truck/Snow Plow	(blank)	1	\$ 360,000	\$360,000	\$120,000	\$0	\$120,000
	Oshawa/Whitby Depot	Data Tablets with vehicle mount & software	(blank)	5	\$ 5,500	\$27,500	\$9,167	\$0	\$9,167
		Traffic Control Sign Boards	(blank)	2	\$ 10,000	\$20,000	\$6,666	\$0	\$6,666
	Scugog Depot	Trailer Mounted Brine Emulsion Storage Tank	(blank)	1	\$ 54,000	\$54,000	\$18,000	\$0	\$18,000
		Wood / Brush Chipper	(blank)	1	\$ 45,000	\$45,000	\$15,000	\$0	\$15,000
	Sunderland Depot	Trench Box Top Extension	(blank)	1	\$ 10,500	\$10,500	\$3,500	\$0	\$3,500
06. Plants East	Plants East	Power Workstation	(blank)	1	\$ 3,500	\$3,500	\$3,500	\$0	\$3,500
		SCADA Process Improvements/Controls	(blank)	1	\$ 100,000	\$100,000	\$100,000	\$0	\$100,000
07. Plants Central	Plants Central	Control Room Chairs	(blank)	1	\$ 5,000	\$5,000	\$5,000	\$0	\$5,000
		Standby Power Workstation Desk	(blank)	1	\$ 3,500	\$3,500	\$3,500	\$0	\$3,500
		Thermography Camera	(blank)	1	\$ 20,000	\$20,000	\$20,000	\$0	\$20,000
08. Plants North	Plants North	1/2 Ton Extended Cab Pickup 4x4	(blank)	1	\$ 60,000	\$60,000	\$60,000	\$0	\$60,000
11. Engineering and Staff Support	Construction	Laptop Computer	(blank)	1	\$ 2,442	\$2,442	\$814	\$0	\$814
12. Facilities Management	Ajax WSP	Control room furniture	(blank)	1	\$ 82,000	\$82,000	\$82,000	\$0	\$82,000
Grand Total						\$1,608,942	\$768,980	\$0	\$768,980

Tangible Capital Asset Program Summary

1W Facilities Management - New3W Fleet/Equipment - New

82,000 686,980 **768,980**

Program Detail Page	Location	Item Description	Item #	Qty	Unit Cost	Gross Total Cost	W ater Total	Other Financing	Net W ater
05. Depot Operations	Orono Depot	Data Recorders	(blank)	1	\$ 12,000	\$12,000	\$4,000	\$0	\$4,000
	Oshawa/Whitby								
	Depot	Large Meter Tester	(blank)	1	\$ 12,000	\$12,000	\$4,000	\$0	\$4,000
06. Plants East	Plants East	Chlorine Analyzers	(blank)	3	\$ 10,000	\$30,000	\$30,000	\$0	\$30,000
		Flow Meter Replacement And Maintenance	(blank)	1	\$ 15,000	\$15,000	\$15,000	\$0	\$15,000
		Pump / Motor / Mixer Repair / Replacement	(blank)	1	\$ 50,000	\$50,000	\$50,000	\$0	\$50,000
		Replacement SCADA Equipment	(blank)	1	\$ 25,000	\$25,000	\$25,000	\$0	\$25,000
		SCADA Services - Maintenance	(blank)	1	\$ 100,000	\$100,000	\$100,000	\$0	\$100,000
07. Plants Central	Plants Central	Chlorine Analyzers	(blank)	3	\$ 10,000	\$30,000	\$30,000	\$0	\$30,000
		WATER SCADA Replacements PC/OIT, Support							
		Wan - Obsolete Equipment	(blank)	1	\$ 250,000	\$250,000	\$250,000	\$0	\$250,000
	Whitby WSP	Fluoride Pump Replacement	(blank)	1	\$ 10,000	\$10,000	\$10,000	\$0	\$10,000
08. Plants North	Plants North	Allowance for Spare Parts	(blank)	1	\$ 20,000	\$20,000	\$20,000	\$0	\$20,000
		Chlorine Analyzers	(blank)	2	\$ 10,000	\$20,000	\$20,000	\$0	\$20,000
		CL2 Chlorinator Replacement	(blank)	3	\$ 20,000	\$60,000	\$60,000	\$0	\$60,000
		Flowmeter Replacement	(blank)	1	\$ 15,000	\$15,000	\$15,000	\$0	\$15,000
		Lab/Process Equipment	(blank)	1	\$ 30,000	\$30,000	\$30,000	\$0	\$30,000
	Plants North - Uxbridge Well #6	Automatic Transfer Switch	(blank)	1	\$ 50,000	\$50,000	\$50,000	\$0	\$50,000
	Plants North - Uxville Well	Automatic Transfer Switch	(blank)	1	\$ 50,000	\$50,000	\$50,000	\$0	\$50,000
10. SCADA Systems	Beaverton WSP	Corporate Network Wiring - including VOIP	(blank)	1	\$ 21,000	\$21,000	\$21,000	\$0	\$21,000
11. Engineering and Staff Support	Construction	Nuclear Densometer	(blank)	1	\$ 10,000	\$10,000	\$3,333	\$0	\$3,333
Otan Capport	O G I G II G G I G I I	Office Furniture	(blank)	1	\$ 2,000	\$2,000	\$667	\$0	\$667
	Data System Management	GIS Hardware (Monitors, backup devices and other)	(blank)	1	\$ 10,000	\$10,000	\$5,000	\$0	\$5,000
	Engineering Planning and	,							
	Studies Environmental	Workstation Furniture	(blank)	1	\$ 2,000	\$2,000	\$1,000	\$0	\$1,000
	Services	Workstation Furniture	(blank)	2	\$ 500	\$1,000	\$500	\$0	\$500
	Financial Services	Desktop Computer & Monitor Refresh	(blank)	100	\$ 967	\$96,672	\$25,618	\$0	\$25,618
		Laptop Computer & Monitor Refresh	(blank)	33	\$ 1,781	\$58,767	\$19,589	\$0	\$19,589
		Power Desktop Computer & Monitor Refresh	(blank)	24	\$ 2,188	\$52,508		\$0	\$45,216
		Power Laptop Computer & Monitor Refresh	(blank)	37	\$ 2,697	\$99,776	\$68,765	\$0	\$68,765

TANGIBLE CAPITAL ASSETS - REPLACEMENT



2019 Program Detail

Works - Water Supply Systems

Program Detail Page	Location	Item Description	Item #	Qty	Unit Cost	Gross Total Cost	W ater Total	Other Financing	Net W ater
11. Engineering and	Technical								
Staff Support	Support	Remotely Operated Vehicle	(blank)	1	\$ 25,000	\$25,000	\$12,500	\$0	\$12,500
12. Facilities		Network Upgrades - Voice Over Internet							
Management	Ajax WSP	Protocol	(blank)	1	\$ 240,000	\$240,000	\$240,000	\$0	\$240,000
	Bowmanville								
	WSP	Floor Recoating for High and Low Lift Areas	(blank)	1	\$ 165,000	\$165,000	\$165,000	\$0	\$165,000
		Network Upgrades - Voice Over Internet							
		Protocol	(blank)	1	\$ 130,000	\$130,000	\$130,000	\$0	\$130,000
	Oshawa WSP	Office Furniture	(blank)	1	\$ 39,000	\$39,000	\$39,000	\$0	\$39,000
		Yard and Metering Chamber Drainage Repairs							
		to Prevent Flooding	(blank)	1	\$ 135,000	\$135,000	\$135,000	\$0	\$135,000
	Plants Central -								
	Garrard PS	Exhaust Fan Replacement	(blank)	1	\$ 140,000	\$140,000	\$140,000	\$0	\$140,000
	Plants Central -	·							
	Grandview St.								
	PS	HVAC Upgrades	(blank)	1	\$ 415,000	\$415,000	\$415,000	\$0	\$415,000
	Plants Central -		,			. ,	, ,		
	Rosebank Rd.								
	Reservoir	HVAC Upgrades	(blank)	1	\$ 91,000	\$91,000	\$91,000	\$0	\$91,000
	Plants North	Upgrade Security System	(blank)	1	\$ 86,000	\$86,000	\$86,000	\$0	\$86,000
	Plants North -								
	Cannington								
	Wells 2 & 7	Asbestos Abatement	(blank)	1	\$ 175,000	\$175,000	\$175,000	\$0	\$175,000
Grand Total						\$2,773,723	\$2,582,188	\$0	\$2,582,188

Tangible Capital Asset Program Summary

2W Facilities Management - Replacement4W Fleet/Equipment - Replacement

1,616,000 966,188

2,582,188

PROGRAM 5W TCA - CONSTRUCTION



2019 Program Detail

Detailed Cost of Program:	20	18	2019						
(\$,000's)	Estimated Actuals	Approved Budget	Base Budget	Program Change	Proposed Budget				
Tangible Capital Assets									
Capital Fund Contribution	41,047	41,047	41,047	(2,000)	39,047				
Total Tangible Capital Assets	41,047	41,047	41,047	(2,000)	39,047				

						Cost Expenditure Attribution (\$000,'s)						
	Project Description	DC Item No.	EA Land Design Const.	Gross Cost A	Grant/ Subsidy/ Other B	User Benefit to Existing C	Revenue Total User Revenue D	Commercial Development Charges E	Residential Development Charges F	Institutional Charges G	Industrial Charges H	Asset Management Reserve Fund
A	LINEAR INFRASTRUCTURE											
	Regional Road Program											
* 1			D	200	0.000	200.000		0.000	0.000	0.000		
5			D,C	450	0.000	450.000		0.000	0.000	0.000		0.000
* 6	, , ,		С	200	0.000	200.000		0.000	0.000	0.000		
* 9			D	200	0.000	200.000		0.000	0.000	0.000		
* 1	, , , , , , , , , , , , , , , , , , , ,		D,C	1,100	0.000			0.000	0.000	0.000		
	Sub-total Area Municipality Road Programs			2,150	0.000	ŕ	·	0.000	0.000	0.000		
	A City of Pickering Road Program		D,C	600	0.000	600.000	600.000	0.000	0.000	0.000		0.000
	B Town of Ajax Road Program		D,C	2,500	0.000			0.000	0.000	0.000		0.000
	C Town of Whitby Road Program		D,C	1,350	0.000			0.000	0.000	0.000		
	City of Oshawa Road Program		D,C	500	0.000	500.000		0.000	0.000	0.000		
	Municipality of Clarington Road Program		D,C	1,500	0.000	,		0.000	0.000	0.000		
	F Township of Scugog Road Program		D,C	0	0.000	0.000	0.000	0.000	0.000	0.000		
	G Township of Uxbridge Road Program		D,C	240	0.000	240.000		0.000	0.000	0.000		
17	H Township of Brock Road Program		D,C	0	0.000	0.000	0.000	0.000	0.000	0.000		
17	Allowance for unknown requirements in conjunction with area municipality road programs		D,C	200	0.000	200.000	200.000	0.000	0.000	0.000	0.000	0.000
	Sub-total			6,890	0.000	6,890.000	6,890.000	0.000	0.000	0.000	0.000	0.000
	MTO & GO Transit projects											
* 19	Watermain replacement at Brock St for bridge works.		С	400	0.000	400.000		0.000	0.000	0.000		0.000
* 20	Watermain replacement at Simcoe St./Albert St. & Hwy 401, Oshawa		D	200	0.000	200.000	200.000	0.000	0.000	0.000	0.000	0.000
	Sub-total			600	0.000	600.000	600.000	0.000	0.000	0.000	0.000	0.000
	Betterments/Replacement											
2	1 0		D,C	628	0.000	627.693	627.693	0.000	0.000	0.000		
22			D,C	2,000	0.000			0.000	0.000	0.000		
* 23			С	1,500	0.000			0.000	0.000	0.000		
* 29			D	120	0.000	120.000		0.000	0.000	0.000		
* 30	, ,		D	50	0.000	50.000		0.000	0.000	0.000		
* 3	, , ,		D,C	40	0.000	0.000		0.000	0.000	0.000		
* 32	Replacement of wm on Sherwoood Rd. fr Windsor Dr. to dead-end, Ajax		D,C	355	0.000	0.000	0.000	0.000	0.000	0.000		
	Replacement of wm on Cameron St. fr Elizabeth St. to Windsor Dr., Ajax		С	360	0.000			0.000		0.000		
	Replacement of wm on Windsor Dr. fr Old Kingston Rd. to Cameron St., Ajax		С	410	0.000			0.000		0.000		
	Replacement of wm on Thickson Rd. fr William Smith Dr. to 60 m S, Whitby		D,C	220	0.000	0.000		0.000	0.000	0.000		
	Replacement of wm on Harmony Rd. fr Adelaide Ave. to 200 m north, Oshawa		D,C	200	0.000	200.000		0.000	0.000	0.000		
	Replacement of wm on RR 2A (Centre St) and Simcoe St., Oshawa		D,C	1,740	0.000	0.000		0.000	0.000	0.000		
	Replacement of wm on Simcoe St. from Bloor St. to Erie St., Oshawa		D	100	0.000	0.000		0.000	0.000	0.000		
	Replacement of wm on Montrave Ave. and Pacific Ave., Oshawa		С	410	0.000	0.000		0.000	0.000	0.000		
* 5	Replacement of wm on Olive Ave. from Simcoe St. to Drew St., Oshawa		D	250	0.000	250.000	250.000	0.000		0.000		
* 58	Replacement of FM on Ritson Rd. from Valve Chamber to Kawartha, Oshawa		D	500	0.000	500.000	500.000	0.000	0.000	0.000	0.000	0.000
60	Replacement of wm on Grassmere Ave. from W/L to Ritson Rd., Oshawa		D,C	645	0.000	645.000	645.000	0.000	0.000	0.000	0.000	0.000

					Cost Expenditure Attribution (\$000,'s)						
Project Description	DC Item No.	EA Land Design Const.	Gross Cost A	Grant/ Subsidy/ Other B	Benefit to Existing C	Revenue Total User Revenue D	Commercial Development Charges E	Residential Development Charges F	Institutional Charges G	Industrial Charges H	Asset Management Reserve Fund I
64 Replacement of wm on Grenfell St. from Marland Ave. to Gibb St., Oshawa		D,C	420	0.000	420.000	420.000	0.000	0.000	0.000		0.000
65 Replacement of wm on Marland Ave. from Grenfell St. to Park Rd. S, Oshawa		D,C	400	0.000	400.000	400.000	0.000	0.000	0.000		0.000
* 71 Replacement of wm on Caleb St. from Clarke St. to Queen St., Port Perry		D,C	350	0.000	0.000	0.000	0.000	0.000	0.000		350.000
73 Replacement of wm on Bigelow St. from Kellett St. to 100 m north, Port Perry		D,C	150	0.000	0.000	0.000	0.000	0.000	0.000		150.000
 74 Replacement of wm on Kellett/Beech St. fr Bigelow St. to Kent St., Port Perry 		D	60	0.000	0.000	0.000	0.000	0.000	0.000		60.000
* 82 Replacement of wm on Simcoe St from Union St to 480 m South, Beaverton		D	100	0.000	0.000	0.000	0.000	0.000	0.000		100.000
* 84 Replacement of wm on Bay St. from Union St. to Osborne St., Beaverton		D	80	0.000	0.000	0.000	0.000	0.000	0.000		80.000
* 85 Replacement of wm on Bay St. from Osborne St. to Mill St., Beaverton		D	60	0.000	0.000	0.000	0.000	0.000	0.000	0.000	60.000
* 86 Replacement of wm on Church St. from Osborne St. to Mill St., Beaverton		D	70	0.000	0.000	0.000	0.000	0.000	0.000		70.000
* 87 Replacement of wm on Mill St. from Church St. to Bay St., Beaverton		D	60	0.000	0.000	0.000	0.000	0.000	0.000		60.000
* 88 Replacement of wm on Bay St. from Mill St. to Main St., Beaverton		D	70	0.000	0.000	0.000	0.000	0.000	0.000	0.000	70.000
Sub-total System Expansion			11,348	0.000	6,712.693	6,712.693	0.000	0.000	0.000	0.000	4,635.000
* 96 Zone 1 FM on Rossland Rd. from Church St. to Westney Rd, Ajax	104	D,C	8,350	2,952.560	0.000	0.000	118.570	4,727.770	5.010	546.090	0.000
* 97 Zone 1 FM on Harwood Ave from Kerrison Dr. to Rossland Rd., Ajax	103	Ċ	4,100	1,535.860	0.000	0.000	56.170	2,246.390	2.460	259.120	0.000
* 99 Zone 2 FM on William Jackson Dr. & Taunton Rd., Ajax	106	D	400	0.000	0.000	0.000	8.800	350.400	0.400		0.000
* 101 Zone 1 FM from Whithy WSP to Thornton Rd, Whithy/Oshawa	215	C	3,000	0.000	0.000	0.000	66.000	2,628.000	3.000		0.000
* 107 Zone 4 FM from Thickson Rd. PS to Reservoir, Whitby	236	D	1,600	0.000	0.000	0.000	35.200	1,401.600	1.600		0.000
* 108 Zone 4 FM on Brawley Rd. from Ashburn Rd. to Duffs Rd., Whitby	237	D	600	0.000	0.000	0.000	13.200	525.600	0.600		0.000
* 112 Zone 1 FM on Bloor St. from Ritson Rd.to Wilson Rd., Oshawa	219	D,C	5,500	0.000	0.000	0.000	121.000	4,818.000	5.500		0.000
* 114 Zone 3 FM on Conlin Rd. from Garrard Rd. PS. to Ritson Rd., Whitby/Oshawa	230	D,C	18,300	0.000	0.000	0.000	402.600	16,030.800	18.300		0.000
* 116 Zone 3 FM on Harmony Rd. from Coldstream to 400 m S of Conlin, Oshawa	229	D,C	3,460	0.000	0.000	0.000	76.120	3,030.960	3.460		0.000
* 118 Zone 4 FM on Harmony Rd. from Greenhill to 400 m S Conlin Rd., Oshawa	231	D,C	640	0.000	0.000	0.000	14.080	560.640			0.000
* 120 Zone 4 FM from PS to Zone 4 Reservoir, Oshawa	235	D,C	1,000	0.000	0.000	0.000	22.000	876.000	1.000		0.000
* 123 Zone 2 FM on Bloor St from Townline Rd. to Trulls, Courtice	224	D,C	6,250	0.000	0.000	0.000	137.500	5,475.000	6.250		0.000
* 124 Courtice Zone 1 feedermain - Phase 3 Courtice	220	C C	4,200	0.000	0.000	0.000	92.400	3,679.200	4.200		0.000
* 126 Zone 1 FM on Prestonvale Rd from Baseline Rd to 950m N., Courtice	223	D	350	0.000	0.000	0.000	7.700	306.600	0.350		0.000
Sub-total	223	D	57,750	4,488.420		0.000	1,171.340	46,656.960	52.770		0.000
Other Linear Infrastructure			0.400	0.000	0.400.000						
137 Replacement of meters	1	С	3,100	0.000		3,100.000	0.000	0.000	0.000		0.000
138 Depots - Replacement of Polybutylene service connections	1	С	300	0.000		300.000	0.000	0.000	0.000		0.000
139 Depots - Replacement of Lead service connections		D,C	1,000	0.000		1,000.000	0.000	0.000	0.000		0.000
140 Replacement of valves		С	200	0.000	200.000	200.000	0.000	0.000	0.000		0.000
141 Replacement of hydrants	ļ	С	160	0.000	160.000	160.000	0.000	0.000	0.000		0.000
Sub-total			4,760	0.000	4,760.000	4,760.000	0.000	0.000	0.000	0.000	0.000
B BUILDINGS											
* 143 Ajax WSP- expansion joint rehabilitation work, Ajax		D	340	0.000	340.000	340.000	0.000	0.000	0.000	0.000	0.000
* 144 Proposed Ajax Zone 1 water storage facility, 11 ML, Ajax	101	EA	200	0.000	0.000	0.000	4.400	175.200	0.200	20.200	0.000
* 148 Garrard Rd. Zone 3 WPS - upgrades , Whitby	207	D	260	0.000	0.000	0.000	5.720	227.760	0.260	26.260	0.000
* 150 Proposed Zone 4 water pumping station, Whitby	212	D	500	0.000	0.000	0.000	11.000	438.000	0.500	50.500	0.000
* 151 Proposed Whitby Zone 4 Storage Facility, Whitby	205	D	500	0.000	60.000	60.000	9.650	385.500	0.450		0.000
* 157 Proposed Zone 4 water pumping station at Harmony Rd. Reservoir, Oshawa	208	D	500	0.000	66.500	66.500	9.550	379.500			0.000
* 158 Proposed Oshawa Zone 4 Storage facility, Oshawa	214	D	500	0.000	85.000		9.115				
* 163 Concession St. Water Pumping Station expansion, Bowmanville	303	D	600	0.000			12.420				

						Cost Expenditure Attribution (\$000,'s)						
							_					
		-	EA		0	User	Revenue		B			Asset
	Desired Description	DC	Land	0	Grant/	D	Total	Commercial	Residential	l	la de atala l	Management
	Project Description	Item	Design	Gross	Subsidy/	Benefit to	User	Development	Development	Institutional	Industrial	Reserve
		No.	Const.	Cost	Other	Existing	Revenue	Charges	Charges	Charges	Charges	Fund
+ /	104 December 17-1- 0 Wester December 25-1- 4 December 18-1-	304	D	A 550	B 0.000	C 33.000	D 33.000	E 11.385	F 450.050	G 0.495	H 52.470	0.000
	164 Proposed Zone 2 Water Pumping Station at Zone 1 Reservoir, Bowmanville 166 Newcastle Water Supply Plant expansion, Newcastle	311	С	10.240	0.000		3.532.800	430.080	452.650 4.270.080	30.720	1.976.320	0.000
	167 Proposed Zone 1 reservoir. Newcastle	312	D	900	0.000	48.600	48.600	18.630	746.100	0.810	85.860	0.000
	168 Proposed Zone Treservoir, Newcastie	315	D	500	0.000		71.000	9.400	376.000	0.400	43.200	0.000
	176 Sunderland New well and pumphouse w/standby power, Brock	602	D.C	600	0.000		483.000	7.500	74.400	0.400	34.620	0.000
		002	D,C	150	0.000	0.000	0.000	0.000	0.000	0.460	0.000	150.000
	 184 Water Storage Facilities condition assessments and rehabilitation works 185 Wellhead protection at Regional well sites 	900	, -	800	0.000		800.000	0.000	0.000	0.000	0.000	0.000
-	Sub-total	800	D,C	17,140	0.000		5,555.900	538.850	8,382.490	35.715	2,477.045	150.000
	Sub-total			17,140	0.000	5,555.900	5,555.900	536.650	0,302.490	35.715	2,477.045	150.000
С	MACHINERY AND EQUIPMENT											
	186 Regional Environmental Laboratory Upgrades, Pickering	1	С	650	325.000		0.000	8.775	285.350	1.300	29.575	0.000
	187 Finch Ave. Elevated Water Storage Tank Recoating, Pickering	1	D	120	0.000		120.000	0.000	0.000	0.000	0.000	0.000
	190 Thickson Rd. WPS - replacement of the motor control centre, Whitby		D,C	250	0.000		250.000	0.000	0.000	0.000	0.000	0.000
	193 Oshawa Water Supply Plant - Valve Chamber Upgrades		D	100	0.000	100.000	100.000	0.000	0.000	0.000	0.000	0.000
	194 Oshawa Water Supply Plant - Header, valve and piping replacement, Oshawa		D	400	0.000	400.000	400.000	0.000	0.000	0.000	0.000	0.000
	196 Oshawa Water Supply Plant- Filter rehabilitation works Phase 2		С	2,500	0.000		2,500.000	0.000	0.000	0.000	0.000	0.000
	199 Hortop Reservoir replacement of Fill and Check Valves, Oshawa		D,C	150	0.000	150.000	150.000	0.000	0.000	0.000	0.000	0.000
	200 Bowmanville WSP - Condition Assessment/Process Study, Bowmanville		D	300	0.000	300.000	300.000	0.000	0.000	0.000	0.000	0.000
	201 Bowmanville Water Supply Plant - disinfection upgrades		D	100	0.000	100.000	100.000	0.000	0.000	0.000	0.000	0.000
	202 Bowmanville Water Supply Plant - Header and pump replacement		D,C	450	0.000	450.000	450.000	0.000	0.000	0.000	0.000	0.000
	206 Orono Standpipe - recoating, Orono		С	400	0.000	400.000	400.000	0.000	0.000	0.000	0.000	0.000
	211 Blackstock Water Supply System - Header and associated piping replacement		D,C	100	0.000	100.000	100.000	0.000	0.000	0.000	0.000	0.000
	214 Beaverton Water Supply Plant - Chlorine line replacement		D,C	300	0.000	300.000	300.000	0.000	0.000	0.000	0.000	0.000
* 2	215 Automatic bulk water dispensing system		D,C	440	0.000	440.000	440.000	0.000	0.000	0.000	0.000	0.000
	Sub-total			6,260	325.000	5,610.000	5,610.000	8.775	285.350	1.300	29.575	0.000
D	IT INFRASTRUCTURE											
	Sub-total			0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
E	ALLOWANCES AND OTHER PROVISIONS											
2	220 Asset Condition Assessment/Investigation transmission pipe		D	200	0.000	0.000	0.000	0.000	0.000	0.000	0.000	200.000
	222 Allowance for acquisition of easements		D,C	150	0.000	150.000	150.000	0.000	0.000	0.000	0.000	0.000
	223 Allowance for engineering studies		D,C	150	0.000		150.000	0.000	0.000	0.000	0.000	0.000
	225 Preliminary Engineering		D	100	0.000	100.000	100.000	0.000	0.000	0.000	0.000	0.000
2	226 Allowance for sundry extensions as per council policy		D,C	15	0.000	15.000	15.000	0.000	0.000	0.000	0.000	0.000
	227 Allowance for unknown requirements		D,C	100	0.000	100.000	100.000	0.000	0.000	0.000	0.000	0.000
2	228 Allowance for land severance review and drawing requirements		D,C	100	0.000	100.000	100.000	0.000	0.000	0.000	0.000	0.000
2	229 Allowance for Regional share for works in conjunction with	708	D,C	1,460	0.000	0.000	0.000	39.420	1,281.880	5.840	132.860	0.000
	residential subdivision development	<u> </u>										
2	230 Allowance for Regional share for works in conjunction with	706	D,C	400	0.000	0.000	0.000	10.800	351.200	1.600	36.400	0.000
	non-residential development	<u> </u>										
2	231 Well interference works		D	400	0.000	0.000	0.000	0.000	400.000	0.000	0.000	0.000
	Sub-total			3,075	0.000	615.000	615.000	50.220	2,033.080	7.440	169.260	200.000
	Total Cost Attribution			109,973	4,813.420	32,893.593	32,893.593	1,769.185	57,357.880	97.225	8,056.390	4,985.000

					Cost Expenditure (\$000,'s				ttribution				
Project Description	DC Item No.	EA Land Design Const.	Gross Cost A	Grant/ Subsidy/ Other B	User I Benefit to Existing C	Revenue Total User Revenue D	Commercial Development Charges E	Residential Development Charges F	Institutional Charges G	Industrial Charges H	Asset Management Reserve Fund I		
DC Revenue Shortfall to be financed from User Revenue				0.000	0.000	0.450.045	0.000	0.000	07.005	0.050.000	0.000		
Institutional Charges and Industrial Charges Subtotal:				0.000	0.000	8,153.615	0.000	0.000	97.225 0.000	8,056.390 0.000	0.000		
Cubicial.				0.000					0.000	0.000	-		
Rate Stabilization Fund													
Newcastle Water Supply Plant expansion, Newcastle (Item No. 166)				2,000.000	0.000	-2,000.000		0.000	0.000	0.000	0.000		
				2,000.000	0.000	-2,000.000	0.000	0.000	0.000	0.000	0.000		
Other Financing - Seaton Landowners Feedermain on Rossland Rd. from Church St. to Westney Rd., Ajax (Item No. 96) Feedermain on Harwood Ave from Rossland Rd. to Magill Dr., Ajax (Item No. 97) Subtotal:				2,952.560 1,535.860 4,488.420	0.000 0.000 0.000	0.000 0.000 0.000	0.000 0.000 0.000	0.000 0.000 0.000	0.000 0.000 0.000	0.000 0.000 0.000	0.000 0.000 0.000		
Other Financing - Regional Municipality of York: Regional Environmental Laboratory Upgrades (Item No. 186) Subtotal:				325.000 325.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000		
Total Financing (including available Development Charge financing)				6,813.420		39,047.208	1,769.185	57,357.880	0.000	0.000	4,985.000		

N * Indicates Capital project requires prior and/or future funding commitments. Refer to Construction of Municipal Services detail sheet.

					Cost Expenditure Attribution (\$000,'s)							
Project Description	DC Item No.	EA Land Design Const.	Gross Cost A	Grant/ Subsidy/ Other B	User R Benefit to Existing C	evenue Total User Revenue D	Commercial Development Charges E	Residential Development Charges	Institutional Charges G	Industrial Charges H	Asset Management Reserve Fund I	
A LINEAR INFRASTRUCTURE												
Regional Road Program												
* 2 R.R. 26 (Thickson Rd.) from Wentworth St. to C.N.R. bridge, Whitby		С	180	0.000	180.000	180.000	0.000	0.000	0.000	0.000	0.000	
* 9 R.R. 56 (Farewell St.) from Marwood Dr. to Wenthworth St., Oshawa		С	540	0.000	540.000	540.000	0.000	0.000	0.000	0.000	0.000	
* 10 R.R. 57 (Bowmanville Ave.) from Baseline Rd. to Nash Rd., Bowmanville		С	385	0.000	385.000	385.000	0.000	0.000	0.000	0.000	0.000	
14 R.R. 60 (Wentworth St.) from Cedar St. to Farewell St., Oshawa		С	1,350	0.000	1,350.000	1,350.000	0.000	0.000	0.000	0.000	0.000	
Sub-total Area Municipality Road Programs			2,455	0.000	2,455.000	2,455.000	0.000	0.000	0.000	0.000	0.000	
17A City of Pickering Road Program		D,C	275	0.000	275.000	275.000	0.000	0.000	0.000	0.000	0.000	
17B Town of Ajax Road Program		D,C	200	0.000	200.000	200.000	0.000	0.000	0.000		0.000	
17C Town of Whitby Road Program		D,C	620	0.000	620.000	620.000	0.000	0.000	0.000		0.000	
17D City of Oshawa Road Program 17E Municipality of Clarington Road Program		D,C D,C	1,100 370	0.000	1,100.000 370.000	1,100.000 370.000	0.000 0.000	0.000	0.000	0.000	0.000	
17E Multicipality of Clarington Road Program 17F Township of Scugog Road Program		D,C	130	0.000	130.000	130.000	0.000	0.000	0.000	0.000	0.000	
17G Township of Scugog Road Program		D,C	270	0.000	270.000	270.000	0.000	0.000	0.000	0.000	0.000	
17H Township of Brock Road Program		D,C	250	0.000	250.000	250.000	0.000	0.000	0.000	0.000	0.000	
17i Allowance for unknown requirements in conjunction		D,C	200	0.000	200.000	200.000	0.000	0.000	0.000			
with area municipality road programs		,										
Sub-total MTO & GO Transit projects			3,415	0.000	3,415.000	3,415.000	0.000	0.000	0.000	0.000	0.000	
* 18 Allowance for unknown requirements		D,C	100	0.000	100.000	100.000	0.000	0.000	0.000	0.000	0.000	
20 Watermain replacement at Simcoe St./Albert St. & Hwy 401, Oshawa		Ċ	2,000	0.000	2,000.000	2,000.000	0.000	0.000	0.000	0.000	0.000	
Sub-total Betterments/Replacement			2,100	0.000	2,100.000	2,100.000	0.000	0.000				
21 Works independent of road programs in various locations		D,C	800	0.000	800.000	800.000	0.000	0.000	0.000	0.000	0.000	
22 Rehabilitation of existing watermains in various locations		D,C	2,000	0.000	2,000.000	2,000.000	0.000	0.000	0.000	0.000	0.000	
28 Replacement of wm on Krosno Blvd fr Liverpool Rd to Fanshaw Pl, Pickeri		D	200	0.000	0.000	0.000	0.000	0.000	0.000	0.000	200.000	
29 Replacement of wm on Pickering Beach Rd fr Foord Rd to Hewitt Cres, Aj.30 Watermain Extension on Achillies Rd from Salem Rd. to 100 m W, Ajax	ax	C	450 150	0.000	450.000 150.000	450.000 150.000	0.000 0.000	0.000	0.000	0.000	0.000 0.000	
31 Replacement of wm on Linton Ave from Kearney Dr to Old Kingston, Ajax		C	410	0.000	0.000	0.000	0.000	0.000	0.000	0.000	410.000	
32 Replacement of wm on Sherwoood from Windsor to dead-end, Ajax		C	665	0.000	0.000	0.000	0.000	0.000	0.000	0.000	665.000	
46 Replacement of wm on Simcoe St from Bloor St to Erie St, Oshawa		C	1,200	0.000	0.000	0.000	0.000	0.000				
54 Replacement of wm on Farewell St from CNR to Bloor St, Oshawa		C	130				0.000	0.000				
57 Replacement of wm on Olive Ave from Simcoe St to Drew St, Oshawa		C	930	0.000	930.000	930.000	0.000	0.000				
59 Replacement of wm on Ritson Rd fr Kawartha Ave to Grassmere Crt, Osha		С	820	0.000	820.000	820.000	0.000	0.000				
68 Replacement of wm on North St. fr Wilmot St to Concession Rd 3, Newcas		D	300	0.000	0.000	0.000	6.600	262.800				
74 Replacement of wm on Kellett/Bigelow St fr Simcoe St to Kent St, Port Per	•	С	405	0.000	0.000	0.000	0.000	0.000				
82 Replacement of wm on Simcoe St from Union St to 480 m South, Beaverto	on	С	660	0.000	0.000	0.000	0.000	0.000				
89 Replacement of wm on Simcoe St from CNR to John St, Beaverton	ın.	D	250	0.000	0.000	0.000	0.000	0.000	0.000			
90 Replacement of wm on Simcoe St from Beaverton WSP to CNR, Beaverto 91 Replacement of wm on James St fr Main St to Centre St/Highland, Beaver		D,C D,C	435 300	0.000	0.000	0.000	0.000 0.000	0.000	0.000			
94 Allowance for construction of services in unserviced areas	1011	C C	200	0.000	200.000	200.000	0.000	0.000				

		1									
							Cost	Expenditure Attr (\$000,'s)	ribution		
		EA			User R						Asset
Project Description	DC Item No.	Land Design	Gross	Grant/ Subsidy/ Other	Benefit to	Total User	Commercial Development	Residential Development	Institutional	Industrial	Management Reserve
	NO.	Const.	Cost A	B	Existing C	Revenue D	Charges E	Charges F	Charges G	Charges H	Fund I
Sub-total			10,305	0.000	5,350.000	5,350.000	6.600	262.800	0.300	30.300	4,655.000
System Expansion											
* 104 Zone 3 FM on Conlin Rd from Anderson St. to Garrard Rd PS, Whitby	225	С	4,000		0.000	0.000	88.000	3,504.000	4.000	404.000	0.000
 106 Zone 3 FM on Anderson St. from Conlin Rd. to Clair Ave., Whitby 	227	D	500		0.000	0.000	11.000	438.000	0.500	50.500	0.000
* 113 WM modifications in conjunction w/Harmony Creek sewer, Oshawa		С	150		150.000	150.000	0.000	0.000	0.000	0.000	0.000
* 125 Zone 1 FM on Baseline Rd from Prestonvale Rd to Trulls Rd, Clarington	221	С	2,800	0.000	0.000	0.000	61.600	2,452.800	2.800	282.800	0.000
* 127 Zone 1 FM on easement from Townline Rd to Prestonvale Rd, Courtice	222	D	500	0.000	0.000	0.000	11.000	438.000	0.500	50.500	0.000
* 128 Zone 1 FM on Lambs Rd. from Hwy 2 to Liberty Res, Bowmanville	307	C	12,400	0.000	0.000	0.000	272.800	10,862.400	12.400	1,252.400	0.000
 129 Zone 1 FM on Baseline Rd from Martin Rd. to Liberty St., Bowmanville 134 Zone 1 FM on King Ave. from Rudell Rd to 200m N., Newcastle 	308 316	C	4,500 1,300	0.000	0.000	0.000	99.000 28.600	3,942.000 1,138.800	4.500 1.300	454.500 131.300	0.000
* 136 WM on Grady Dr fr Whitehand Cres to North St, Newcastle	310	D	100	0.000	100.000	100.000	0.000	0.000	0.000	0.000	0.000
Sub-total			26,250		250.000	250.000	572.000	22,776.000	26.000	2,626.000	0.000
Other Linear Infrastructure											
137 Replacement of meters		С	3,100	0.000	3,100.000	3,100.000	0.000	0.000	0.000	0.000	0.000
139 Depots - Replacement of Lead service connections		D,C	1,000	0.000	1,000.000	1,000.000	0.000	0.000	0.000	0.000	0.000
140 Replacement of valves		C	200	0.000	200.000	200.000	0.000	0.000	0.000	0.000	0.000
141 Replacement of hydrants		С	160	0.000	160.000	160.000	0.000	0.000	0.000	0.000	0.000
Sub-total Sub-total			4,460	0.000	4,460.000	4,460.000	0.000	0.000	0.000	0.000	0.000
B BUILDINGS											
* 142 Ajax WSP expansion from 163.6 to 327 MLD, Ajax	100	EA	1,500	840.000	495.000	495.000	10.530	105.150	0.660	48.660	0.000
* 143 Ajax WSP- expansion joint rehabilitation work, Ajax		С	4,000	0.000	4,000.000	4,000.000	0.000	0.000	0.000	0.000	0.000
* 144 Proposed Ajax Zone 1 water storage facility, 11 ML, Ajax	101	EA	600	0.000	0.000	0.000	13.200	525.600	0.600	60.600	0.000
* 145 Whitby WSP expansion from 109 to 218 MLD, Whitby	200	D	2,000	0.000	116.000	116.000	120.400	1,200.000	7.600	556.000	0.000
148 Garrard Rd. Zone 3 WPS - upgrades , Whitby	207	С	1,140	0.000	0.000	0.000	25.080	998.640	1.140	115.140	0.000
* 161 Bowmanville WSP Expansion from 36 to 55 MLD, Bowmanville	300	EA	500	0.000	37.500	37.500	29.550	294.500	1.850	136.600	0.000
 162 Liberty St. Zone 1 reservoir and abandon existing elevated tank 	301	С	11,600	0.000	2,772.400	2,772.400	192.560	7,737.200	9.280	888.560	0.000
* 163 Concession St. WPS expansion, Bowmanville	303	С	5,000	0.000	300.000	300.000	103.500	4,115.000	4.500	477.000	0.000
* 164 Proposed Zone 2 Water Pumping Station at Z1 Reservoir, Bowmanville	304	С	8,000	0.000	480.000	480.000	165.600	6,584.000	7.200	763.200	0.000
* 174 New Well and pumphouse, Uxbridge	500	D	620	0.000	0.000	0.000	39.680	394.940	2.480	182.900	0.000
* 176 Sunderland New well and pumphouse w/standby power, Brock	602 600	С	500	0.000	402.500 4,432.500	402.500 4,432.500	6.250	62.000	0.400	28.850	0.000 0.000
* 179 Cannington New Well and pumphouse, Brock * 185 Wellhead protection at Regional well sites	800	D,C	4,500 800	0.000	800.000	800.000	4.050 0.000	45.000 0.000	0.450 0.000	18.000 0.000	0.000
Sub-total	800	D,C	40,760		13,835.900	13,835.900	710.400	22,062.030	36.160	3,275.510	0.000
C MACHINERY AND EQUIPMENT			,			,		·		,	
* 187 Finch Ave. Elevated Water Storage Tank Recoating, Pickering		С	500		500.000	500.000					
* 192 Grandview Water Pumping Station upgrades, Oshawa		D	150		150.000	150.000		0.000		0.000	0.000
* 194 Oshawa WSP- Header, valve and piping replacement, Oshawa		С	1,600		1,600.000	1,600.000		0.000		0.000	0.000
* 197 Oshawa WSP - upgrades to the UPS		С	700		700.000	700.000	0.000	0.000	0.000	0.000	0.000
* 198 Waverly Rd. WPS - upgrades, Oshawa		D	150		150.000	150.000	0.000	0.000	0.000	0.000	0.000
* 201 Bowmanville WSP - disinfection upgrades		С	570		570.000	570.000	0.000	0.000	0.000	0.000	0.000
203 Bowmanville WSP-Replacement of the Standby power 204 Concession St. WPS- station upgrades		С	1,650 150	0.000	1,650.000	1,650.000 150.000	0.000	0.000	0.000	0.000	0.000 0.000
204 Concession St. WPS- station upgrades 205 Newtonville WPS- Station upgrades		D D	100		150.000 100.000	150.000		0.000	0.000	0.000	0.000
205 Newtonville WPS- Station upgrades 208 Mill St. WPS - Station upgrades, Orono		D	100		100.000	100.000		0.000		0.000	0.000
200 Hill Ot. WI O - Otation appraised, O10110	1		100	0.000	100.000	100.000	0.000	0.000	0.000	0.000	0.000

						Cost Expenditure Attribution (\$000,'s)						
Project Description		DC Item No.	EA Land Design Const.	Gross Cost A	Grant/ Subsidy/ Other B	User R Benefit to Existing C	Total User Revenue D	Commercial Development Charges E	Residential Development Charges F	Institutional Charges G	Industrial Charges H	Asset Management Reserve Fund I
 209 Greenbank WSS - upgrad 			D,C	500	0.000	500.000	500.000	0.000	0.000	0.000	0.000	0.000
 210 Port Perry WSS - MW No. 			С	2,200	0.000	2,200.000	2,200.000	0.000	0.000	0.000	0.000	0.000
* 213 Beaverton WSP - Station			С	2,500	0.000	2,500.000	2,500.000	0.000	0.000	0.000	0.000	0.000
 215 Automatic bulk water dispersion 	ensing system		D,C	440	0.000	440.000	440.000	0.000	0.000	0.000	0.000	0.000
Sub-total D IT INFRASTRUCTURE				11,310	0.000	,,,	11,310.000	0.000	0.000	0.000	0.000	0.000
 216 Plant SCADA system upg 	rades	700	С	5,000	0.000	3,150.000	3,150.000	148.000	1,189.500	20.500	492.000	0.000
Sub-total E ALLOWANCES AND OTI	HER PROVISIONS			5,000	0.000	3,150.000	3,150.000	148.000	1,189.500	20.500	492.000	0.000
218 Emergency Planning			D	100	0.000	100.000	100.000	0.000	0.000	0.000	0.000	0.000
219 Asset Condition Assessme			D	230	0.000	0.000	0.000	0.000	0.000	0.000	0.000	230.000
	ent/Investigation transmission pipe		D	100	0.000	0.000	0.000	0.000	0.000	0.000	0.000	100.000
221 Master Planning energy m			D	200	0.000	200.000	200.000	0.000	0.000	0.000	0.000	0.000
222 Allowance for acquisition of			D,C	150	0.000	150.000	150.000	0.000	0.000	0.000	0.000	0.000
223 Allowance for engineering			D,C	300	0.000	300.000	300.000	0.000	0.000	0.000	0.000	0.000
224 Allowance for CTC Source	e Water Protection Plan		D	300	0.000	300.000	300.000	0.000	0.000	0.000	0.000	0.000
225 Preliminary Engineering			D	100	0.000	100.000	100.000	0.000	0.000	0.000	0.000	0.000
226 Allowance for sundry exter			D,C	15 100	0.000	15.000	15.000	0.000	0.000	0.000	0.000	0.000
227 Allowance for unknown re			D,C		0.000	100.000	100.000	0.000	0.000	0.000	0.000	0.000
	nce review and drawing requirements	700	D,C	100	0.000	100.000	100.000	0.000	0.000	0.000	0.000	0.000
residential subdivision dev		708	D,C	1,460	0.000	0.000	0.000	39.420	1,281.880	5.840	132.860	
non-residential developme	are for works in conjunction with ent	706	D,C	400	0.000	0.000	0.000	10.800	351.200	1.600	36.400	0.000
231 Well interference works			D	400	0.000	0.000	0.000	0.000	400.000	0.000	0.000	0.000
Sub-total	Sub-total			3,955	0.000	1,365.000	1,365.000	50.220	2,033.080	7.440	169.260	330.000
Total Cost Attribution				110,010	840.000	47,690.900	47,690.900	1,487.220	48,323.410	90.400	6,593.070	4,985.000

^{*} Indicates Capital project requires prior and/or future funding commitments. Refer to Construction of Municipal Services detail sheet.

Project Description								Cost	Expenditure Attı (\$000,'s)	ribution		
Regional Road Program	Project Description	Item	Land Design	Cost	Subsidy/ Other	Benefit to Existing	Total User Revenue	Development Charges	Development Charges	Charges	Charges	Asset Management Reserve Fund
## R. R. S. (Sievenson RJ.) from Ferguson St. to Bonacord Ave. Whitiby C. 850 0.000 850.000 0.00	A LINEAR INFRASTRUCTURE								•			•
R. R. G. S (Stevenson Rd.) from Bonds Et. Dr. Osabar Rd. L., Orbitava To R. R. S. O'Romantille Ave.) From Baselite Rd. D. Osaba Hd. B. Bownarville C. 150 0.000 150000 1.0000 0.000	Regional Road Program											
To Charact Wilson Review From Baseline Rd to Nash Rd, Bowmanville C 150 0.000 150,000 0.	4 R.R. 43 (Cochrane St.) from Ferguson St. to Bonacord Ave. Whitby		С	850	0.000	850.000	850.000	0.000	0.000	0.000	0.000	0.000
12 R. S. Øf (Gibb SI) from Sevenson Rd. to Simose St., Oshawa C	8 R.R. 53 (Stevenson Rd.) from Bond St. to Rossland Rd., Oshawa		D		0.000	140.000		0.000	0.000	0.000	0.000	0.000
Sub-total												0.000
Area Municipality Road Program			С									0.000
17A City of Pickering Road Program	Sub-total			1,940	0.000	1,940.000	1,940.000	0.000	0.000	0.000	0.000	0.000
178 Town of Ajax Road Program	Area Municipality Road Programs											
170 City of Whithy Road Program	17A City of Pickering Road Program		D,C		0.000	275.000	275.000	0.000	0.000	0.000	0.000	0.000
170 City of Oshawa Road Program												0.000
17E Municipality of Clarington Road Program D.C. 370 0.000 370.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 17G Township of Stuaping Road Program D.C. 270 0.000 270.000 270.000 0.00												0.000
17F Township of Scupage Road Program												0.000
17G Township of Uxbridge Road Program	17E Municipality of Clarington Road Program											0.000
17H Township of Brock Road Program												0.000
Till Allowance for unknown requirements in conjunction with area municipality road programs Sub-total 3,415 0.000 3,415.000 3,415.000 0.												0.000
With area municipality road programs Sub-total 3,415 0.000 3,415.000 3,415.000 0												0.000
Sub-total MTO & GO Transit projects	, ,		5,0	200	0.000	200.000	200.000	0.000	0.000	0.000	0.000	0.000
18 Allowance for unknown requirements				3,415	0.000	3,415.000	3,415.000	0.000	0.000	0.000	0.000	0.000
Sub-total	MTO & GO Transit projects											
Betterments/Replacement	* 18 Allowance for unknown requirements		D,C		0.000	100.000	100.000	0.000	0.000	0.000	0.000	0.000
22 Rehabilitation of existing watermains in various locations D,C 2,000 0.000 2,000,000 2,000,000 2,000,000 0.000 <td></td> <td></td> <td></td> <td>100</td> <td>0.000</td> <td>100.000</td> <td>100.000</td> <td>0.000</td> <td>0.000</td> <td>0.000</td> <td>0.000</td> <td>0.000</td>				100	0.000	100.000	100.000	0.000	0.000	0.000	0.000	0.000
28 Replacement of wn on Krosno Blvd fr Liverpool Rd to Fanshaw PI, Pickering C 885 0.000 <td>21 Works independent of road programs in various locations</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>0.000</td> <td>0.000</td>	21 Works independent of road programs in various locations										0.000	0.000
47 Replacement of fm on Bloor St. from Cubert St to Oxford St, Oshawa D,C 270 0.000												0.000
48 Replacement of wm on Bloor St from Wilson Rd to Holland St, Oshawa D,C 370 0.000												885.000
58 Replacement of fm on Ritson from Valve Chamber to Kawartha, Oshawa C 3,500 0.000 3,500.000 3,500.000 0.000<												270.000
68 Replacement of wm on North St. fr Wilmot St to Concession Rd 3, Newcastle C 1,240 0.000 0.000 0.000 27.280 1,086.240 1.240 125.240 C 84 Replacement of wm on Bay St fr Osborne St to Union St, Beaverton C 480 0.00												370.000 0.000
84 Replacement of wm on Bay St fr Osborne St to Union St, Beaverton C 480 0.000				,			,					0.000
85 Replacement of wm on Bay St. from Osborne St. to Mill St., Beaverton C 310 0.000												480.000
86 Replacement of wm on Church St. from Osborne St. to Mill St., Beaverton C 430 0.000												310.000
87 Replacement of wm on Mill St fr Church St to Bay St, Beaverton C 300 0.000 <												430.000
88 Replacement of wm on Bay St. from Mill St. to Main St., Beaverton C 480 0.000			С									300.000
90 Replacement of wm on Simcoe St fr Beaverton WSP to CNR, Beaverton C 325 0.000	88 Replacement of wm on Bay St. from Mill St. to Main St., Beaverton											480.000
94 Allowance for construction of services in unserviced areas C 200 0.000 200.000 200.000 0.000												550.000
Sub-total 12,140 0.000 6,500.000 6,500.000 27.280 1,086.240 1.240 125.240 4,400												325.000
			C									0.000
				12,140	0.000	0,500.000	0,500.000	21.280	1,000.240	1.240	125.240	4,400.000
* 98 Zone 2 FM on Taunton Rd. from Westney to Harwood Ave, Ajax 105 D 300 0.000 0.000 0.000 6.600 262.800 0.300 30.300 0	<u> </u>	4.5-										0.000

			1								
					,			Expenditure Attr (\$000,'s)	ibution	I	
		EA			User R	01/00110					Asset
	DC	Land		Grant/	USELK	Total	Commercial	Residential			Management
Project Description	Item	Design	Gross	Subsidy/	Benefit to	User	Development	Development	Institutional	Industrial	Reserve
	No.	Const.	Cost	Other	Existing	Revenue	Charges	Charges	Charges	Charges	Fund
			Α	В	С	D	E	F	G	Н	I
* 99 Zone 2 FM on Taunton Rd. & William Jackson Dr., Ajax	106	D,C	5,800	0.000	0.000	0.000	127.600	5,080.800	5.800	585.800	0.000
 * 101 Zone 1 FM from Whitby WSP to Thornton Rd., Whitby/Oshawa * 106 Zone 3 FM on Anderson St. from Conlin Rd. to Clair Ave, Whitby 	216 227	C	12,500 4,650	0.000	0.000	0.000	275.000 102.300	10,950.000 4,073.400	12.500 4.650	1,262.500 469.650	0.000
* 107 Zone 4 FM from Thickson Rd. PS to Reservoir, Whitby	236	D,C	15,900	0.000	0.000	0.000	349.800	13,928.400	15.900		0.000
* 108 Zone 4 FM on Brawley Rd. from Ashburn Rd. to Duffs Rd., Whitby	237	D,C	5,300	0.000	0.000	0.000	116.600	4,642.800	5.300	535.300	0.000
* 115 Zone 3 FM on Conlin Rd. from Ritson Rd. to Wilson Rd., Oshawa	228	C	3,800	0.000	0.000	0.000	83.600	3,328.800	3.800	383.800	0.000
* 119 Zone 4 FM on Harmony Rd from Conlin Rd to Z 4 PS, Oshawa	233	D	900	0.000	0.000	0.000	19.800	788.400	0.900		0.000
* 120 Zone 4 FM from PS to Zone 4 Reservoir, Oshawa	235	D,C	15,000	0.000	0.000	0.000	330.000	13,140.000	15.000	1,515.000	0.000
 126 Zone 1 FM on Prestonvale Rd from Baseline Rd to 950m N., Courtice 	223	С	1,500	0.000	0.000	0.000	33.000	1,314.000	1.500		0.000
* 127 Zone 1 FM on easement from Townline Rd to Prestonvale Rd, Courtice	222	С	2,600	0.000	0.000	0.000	57.200	2,277.600	2.600	262.600	0.000
* 133 Zone 1 feedermain from Arthur St Res to New Zone 1 Res., Newcastle	317	С	2,650	0.000	0.000	0.000	58.300	2,321.400	2.650		0.000
* 135 Zone 2 feedermain on Arthur St from Zone 2 PS to Arthur PS, Newcastle	318	C	3,950	0.000	0.000	0.000	86.900	3,460.200	3.950	398.950	0.000
* 136 WM on Grady Dr fr Whitehand Cres to North St, Newcastle Sub-total		C	670 75,520	0.000	670.000 670.000	670.000 670.000	0.000 1,646.700	0.000 65,568.600	0.000 74.850		0.000
Sub-total			73,320	0.000	070.000	070.000	1,040.700	03,300.000	74.000	7,559.650	0.000
Other Linear Infrastructure											
137 Replacement of meters		С	1,000	0.000	1,000.000	1,000.000	0.000	0.000	0.000	0.000	0.000
139 Depots - Replacement of Lead service connections		D,C	1,000	0.000	1,000.000	1.000.000	0.000	0.000	0.000	0.000	0.000
140 Replacement of valves		Ć	200	0.000	200.000	200.000	0.000	0.000	0.000	0.000	0.000
141 Replacement of hydrants		С	160	0.000	160.000	160.000	0.000	0.000	0.000	0.000	0.000
Sub-total Sub-total			2,360	0.000	2,360.000	2,360.000	0.000	0.000	0.000	0.000	0.000
B BUILDINGS											
* 146 Whitby WSP - Plant No. 1 upgrades		D	2,000	0.000	2,000.000	2,000.000	0.000	0.000	0.000	0.000	0.000
* 147 Garrard Rd Reservoir expansion, Whitby	202	D	3,350	0.000	147.400	147.400	70.350	2,803.950	3.350		0.000
* 149 Thickson Rd. Zone 3 Pumping Station expansion, Whitby	210 212	EA	500 6,400	0.000	65.500	65.500	9.550 140.800	380.500	0.450		0.000
150 Proposed Zone 4 pumping station, Whitby 151 Proposed Whitby Zone 4 Storage Facility	205	C	11,500	0.000	0.000 1,380.000	0.000	140.800 221.950	5,606.400 8,866.500	6.400 10.350	646.400 1,021.200	0.000
157 Proposed Whitby Zone 4 Storage Facility 157 Proposed Zone 4 Pumping Station at Harmony Rd Res, Oshawa	208	C	6,500	0.000	864.500	864.500	124.150	4,933.500	5.850	572.000	0.000
* 158 Proposed Oshawa Zone 4 Storage facility, Oshawa	206	D,C	11,000	0.000	1,870.000	1,870.000	200.530	7,997.000	9.020	923.450	0.000
* 167 Proposed Zone 1 reservoir, Newcastle Clarington	312	C	7,900	0.000	426.600	426.600	163.530	6,549.100	7.110		0.000
168 Proposed Zone 2 Water Pumping Station, Newcastle	315	C	3,800	0.000	539.600	539.600	71.440	2,857.600	3.040	328.320	0.000
* 171 Alternative water source, Scugog	400	С	17,600	0.000	5,931.200	5,931.200	746.240	7,427.200	47.520	,	0.000
 172 Port Perry Water Storage Facility - additional Capacity 2.8 ML 	401	D	1,000	0.000	87.000	87.000	20.000	800.000	0.900	92.100	0.000
* 173 Greenbank WSS - replacement of MW No. 1, Scugog		D	250	0.000	250.000	250.000	0.000	0.000	0.000		0.000
* 174 New Well and pumphouse, Uxbridge	500	С	3,000	0.000	0.000	0.000	192.000	1,911.000	12.000	885.000	0.000
 175 Expansion of Quaker Hill reservoir, Uxbridge 176 Sunderland New well and pumphouse with standby power, Brock 	501 602	D C	400 3,300	0.000	0.000 2,656.500	0.000 2,656.500	8.800 41.250	350.400 409.200	0.400 2.640	40.400 190.410	0.000
* 1/6 Sunderland New Well and pumphouse with standby power, Brock * 184 Water Storage Facilities condition assessments and rehabilitation works	002	D,C	3,300	0.000	0.000	0.000	41.250 0.000	0.000	0.000		150.000
* 185 Wellhead protection at Regional well sites	800	D,C	800	0.000					0.000		
Sub-total		2,0	79,450	0.000			2,010.590		109.030		150.000
C MACHINERY AND EQUIPMENT					ŕ						
* 192 Grandview Water Pumping Station upgrades, Oshawa		С	2,000	0.000		2,000.000		0.000	0.000		0.000
* 193 Oshawa WSP - Valve Chamber Upgrades		С	570	0.000	570.000	570.000	0.000	0.000	0.000		0.000
* 198 Waverly Rd. WPS - upgrades, Oshawa		С	2,000	0.000	2,000.000	2,000.000		0.000	0.000		0.000
* 204 Concession St. WPS- station upgrades		С	2,000	0.000	2,000.000	2,000.000		0.000	0.000		0.000
* 205 Newtonville WPS - Station upgrades		D	150	0.000	150.000	150.000	0.000	0.000	0.000	0.000	0.000

∞

					Cost Expenditure Attribution (\$000,'s)						
	DC	EA		Crowt	User R	evenue Total	Commonsial	Residential			Asset
Project Description	Item No.	Land Design Const.	Gross Cost	Grant/ Subsidy/ Other	Benefit to Existing	User Revenue	Commercial Development Charges	Development Charges	Institutional Charges	Industrial Charges	Management Reserve Fund
			Α	В	С	D	E	F	G	H	I
* 207 Orono WSS - upgrades		D	100	0.000	100.000	100.000	0.000	0.000	0.000	0.000	0.000
* 208 Mill St. WPS - Station upgrades, Orono		D	150	0.000	150.000	150.000	0.000	0.000	0.000	0.000	0.000
* 212 Sunderland Standpipe Water Storage Tank - recoating, Brock		С	650	0.000	650.000	650.000	0.000	0.000	0.000	0.000	0.000
* 215 Automatic bulk water dispensing system		D,C	440	0.000	440.000	440.000	0.000	0.000	0.000	0.000	0.000
Sub-total Sub-total			8,060	0.000	8,060.000	8,060.000	0.000	0.000	0.000	0.000	0.000
D IT INFRASTRUCTURE											
* 216 Plant SCADA system upgrades	700	С	3,000	0.000	1,890.000	1,890.000	88.800	713.700	12.300	295.200	0.000
Sub-total			3,000	0.000	1,890.000	1,890.000	88.800	713.700	12.300	295.200	0.000
E ALLOWANCES AND OTHER PROVISIONS											
219 Asset Condition Assessments-Report		D	240	0.000	0.000	0.000	0.000	0.000	0.000	0.000	240.000
220 Asset Condition Assessment/Investigation transmission pipe		D	195	0.000	0.000	0.000	0.000	0.000	0.000	0.000	195.000
222 Allowance for acquisition of easements		D,C	150	0.000	150.000	150.000	0.000	0.000	0.000	0.000	0.000
223 Allowance for engineering studies		D,C	150	0.000	150.000	150.000	0.000	0.000	0.000	0.000	0.000
224 Allowance for CTC Source Water Protection Plan		D	300	0.000	300.000	300.000	0.000	0.000	0.000	0.000	0.000
225 Preliminary Engineering		D	100	0.000	100.000	100.000	0.000	0.000	0.000	0.000	0.000
220 Allowance for surfury extensions as per council policy		D,C	15	0.000	15.000	15.000	0.000	0.000	0.000	0.000	0.000
227 Allowance for unknown requirements		D,C	100	0.000	100.000	100.000	0.000	0.000	0.000	0.000	0.000
228 Allowance for land severance review and drawing requirements		D,C	100	0.000	100.000	100.000	0.000	0.000	0.000	0.000	0.000
229 Allowance for Regional share for works in conjunction with residential subdivision development	708	D,C	1,460	0.000	0.000	0.000	39.420	1,281.880	5.840	132.860	0.000
230 Allowance for Regional share for works in conjunction with non-residential development	706	D,C	400	0.000	0.000	0.000	10.800	351.200	1.600	36.400	0.000
231 Well interference works		D	400	0.000	0.000	0.000	0.000	400.000	0.000	0.000	0.000
Sub-total			3,610	0.000	915.000	915.000	50.220	2,033.080	7.440	169.260	435.000
Total Cost Attribution			189,595	0.000	42,868.300	42,868.300	3,823.590	120,293.970	204.860	17,419.280	4,985.000

^{*} Indicates Capital project requires prior and/or future funding commitments. Refer to Construction of Municipal Services detail sheet.

							Cost	Expenditure Attr	ribution		
		EA .			User R	evenue					Asset
Project Description	DC Item No.	Land Design Const.	Gross Cost A	Grant/ Subsidy/ Other B	Benefit to Existing C	Total User Revenue D	Commercial Development Charges E	Residential Development Charges F	Institutional Charges G	Industrial Charges H	Management Reserve Fund I
A LINEAR INFRASTRUCTURE											
Regional Road Program											
* 1 R.R. 14 (Liberty St.) from Baseline Rd. to King St., Bowmanville		С	1,500	0.000	1,500.000	1,500.000	0.000	0.000	0.000	0.000	0.000
11 R.R. 58 Manning Rd/Adelaide Ave. Intersection improvements * 13 R.R. 59 (Gibb St.)/Olive Ave. Interconnection, Oshawa		C D	800 100	0.000	800.000 100.000	800.000 100.000	0.000	0.000	0.000	0.000	0.000
Sub-total		D	2,400	0.000	2,400.000	2,400.000		0.000	0.000	0.000	0.000
Area Municipality Road Programs			2,400	0.000	2,400.000	2,400.000	0.000	0.000	0.000	0.000	0.000
17A City of Pickering Road Program		D,C	275	0.000	275.000	275.000	0.000	0.000	0.000	0.000	0.000
17B Town of Ajax Road Program		D,C	200	0.000	200.000	200.000	0.000	0.000	0.000	0.000	0.000
17C Town of Whitby Road Program		D,C	620	0.000	620.000	620.000		0.000	0.000	0.000	0.000
17D City of Oshawa Road Program		D,C	1,100	0.000	1,100.000	1,100.000		0.000	0.000	0.000	0.000
17E Municipality of Clarington Road Program 17F Township of Scugog Road Program		D,C	370	0.000	370.000	370.000	0.000	0.000	0.000	0.000	0.000
17F Township of Scugog Road Program 17G Township of Uxbridge Road Program		D,C D.C	130 270	0.000	130.000 270.000	130.000 270.000	0.000	0.000	0.000	0.000	0.000
17H Township of Oxbridge Road Program 17H Township of Brock Road Program		D,C	250	0.000	250.000	250.000		0.000	0.000	0.000	0.000
17i Allowance for unknown requirements in conjunction		D,C	200	0.000	200.000	200.000	0.000	0.000	0.000	0.000	0.000
with area municipality road programs Sub-total			3,415	0.000	3,415.000	3,415.000	0.000	0.000	0.000	0.000	0.000
MTO & GO Transit projects											
* 18 Allowance for unknown requirements		D,C	100	0.000	100.000	100.000	0.000	0.000	0.000	0.000	0.000
Sub-total		В,О	100	0.000	100.000	100.000	0.000	0.000	0.000	0.000	0.000
Betterments/Replacement											
21 Works independent of road programs in various locations		D,C	800	0.000	800.000	800.000	0.000	0.000	0.000	0.000	0.000
22 Rehabilitation of existing watermains in various locations		D,C	2,000	0.000	2,000.000	2,000.000	0.000	0.000	0.000	0.000	0.000
37 Replacement of wm on Clements Rd E fr Burcher Rd to Dryer Dr, Ajax		D	200	0.000	0.000	0.000		0.000	0.000	0.000	200.000
70 Replacement of wm on First Ave from Brock St. to Dominion St., Uxbridge		D,C	280	0.000	0.000	0.000		0.000	0.000	0.000	280.000
72 Replacement of wm on Rosa St fr Paxton St to dead-end, Port Perry		D,C	600	0.000	0.000	0.000	0.000	0.000	0.000	0.000	600.000
75 Replacement of wm on Ottawa St fr Queen St to MacDonald St, Port Perry		D,C D,C	300 430	0.000	0.000	0.000	0.000	0.000	0.000	0.000	300.000 430.000
78 Replacement of wm on Jane St from Ida St to 220 m north, Sunderland 92 Replacement of wm on King St fr Mara Rd to dead-end, Beaverton		D,C	500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	500.000
* 93 Replacement of watermains in various locations		D,C	2,016		0.000	0.000	0.000	0.000	0.000	0.000	2,016.000
94 Allowance for construction of services in unserviced areas		C	200	0.000	200.000	200.000	0.000	0.000	0.000	0.000	0.000
Sub-total			7,326	0.000				0.000	0.000	0.000	
System Expansion											
* 98 Zone 2 FM on Taunton Rd. from Westney to Harwood Ave, Ajax		С	2,600	0.000	0.000	0.000	57.200	2,277.600	2.600	262.600	0.000
* 100 Zone 2 FM on Church St. from Hydro ROW to Taunton Rd., Ajax	110	D	600	0.000		0.000		525.600		60.600	
* 101 Zone 1 FM from Whitby WSP to Thornton Rd., Whitby/Oshawa	215	С	25,200	0.000		0.000		22,075.200			
* 102 Zone 1 on Manning from Anderson to Hydro Corridor, Whitby	218	D	400	0.000	0.000	0.000		350.400		40.400	
* 105 Zone 3 FM on Anderson/Watford St from Clair Ave to Carnwith Dr, Whitby	226	D	600	0.000	0.000	0.000	13.200	525.600	0.600	60.600	0.000

							Cost	Expenditure Attr (\$000,'s)	ibution		
Project Description	DC Item	EA Land Design	Gross	Grant/ Subsidy/	Benefit to	evenue Total User	Commercial Development	Residential Development	Institutional	Industrial	Asset Management Reserve
	No.	Const.	Cost	Other	Existing	Revenue	Charges	Charges	Charges	Charges	Fund
		_	Α	В	С	D	Е	F	G	Н	<u> </u>
* 119 Zone 4 FM on Harmony Rd from Conlin Rd to Z 4 PS, Oshawa	233	С	3,600	0.000	0.000	0.000	79.200	3,153.600	3.600	363.600	0.000
* 130 Zone 1 FM from Bowmanville WSP to Baseline Rd., Bowmanville	305	EA	500	0.000	0.000	0.000	11.000	438.000	0.500	50.500	0.000
Sub-total			33,800	0.000	0.000	0.000	743.600	29,608.800	33.800	3,413.800	0.000
Other Linear Infrastructure											
137 Replacement of meters		С	1,000	0.000	1,000.000	1,000.000	0.000	0.000	0.000	0.000	0.000
139 Depots - Replacement of lead service connections		D,C	1,000	0.000	1,000.000	1,000.000	0.000	0.000	0.000	0.000	0.000
140 Replacement of valves		C	200	0.000	200.000	200.000	0.000	0.000	0.000	0.000	0.000
141 Replacement of hydrants		С	160	0.000	160.000	160.000	0.000	0.000	0.000	0.000	0.000
Sub-total			2,360	0.000	2,360.000	2,360.000	0.000	0.000	0.000	0.000	0.000
B BUILDINGS			,		ŕ	ŕ					
* 142 Ajax WSP expansion from 163.6 to 327 MLD, Ajax	100	D	4,500	2,520.000	1,485.000	1,485.000	31.590	315.450	1.980	145.980	0.000
 144 Proposed Ajax Zone 1 water storage facility, 11 ML, Ajax 	101	D	600	0.000	0.000	0.000	13.200	525.600	0.600	60.600	0.000
* 145 Whitby WSP expansion from 109 to 218 MLD, Whitby	200	С	145,000	0.000	8,410.000	8,410.000	8,729.000	87,000.000	551.000	40,310.000	0.000
153 Taunton Rd Zone 2 Reservoir Expansion, Oshawa	203	EA	500	0.000	0.000	0.000	11.000	438.000	0.500	50.500	0.000
* 154 Grandview Zone 2 Pumping Station expansion, Oshawa	209	EA	500	0.000	20.000	20.000	10.500	420.500	0.500	48.500	0.000
* 160 Hortop Pumping Station Replacement, Oshawa		D	1,000	0.000	1,000.000	1,000.000	0.000	0.000	0.000	0.000	0.000
* 161 Bowmanville WSP Expansion from 36 to 55 MLD, Bowmanville	300	D	1,500	0.000	112.500	112.500	88.650	883.500	5.550	409.800	0.000
* 165 Bowmanville Zone 2 reservoir expansion, Clarington	302	EA	600	0.000	30.600	30.600	12.540	498.600	0.540	57.720	0.000
* 169 Proposed Zone 2 Reservoir, Newcastle	314	EA	500	0.000	71.000	71.000	9.400	376.000	0.400	43.200	0.000
* 175 Expansion of Quaker Hill reservoir, Uxbridge	501	С	3,420	0.000	0.000	0.000	75.240	2,995.920	3.420	345.420	0.000
* 184 Water Storage Facilities condition assessments and rehabilitation works		D,C	150	0.000	0.000	0.000	0.000	0.000	0.000	0.000	150.000
* 185 Wellhead protection at Regional well sites	800	D,C	800	0.000	800.000	800.000	0.000	0.000	0.000	0.000	0.000
Sub-total			159,070	2,520.000	11,929.100	11,929.100	8,981.120	93,453.570	564.490	41,471.720	150.000
C MACHINERY AND EQUIPMENT											
* 191 Whitby WSP - filter treatment process upgrades	201	D	2,251	0.000	1,690.501	1,690.501	36.016	357.909	2.251	164.323	0.000
* 205 Newtonville WPS - Station upgrades		С	2,000	0.000	2,000.000		0.000	0.000	0.000		0.000
* 207 Orono WSS - upgrades		D	150	0.000	150.000	150.000	0.000	0.000	0.000	0.000	0.000
* 208 Mill St. WPS - Station upgrades, Orono		С	2,000	0.000	2,000.000	2,000.000	0.000	0.000	0.000	0.000	0.000
* 215 Automatic bulk water dispensing system		D,C	300	0.000	300.000	300.000	0.000	0.000	0.000	0.000	0.000
Sub-total			6,701	0.000	6,140.501	6,140.501	36.016	357.909	2.251	164.323	0.000
D IT INFRASTRUCTURE											
Sub-total			0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
E ALLOWANCES AND OTHER PROVISIONS											
219 Asset Condition Assessments-Report	1	D	300	0.000	0.000	0.000	0.000	0.000	0.000		300.000
220 Asset Condition Assessment/Investigation transmission pipe		D	209		0.000		0.000	0.000	0.000		209.000
222 Allowance for acquisition of easements		D,C	150		150.000		0.000	0.000	0.000		0.000
223 Allowance for engineering studies		D,C	300	0.000	300.000		0.000	0.000	0.000		0.000
224 Allowance for CTC Source Water Protection Plan		D,C	3,400	0.000	3,400.000		0.000	0.000	0.000		0.000
225 Preliminary Engineering		D	100		100.000	100.000	0.000	0.000	0.000		0.000
226 Allowance for sundry extensions as per council policy		D,C	15	0.000	15.000	15.000	0.000	0.000	0.000	0.000	0.000

							Cost	Expenditure Attı (\$000,'s)	ibution		
Project Description	DC Item No.	EA Land Design Const.	Gross Cost A	Grant/ Subsidy/ Other B	User R Benefit to Existing C	evenue Total User Revenue D	Commercial Development Charges E	Residential Development Charges F	Institutional Charges G	Industrial Charges H	Asset Management Reserve Fund I
227 Allowance for unknown requirements					100.000	100.000	0.000	0.000	0.000	0.000	0.000
228 Allowance for land severance review and drawing requirements		D,C	100	0.000	100.000	100.000	0.000	0.000	0.000	0.000	0.000
229 Allowance for Regional share for works in conjunction with residential subdivision development	708	D,C	1,460	0.000	0.000	0.000	39.420	1,281.880	5.840	132.860	0.000
230 Allowance for Regional share for works in conjunction with non-residential development	706	D,C	400	0.000	0.000	0.000	10.800	351.200	1.600	36.400	0.000
231 Well interference works		D	400	0.000	0.000	0.000	0.000	400.000	0.000	0.000	0.000
Sub-total Sub-total			6,934	0.000	4,165.000	4,165.000	50.220	2,033.080	7.440	169.260	509.000
Total Cost Attribution		222,106	2,520.000	33,509.601	33,509.601	9,810.956	125,453.359	607.981	45,219.103	4,985.000	

^{*} Indicates Capital project requires prior and/or future funding commitments. Refer to Construction of Municipal Services detail sheet.

0 11 7											
							Cost	Expenditure Attr	ribution		
		EA			User R	evenue					Asset
Project Description	DC Item No.	Land Design Const.	Gross Cost A	Grant/ Subsidy/ Other B	Benefit to Existing C	Total User Revenue D	Commercial Development Charges E	Residential Development Charges F	Institutional Charges G	Industrial Charges H	Management Reserve Fund I
A LINEAR INFRASTRUCTURE											
Regional Road Program											
7 R.R. 53 (Stevenson Rd.) from CPR to Bond St., Oshawa		С	1,100	0.000	1,100.000	1,100.000	0.000	0.000	0.000	0.000	0.000
16 Allowance for watermains in conjuction with Regional Roads		D,C	1,000	0.000	1,000.000	1,000.000	0.000	0.000	0.000	0.000	0.000
Sub-total Sub-total			2,100	0.000	2,100.000	2,100.000	0.000	0.000	0.000	0.000	0.000
Area Municipality Road Programs											
17A City of Pickering Road Program		D,C	275	0.000	275.000	275.000	0.000	0.000	0.000	0.000	0.000
17B Town of Ajax Road Program		D,C	1,650	0.000	1,650.000	1,650.000	0.000	0.000	0.000	0.000	0.000
17C Town of Whitby Road Program		D,C	620		620.000	620.000	0.000	0.000	0.000	0.000	0.000
17D City of Oshawa Road Program		D,C	1,100	0.000	1,100.000	1,100.000		0.000	0.000	0.000	0.000
17E Municipality of Clarington Road Program		D,C	370		370.000	370.000		0.000	0.000	0.000	0.000
17F Township of Scugog Road Program 17G Township of Uxbridge Road Program		D,C D,C	130 270		130.000 270.000	130.000 270.000	0.000	0.000	0.000	0.000	0.000
17G Township of Oxbridge Road Program 17H Township of Brock Road Program		D,C	250		250.000	250.000	0.000	0.000	0.000		0.000
17i Allowance for unknown requirements in conjunction		D,C	200		200.000	200.000		0.000	0.000		0.000
with area municipality road programs		5,0	200	0.000	200.000	200.000	0.000	0.000	0.000	0.000	0.000
Sub-total			4,865	0.000	4,865.000	4,865.000	0.000	0.000	0.000	0.000	0.000
MTO & GO Transit projects											
* 18 Allowance for unknown requirements		D,C	100	0.000	100.000	100.000	0.000	0.000	0.000	0.000	0.000
Sub-total			100	0.000	100.000	100.000	0.000	0.000	0.000	0.000	0.000
Betterments/Replacement											
21 Works independent of road programs in various locations		D,C	800	0.000	800.000	800.000	0.000	0.000	0.000	0.000	0.000
22 Rehabilitation of existing watermains in various locations		D,C	2,000	0.000	2,000.000	2,000.000		0.000	0.000	0.000	0.000
37 Replacement of wm on Clements Rd E from Burcher Rd to Dryer Dr, Ajax		С	1,200	0.000	0.000	0.000		0.000	0.000	0.000	1,200.000
51 Replacement of wm on Hwy 2 from Midtown Dr. to Queen St., Oshawa		D,C	450		0.000	0.000		0.000	0.000	0.000	450.000
61 Replacement of wm on Rossland Rd from Attersley Dr to Gladfern St, Oshawa 76 Replacement of wm on Bay St from Old Simcoe St to Bigelow St., Port Perry		D,C D,C	600 550	0.000	0.000	0.000	0.000	0.000	0.000	0.000	600.000 550.000
79 Replacement of wm on Maple St from River St to dead-end, Sunderland		D,C	110		0.000	0.000	0.000	0.000	0.000		110.000
83 Replacement of wm on Centre St from Mara Rd. to James St, Beaverton		D,C	480	0.000	0.000	0.000	0.000	0.000	0.000	0.000	480.000
* 93 Replacement of watermains in various locations		D,C	945		0.000	0.000	0.000	0.000	0.000		945.000
94 Allowance for construction of services in unserviced areas		Ć	200	0.000	200.000	200.000	0.000	0.000	0.000	0.000	0.000
Sub-total Sub-total			7,335	0.000	3,000.000	3,000.000	0.000	0.000	0.000	0.000	4,335.000
System Expansion											
* 100 Zone 2 FM on Church St. from Hydro ROW to Taunton Rd., Ajax	107	С	3,000		0.000			2,628.000			0.000
* 102 Zone 1 FM on Manning from Anderson to Hydro Corridor, Whitby	218	С	1,500		0.000	0.000		1,314.000	1.500		0.000
* 105 Zone 3 FM on Anderson/Watford St from Clair Ave to Carnwith Dr, Whitby	226	С	6,600		0.000	0.000		5,781.600			0.000
 * 111 WM on Britannia Dr from Thornton Rd to Windfields Farm Dr, Oshawa * 117 Zone 4 FM on Conlin Rd. from Harmony Rd. to Grandview St., Oshawa 	241 232	D C	260 1,250	0.000	0.000	0.000	5.720 27.500	227.760 1,095.000	0.260 1.250		0.000
* 121 Zone 4 FM on Ritson Rd from Columbus Rd to Winchester Rd, Oshawa	239	D	600	0.000	0.000	0.000		525.600	0.600		0.000
* 122 Zone 4 FM on Winchester Rd. from Ritson Rd. to Harmony Rd., Oshawa	240	D	600		0.000	0.000		525.600	0.600		0.000
Sub-total			13,810		0.000						

							Cost	Expenditure Attr	ribution		
Project Description	DC Item No.	EA Land Design Const.	Gross Cost	Grant/ Subsidy/ Other	User R Benefit to Existing	evenue Total User Revenue	Commercial Development Charges	Residential Development Charges	Institutional Charges	Industrial Charges	Asset Management Reserve Fund
	1.0.	30	A	В	C	D	E	F	G	H	1
Other Linear Infrastructure					,	-	_	•			·
137 Replacement of meters		С	1,000	0.000	1,000.000	1,000.000	0.000	0.000	0.000	0.000	0.000
139 Depots - Replacement of Lead service connections		D,C	1,000	0.000	1,000.000	1,000.000	0.000	0.000	0.000	0.000	0.000
140 Replacement of valves		С	200	0.000	200.000	200.000	0.000	0.000	0.000	0.000	0.000
141 Replacement of hydrants		С	160	0.000	160.000	160.000	0.000	0.000	0.000	0.000	0.000
Sub-total			2,360	0.000	2,360.000	2,360.000	0.000	0.000	0.000	0.000	0.000
B BUILDINGS											
* 147 Garrard Rd Reservoir expansion, Whitby	202	С	13,350	0.000	587.400	587.400	280.350	11,173.950	13.350		0.000
* 149 Thickson Rd. Zone 3 Pumping Station expansion, Whitby	210	D	1,100	0.000	144.100	144.100	21.010	837.100	0.990	96.800	0.000
* 160 Hortop Pumping Station Replacement, Oshawa		С	9,000	0.000	9,000.000	9,000.000	0.000	0.000	0.000	0.000	0.000
* 172 Port Perry Water Storage Facility - additional Capacity 2.8 ML	401	С	11,100	0.000	965.700	965.700	222.000	8,880.000	9.990		0.000
* 173 Greenbank WSS - replacement of Municipal Well No. 1, Scugog		С	1,000	0.000	1,000.000	1,000.000	0.000	0.000	0.000	0.000	0.000
* 184 Water Storage Facilities condition assessments and rehabilitation works		D,C	150	0.000	0.000	0.000	0.000	0.000	0.000	0.000	150.000
* 185 Wellhead protection at Regional well sites Sub-total	800	D,C	800 36,500	0.000	800.000 12,497.200	800.000 12,497.200	0.000 523.360	0.000 20,891.050	0.000 24.330	0.000 2,414.060	0.000 150.000
C MACHINERY AND EQUIPMENT			ŕ		,	,		•		ŕ	
* 207 Orono WSS - upgrades		С	2,500	0.000	2,500.000	2,500.000	0.000	0.000	0.000	0.000	0.000
* 215 Automatic bulk water dispensing system Sub-total		D,C	300 2,800	0.000	300.000 2,800.000	300.000 2,800.000	0.000 0.000	0.000	0.000	0.000	0.000
D IT INFRASTRUCTURE			2,000	0.000	2,000.000	2,000.000	0.000	0.000	0.000	0.000	0.000
Sub-total E ALLOWANCES AND OTHER PROVISIONS			0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
* 247 Degianal Water Cumply Master Diaming Ctudy	704	D.C	900	0.000	0.000	0.000	24 600	702 400	2 200	72.900	0.000
* 217 Regional Water Supply Master Planning Study 219 Asset Condition Assessments-Report	701	D,C D	800 300	0.000	0.000	0.000	21.600 0.000	702.400 0.000	3.200 0.000	72.800 0.000	0.000 300.000
220 Asset Condition Assessment/Investigation transmission pipe		D	200	0.000	0.000	0.000	0.000	0.000	0.000	0.000	200.000
222 Allowance for acquisition of easements		D,C	150	0.000	150.000	150.000	0.000	0.000	0.000	0.000	0.000
223 Allowance for engineering studies		D,C	150	0.000	150.000	150.000		0.000	0.000	0.000	0.000
225 Preliminary Engineering		D	100	0.000	100.000	100.000	0.000	0.000	0.000	0.000	0.000
226 Allowance for sundry extensions as per council policy		D,C	15	0.000	15.000	15.000	0.000	0.000	0.000	0.000	0.000
227 Allowance for unknown requirements		D,C	100	0.000	100.000	100.000	0.000	0.000	0.000	0.000	0.000
228 Allowance for land severance review and drawing requirements		D,C	100			100.000	0.000	0.000		0.000	0.000
229 Allowance for Regional share for works in conjunction with residential subdivision development	708	D,C	1,460	0.000	0.000	0.000	39.420	1,281.880	5.840	132.860	0.000
230 Allowance for Regional share for works in conjunction with non-residential development	706	D,C	400	0.000	0.000	0.000		351.200			0.000
231 Well interference works		D	1,000	0.000	0.000	0.000	0.000	1,000.000	0.000	0.000	0.000
Sub-total Sub-total			4,775	0.000	615.000	615.000	71.820	3,335.480	10.640	242.060	500.000
Total Cost Attribution			74,645	0.000	28,337.200	28,337.200	899.000	36,324.090	48.780	4,050.930	4,985.000

^{*} Indicates Capital project requires prior and/or future funding commitments. Refer to Construction of Municipal Services detail sheet.

		1	1	1	1							
								Cost	Expenditure Attr (\$000,'s)	ribution		
			EA			User Ro						Asset
		DC	Land		Grant/	User R	evenue Total	Commercial	Residential			Asset Management
Project Descr	iption	Item No.	Design Const.	Gross Cost A	Subsidy/ Other B	Benefit to Existing C	User Revenue D	Development Charges E	Development Charges F	Institutional Charges G	Industrial Charges H	Reserve Fund
A LINEAR INFR	ASTRUCTURE											
Regional Roa	d Program											
* 3 R.R. 36 (Hopk	ins St.) from Consumers Dr. to Dundas St., Whitby		D	125	0.000	125.000	125.000	0.000	0.000	0.000	0.000	0.000
* 13 R.R. 59 (Gibb	St.)/Olive Ave. Interconnection, Oshawa		С	230	0.000	230.000	230.000	0.000	0.000	0.000	0.000	0.000
16 Allowance for	watermains in conjuction with Regional Roads		D,C	800	0.000	800.000	800.000	0.000	0.000	0.000	0.000	0.000
Sub-total				1,155	0.000	1,155.000	1,155.000	0.000	0.000	0.000	0.000	0.000
	ality Road Programs		D 0	075	0.000	075 000	075.000	0.000	0.000	0.000	0.000	0.000
17A City of Pickerin 17B Town of Ajax F	ng Road Program		D,C	275		275.000	275.000	0.000	0.000	0.000	0.000	0.000
			D,C	200	0.000	200.000	200.000			0.000		0.000
17C Town of Whitb			D,C	620		620.000	620.000	0.000	0.000	0.000	0.000	0.000
17D City of Oshawa			D,C	1,100		1,100.000	1,100.000	0.000	0.000	0.000	0.000	0.000
	Clarington Road Program		D,C	370		370.000	370.000	0.000	0.000	0.000	0.000	0.000
	cugog Road Program		D,C	130	0.000	130.000	130.000	0.000	0.000	0.000	0.000	0.000
	xbridge Road Program		D,C	270	0.000	270.000	270.000	0.000	0.000	0.000	0.000	0.000
17H Township of B			D,C	250	0.000	250.000	250.000	0.000	0.000	0.000	0.000	0.000
	unknown requirements in conjunction		D,C	200	0.000	200.000	200.000	0.000	0.000	0.000	0.000	0.000
Sub-total	cipality road programs			3.415	0.000	3.415.000	3.415.000	0.000	0.000	0.000	0.000	0.000
MTO & GO Tr	ansit projects			-,		,	.,					
 18 Allowance for 	unknown requirements		D,C	100	0.000	100.000	100.000	0.000	0.000	0.000	0.000	0.000
Sub-total				100	0.000	100.000	100.000	0.000	0.000	0.000	0.000	0.000
Betterments/I												
	ndent of road programs in various locations		D,C	800		800.000	800.000	0.000	0.000	0.000	0.000	0.000
	of existing watermains in various locations		D,C	2,000	0.000	2,000.000	2,000.000	0.000	0.000	0.000	0.000	0.000
	of wm on Rougemount fr Kingston Rd to 100 m south, Pickering		D,C	150		0.000	0.000	0.000	0.000	0.000	0.000	150.000
	of wm on Alliance Rd fr 20 m N Bayly St to S/L, Pickering		D,C	460		0.000	0.000	0.000	0.000	0.000	0.000	460.000
	of wm on Cedar St. from Tudor Ave W to Beatty Rd., Ajax	ļ	D,C	450		0.000	0.000	0.000	0.000	0.000	0.000	450.000
	of wm on Thickson Rd from Nichol Ave to Bellwood Rd, Whitby		D,C	570	0.000	0.000	0.000	0.000	0.000	0.000	0.000	570.000
	of wm on Maria St from Annes St to Frances St, Whitby	<u> </u>	D,C	500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	500.000
	of wm on Simcoe St S from Quebec to Gibb, Oshawa	<u> </u>	D,C	120		0.000	0.000	0.000	0.000	0.000	0.000	120.000
	of wm on Hwy 2 from Garrard Rd to Thornton Rd, Oshawa	ļ	D,C	150	0.000	0.000	0.000	0.000	0.000	0.000	0.000	150.000
	of wm on Hwy 2 from Wilson Rd. to Harmony Crk., Oshawa	-	D,C	820		0.000	0.000	0.000	0.000	0.000	0.000	820.000
	of wm on Hwy 2 from Harmony Rd to Kingsway, Oshawa	ļ	D	100		0.000	0.000	0.000	0.000	0.000	0.000	100.000
	of wm on Valencia Rd. from Oxford St. to dead-end, Oshawa	-	D,C	300		0.000	0.000	0.000	0.000	0.000	0.000	300.000
	of wm on Baseline Rd fr Liberty St to Mearns Ave, Bowmanville	1	D	200		0.000	0.000	0.000	0.000	0.000	0.000	200.000
	of watermains in various locations	1	D,C	515		0.000	0.000	0.000	0.000	0.000	0.000	515.000
94 Allowance for Sub-total	construction of services in unserviced areas		С	200	0.000	200.000 3,000.000	200.000	0.000	0.000	0.000	0.000	0.000
<u> </u>				7,335	0.000	3,000.000	3,000.000	0.000	0.000	0.000	0.000	4,335.000

							Coot	Evnanditura A44-	ibution		
							Cost	Expenditure Attr (\$000,'s)	noution		
		EA			User R	ovenue					Asset
Project Description	DC Item No.	Land Design Const.	Gross Cost A	Grant/ Subsidy/ Other B	Benefit to Existing C	Total User Revenue D	Commercial Development Charges E	Residential Development Charges F	Institutional Charges G	Industrial Charges H	Management Reserve Fund
System Expansion									-		
* 109 Zone 4 FM on Ashburn Rd from Brawley Rd to Columbus Rd, Whitby	234	D	700	0.000	0.000	0.000	15.400	613.200	0.700	70.700	0.000
* 110 Zone 4 FM on Columbus Rd from Thickson Rd to Ritson Rd, Oshawa	238	D	1,500	0.000	0.000	0.000	33.000	1,314.000	1.500	151.500	0.000
* 111 WM on Britannia Dr from Thornton Rd to Windfields Farm Dr, Oshawa	241	С	1,560	0.000	0.000	0.000	34.320	1,366.560	1.560	157.560	0.000
* 130 Zone 1 FM from Bowmanville WSP to Baseline Rd., Bowmanville	305	D	500	0.000	0.000	0.000	11.000	438.000	0.500	50.500	0.000
* 132 Zone 2 FM on Liberty St. from Concession Rd 3 & 4 to Z 2 Res, Bowmanville	309	D	600	0.000	0.000	0.000	13.200	525.600	0.600	60.600	0.000
Sub-total			4,860	0.000	0.000	0.000	106.920	4,257.360	4.860	490.860	0.000
Other Linear Infrastructure											
137 Replacement of meters		С	1,000	0.000	1,000.000	1,000.000	0.000	0.000	0.000	0.000	0.000
139 Depots - Replacement of Lead service connections		D.C	5.000	0.000		5.000.000	0.000	0.000	0.000	0.000	0.000
140 Replacement of valves		C	200	0.000	-,	200.000		0.000	0.000		0.000
141 Replacement of hydrants		C	160	0.000	160.000	160.000	0.000	0.000	0.000	0.000	0.000
Sub-total			6,360	0.000	6,360.000	6,360.000	0.000	0.000	0.000	0.000	0.000
B BUILDINGS											
* 142 Ajax WSP expansion from 163.6 to 327 MLD, Ajax	100	С	102,000	57,120.000	0.000	0.000	2,856.000	28,560.000	204.000	13,260.000	0.000
* 144 Proposed Ajax Zone 1 water storage facility - 11 ML, Ajax	101	С	10,800	0.000	0.000	0.000	237.600	9,460.800	10.800	1,090.800	0.000
* 146 Whitby WSP - Plant No. 1 upgrades		С	10,000	0.000	10,000.000	10,000.000	0.000	0.000	0.000	0.000	0.000
153 Taunton Rd Zone 2 Reservoir Expansion, Oshawa	203	D	1,200	0.000	0.000	0.000	26.400	1,051.200	1.200	121.200	0.000
* 154 Grandview Zone 2 Pumping Station expansion, Oshawa	209	EA	600	0.000	24.000	24.000	12.600	504.600	0.600	58.200	0.000
* 155 Taunton Rd. Zone 3, Pumping Station expansion, Oshawa	211	EA	500	0.000	74.000	74.000	9.400	373.000	0.400		0.000
* 156 Harmony Rd. Zone 3 reservoir expansion, Oshawa	204	EA	500	0.000	74.000	74.000	9.400	373.000	0.400		0.000
* 161 Bowmanville WSP Expansion from 36 to 55 MLD, Bowmanville	300	С	38,000	0.000	0.000	0.000	2,432.000	24,206.000	152.000		0.000
* 165 Bowmanville Zone 2 reservoir expansion, Clarington	302	D	1,000	0.000	51.000	51.000	20.900	831.000	0.900		0.000
* 169 Proposed Zone 2 Reservoir, Newcastle	314	D	600	0.000	85.200	85.200	11.280	451.200	0.480	51.840	0.000
170 Proposed Orono storage facility, Clarington	313	EA	400	0.000	348.800	348.800	1.132	44.800	0.052	5.216	0.000
* 184 Water Storage Facilities condition assessments and rehabilitation works		D,C	150	0.000	0.000	0.000	0.000	0.000	0.000	0.000	150.000
* 185 Wellhead protection at Regional well sites Sub-total	800	D,C	800 166.550	0.000 57,120.000	800.000 11.457.000	800.000 11.457.000	0.000 5.616.712	0.000 65.855.600	0.000 370.832	0.000 25.979.856	0.000 150.000
			100,550	37,120.000	11,437.000	11,407.000	5,010.712	03,033.000	370.032	20,919.000	150.000
C MACHINERY AND EQUIPMENT			100	2 25 5	100.05	100 05-	2 2 2 2	2 2 2 2	2 2 2 2	2.25	2 2 2 2
* 189 Cherrywood WPS - Station Upgrades, Pickering	004	D	100	0.000	100.000	100.000		0.000	0.000		0.000
* 191 Whitby WSP - filter treatment process upgrades Sub-total	201	С	8,000 8,100	0.000	6,008.000 6,108.000	6,008.000 6,108.000	128.000 128.000	1,272.000 1,272.000	8.000 8.000	584.000 584.000	0.000
D IT INFRASTRUCTURE											
				0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Sub-total				0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

							Cost	Expenditure Attr (\$000,'s)	ibution		
Project Description	DC Item	EA Land Design	Gross	Grant/ Subsidy/	User R	Total User	Commercial Development	Residential Development	Institutional	Industrial	Asset Management Reserve
	No.	Const.	Cost A	Other B	Existing C	Revenue D	Charges E	Charges F	Charges G	Charges H	Fund I
E ALLOWANCES AND OTHER PROVISIONS											
219 Asset Condition Assessments-Report		D	300	0.000	0.000	0.000	0.000	0.000	0.000	0.000	300.000
220 Asset Condition Assessment/Investigation transmission pipe		D	200	0.000	0.000	0.000	0.000	0.000	0.000	0.000	200.000
221 Master Planning energy management		D	200	0.000	200.000	200.000	0.000	0.000	0.000	0.000	0.000
222 Allowance for acquisition of easements		D,C	150	0.000	150.000	150.000	0.000	0.000	0.000	0.000	0.000
223 Allowance for engineering studies		D,C	300	0.000	300.000	300.000	0.000	0.000	0.000	0.000	0.000
224 Allowance for CTC Source Water Protection Plan		D	300	0.000	300.000	300.000	0.000	0.000	0.000	0.000	0.000
225 Preliminary Engineering		D	100	0.000	100.000	100.000	0.000	0.000	0.000	0.000	0.000
226 Allowance for sundry extensions as per council policy		D,C	15	0.000	15.000	15.000	0.000	0.000	0.000	0.000	0.000
227 Allowance for unknown requirements		D,C	100	0.000	100.000	100.000	0.000	0.000	0.000	0.000	0.000
228 Allowance for land severance review and drawing requirements		D,C	100	0.000	100.000	100.000	0.000	0.000	0.000	0.000	0.000
229 Allowance for Regional share for works in conjunction with residential subdivision development	708	D,C	1,460	0.000	0.000	0.000	39.420	1,281.880	5.840	132.860	0.000
230 Allowance for Regional share for works in conjunction with non-residential development	706	D,C	400	0.000	0.000	0.000	10.800	351.200	1.600	36.400	0.000
231 Well interference works		D	1,000	0.000	0.000	0.000	0.000	1,000.000	0.000	0.000	0.000
Sub-total			4,625	0.000	1,265.000	1,265.000	50.220	2,633.080	7.440	169.260	500.000
Total Cost Attribution			202,500	57,120.000	32,860.000	32,860.000	5,901.852	74,018.040	391.132	27,223.976	4,985.000

^{*} Indicates Capital project requires prior and/or future funding commitments. Refer to Construction of Municipal Services detail sheet.

								Cost E	xpenditure Attı (\$000,'s)	ribution		
	Project Description	DC Item No.	EA Land Design Const.	Gross Cost A	Grant/ Subsidy/ Other B	User Re Benefit to Existing C	Total User Revenue D	Commercial Development Charges E	Residential Development Charges F	Institutional Charges G	Industrial Charges H	Asset Management Reserve Fund I
A	LINEAR INFRASTRUCTURE											
	Regional Road Program											
*	8 R.R. 53 (Stevenson Rd.) from Bond St. to Rossland Rd., Oshawa		С	1,240	0.000	1,240.000	1,240.000	0.000	0.000	0.000	0.000	0.000
	16 Allowance for watermains in conjuction with Regional Roads		D,C	600	0.000	600.000	600.000	0.000	0.000	0.000	0.000	0.000
	Sub-total			1,840	0.000	1,840.000	1,840.000	0.000	0.000	0.000	0.000	0.000
	Area Municipality Road Programs											
1	7A City of Pickering Road Program		D,C	275	0.000	275.000	275.000	0.000	0.000	0.000	0.000	0.000
	7B Town of Ajax Road Program		D,C	200	0.000	200.000	200.000	0.000	0.000	0.000	0.000	0.000
	7C Town of Whitby Road Program		D,C	620	0.000	620.000	620.000	0.000	0.000	0.000	0.000	0.000
	7D City of Oshawa Road Program		D,C	1,100	0.000	1,100.000	1,100.000	0.000	0.000	0.000	0.000	0.000
1	7E Municipality of Clarington Road Program		D,C	370	0.000	370.000	370.000	0.000		0.000	0.000	0.000
	7F Township of Scugog Road Program		D,C	130	0.000	130.000	130.000	0.000	0.000	0.000	0.000	0.000
	7G Township of Uxbridge Road Program		D,C	270	0.000	270.000	270.000	0.000	0.000	0.000	0.000	0.000
	7H Township of Brock Road Program 17i Allowance for unknown requirements in conjunction		D,C D,C	250 200	0.000 0.000	250.000 200.000	250.000 200.000	0.000	0.000	0.000	0.000	0.000
	with area municipality road programs		D,C	200	0.000	200.000	200.000	0.000	0.000	0.000	0.000	0.000
-	Sub-total			3,415	0.000	3,415.000	3,415.000	0.000	0.000	0.000	0.000	0.000
	MTO & GO Transit projects			2,		2,	5,					
*	18 Allowance for unknown requirements		D,C	100	0.000	100.000	100.000	0.000	0.000	0.000	0.000	0.000
	Sub-total			100	0.000	100.000	100.000	0.000	0.000	0.000	0.000	0.000
	Betterments/Replacement											
	21 Works independent of road programs in various locations		D,C	800	0.000	800.000	800.000	0.000	0.000	0.000	0.000	0.000
	22 Rehabilitation of existing watermains in various locations		D,C	2,000	0.000	2,000.000	2,000.000	0.000	0.000	0.000	0.000	0.000
	40 Replacement of wm on Consumers Dr from Thickson to Sunray, Whitby		D,C	650	0.000	0.000	0.000	0.000	0.000	0.000	0.000	650.000
	53 Replacement of wm on Hwy 2 from Harmony Rd to Kingsway, Oshawa 67 Replacement of wm on Baseline Rd fr Liberty St to Mearns Ave, Bowmanville	-	C	1,300 1,000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
	67 Replacement of wm on Baseline Rd fr Liberty St to Mearns Ave, Bowmanville 77 Replacement of wm on Perry St. from North St to Paxton St, Port Perry		D,C	1,000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1,000.000 200.000
	80 Replacement of wm on Cameron St fr E McRae to W Simcoe St., Cannington		D,C	250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	250.000
	93 Replacement of watermains in various locations		D,C	1,100	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1,100.000
	94 Allowance for construction of services in unserviced areas		C	200	0.000	200.000	200.000	0.000	0.000	0.000	0.000	0.000
	Sub-total			7,500	0.000	3,000.000	3,000.000	0.000	0.000	0.000	0.000	4,500.000
	System Expansion		<u> </u>									
	95 Zone 1 FM on Bayly St. from Pickering Beach to Toy Ave., Pickering/Ajax	102	D	1,000	209.100	0.000	0.000	17.300	692.800	0.800	80.000	0.000
	109 Zone 4 FM on Ashburn Rd. from Brawley Rd. to Columbus Rd., Whitby	234	С	6,900	0.000	0.000	0.000	151.800	6,044.400	6.900	696.900	0.000
	21 Zone 4 FM on Ritson Rd from Columbus to Winchester, Oshawa	239	С	6,000	0.000	0.000	0.000	132.000	5,256.000	6.000	606.000	0.000
_ 1	I22 Zone 4 FM on Winchester Rd from Ritson Rd to Harmony Rd., Oshawa Sub-total	240	D	5,700 19,600	0.000 209.100	0.000	0.000	125.400 426.500	4,993.200 16,986.400	5.700 19.400	575.700 1,958.600	0.000
	Other Linear Infrastructure			19,000	209.100	0.000	0.000	420.500	10,300.400	19.400	1,300.000	0.000
1	137 Replacement of meters	 	С	1,500	0.000	1,500.000	1,500.000	0.000	0.000	0.000	0.000	0.000
	Topicomon or motoro	1		1,000	0.000	1,000.000	1,500.000	0.000	0.000	0.000	0.000	0.000

							Cost E	xpenditure Attr (\$000,'s)	ribution		
	DC	EA Land		Grant/	User R	evenue Total	Commercial	Residential			Asset Management
Project Description	Item No.	Design Const.	Gross Cost A	Subsidy/ Other B	Benefit to Existing C	User Revenue D	Development Charges E	Development Charges F	Institutional Charges G	Industrial Charges H	Reserve Fund
139 Depots - Replacement of Lead service connections		D,C	5,000	0.000	5,000.000	5,000.000	0.000	0.000	0.000	0.000	0.000
140 Replacement of valves		С	200	0.000	200.000	200.000	0.000	0.000	0.000	0.000	0.000
141 Replacement of hydrants		С	160	0.000	160.000	160.000	0.000	0.000	0.000	0.000	0.000
Sub-total			6,860	0.000	6,860.000	6,860.000	0.000	0.000	0.000	0.000	0.000
B BUILDINGS											
 149 Thickson Rd. Zone 3 Pumping Station expansion, Whitby 	210	С	10,600	0.000	1,388.600	1,388.600	202.460	8,066.600	9.540	932.800	0.000
* 156 Harmony Rd. Zone 3 reservoir expansion, Oshawa	204	D	500	0.000	74.000	74.000	9.400	373.000	0.400	43.200	0.000
 * 184 Water Storage Facilities condition assessments and rehabilitation works 		D,C	150	0.000	0.000	0.000	0.000	0.000	0.000	0.000	150.000
* 185 Wellhead protection at Regional well sites	800	D,C	800	0.000	800.000	800.000	0.000	0.000	0.000	0.000	0.000
Sub-total			12,050	0.000	2,262.600	2,262.600	211.860	8,439.600	9.940	976.000	150.000
C MACHINERY AND EQUIPMENT											
 189 Cherrywood WPS - Station Upgrades, Pickering 		D	150	0.000	150.000	150.000	0.000	0.000	0.000	0.000	0.000
Sub-total			150	0.000	150.000	150.000	0.000	0.000	0.000	0.000	0.000
D IT INFRASTRUCTURE											
Sub-total			0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
E ALLOWANCES AND OTHER PROVISIONS											
219 Asset Condition Assessments-Report		D	135	0.000	0.000	0.000	0.000	0.000	0.000	0.000	135.000
220 Asset Condition Assessment/Investigation transmission pipe		D	200	0.000	0.000	0.000	0.000	0.000	0.000	0.000	200.000
222 Allowance for acquisition of easements		D,C D.C	150 150	0.000	150.000	150.000 150.000	0.000	0.000	0.000	0.000	0.000
223 Allowance for engineering studies	-	D,C D	100	0.000	150.000 100.000	150.000	0.000	0.000	0.000	0.000	0.000
Preliminary Engineering Allowance for sundry extensions as per council policy	 	D.C	100	0.000	15.000	100.000	0.000	0.000	0.000	0.000	0.000
227 Allowance for unknown requirements	-	D,C	100	0.000	100.000	100.000	0.000	0.000	0.000	0.000	0.000
228 Allowance for land severance review and drawing requirements	-	D,C	100	0.000	100.000	100.000	0.000	0.000	0.000	0.000	0.000
229 Allowance for Regional share for works in conjunction with	708	D,C	1,460	0.000	0.000	0.000	39.420	1,281.880	5.840	132.860	0.000
residential subdivision development	, 00	5,0	1,400	0.000	0.000	0.000	55.420	1,201.000	5.040	102.000	0.000
230 Allowance for Regional share for works in conjunction with non-residential development	706	D,C	400	0.000	0.000	0.000	10.800	351.200	1.600	36.400	0.000
231 Well interference works		D	1,000	0.000	0.000	0.000	0.000	1,000.000	0.000	0.000	0.000
Sub-total			3,810	0.000	615.000	615.000	50.220	2,633.080	7.440	169.260	335.000
Total Cost Attribution			55,325	209.100	18,242.600	18,242.600	688.580	28,059.080	36.780	3,103.860	4,985.000

^{*} Indicates Capital project requires prior and/or future funding commitments. Refer to Construction of Municipal Services detail sheet.

	1										
						,	Cost	Expenditure Attr (\$000,'s)	ibution	T	
Project Description	DC Item	EA Land Design	Gross	Grant/ Subsidy/	User R	evenue Total User	Commercial Development	Residential Development	Institutional	Industrial	Asset Management Reserve
	No.	Const.	Cost A	Other B	Existing C	Revenue D	Charges E	Charges F	Charges G	Charges H	Fund I
A LINEAR INFRASTRUCTURE											
Regional Road Program											
16 Allowance for watermains in conjuction with Regional Roads		D,C	2,000	0.000	2,000.000	2,000.000	0.000	0.000	0.000	0.000	0.000
Sub-total			2,000	0.000	2,000.000	2,000.000	0.000	0.000	0.000	0.000	0.000
Area Municipality Road Programs											
17A City of Pickering Road Program		D,C	275	0.000	275.000	275.000	0.000	0.000	0.000		0.000
17B Town of Ajax Road Program 17C Town of Whitby Road Program	+	D,C D.C	200 620	0.000	200.000 620.000	200.000 620.000	0.000 0.000	0.000	0.000		0.000
17D City of Oshawa Road Program		D,C	1,100	0.000	1,100.000	1,100.000	0.000	0.000	0.000		0.000
17E Municipality of Clarington Road Program		D,C	370	0.000	370.000	370.000	0.000	0.000	0.000		0.000
17F Township of Scugog Road Program		D,C	130	0.000	130.000	130.000	0.000	0.000	0.000		0.000
17G Township of Uxbridge Road Program		D,C	270	0.000	270.000	270.000	0.000	0.000	0.000		0.000
17H Township of Brock Road Program 17i Allowance for unknown requirements in conjunction		D,C D,C	250 200	0.000	250.000 200.000	250.000 200.000	0.000 0.000	0.000	0.000		0.000
with area municipality road programs		D,C	200	0.000	200.000	200.000	0.000	0.000	0.000	0.000	0.000
Sub-total			3,415	0.000	3,415.000	3,415.000	0.000	0.000	0.000	0.000	0.000
MTO & GO Transit projects					·						
* 18 Allowance for unknown requirements		D,C	100	0.000	100.000	100.000	0.000	0.000	0.000	0.000	0.000
Sub-total Sub-total			100	0.000	100.000	100.000	0.000	0.000	0.000	0.000	0.000
Betterments/Replacement											
21 Works independent of road programs in various locations		D,C	800	0.000	800.000	800.000	0.000	0.000	0.000		
22 Rehabilitation of existing watermains in various locations		D,C	2,000	0.000	2,000.000	2,000.000	0.000	0.000	0.000		0.000
25 Replacement of wm on Brock Rd from Feldspar to Clements, Pickering		D,C	500	0.000	0.000	0.000	0.000	0.000	0.000		
26 Replacement of wm on Notion Rd from Kingston Rd to 230 m S, Pickering 35 Replacement of wm on Dowty Rd from Thomson St to Hunt St, Ajax		D,C D,C	300 700	0.000	0.000	0.000	0.000 0.000	0.000	0.000		300.000 700.000
49 Replacement of wm on Thornton Rd from Bloor St to under CNR, Oshawa		D,C	350	0.000	0.000	0.000	0.000	0.000	0.000		350.000
69 Replacement of wm on Amos St. from Toronto St. to Hwy 401, Newcastle		D,C	250	0.000	0.000	0.000	0.000	0.000	0.000		250.000
80 Replacement of wm on Cameron St fr E McRae to W Simcoe St., Cannington		Ċ	750	0.000	0.000	0.000	0.000	0.000	0.000	0.000	750.000
81 Replacement of wm on Laidlaw St. from Cameon S. to Park St, Cannington		D,C	450	0.000	0.000	0.000	0.000	0.000	0.000		450.000
93 Replacement of watermains in various locations		D,C	1,035	0.000	0.000	0.000	0.000	0.000	0.000		1,035.000
94 Allowance for construction of services in unserviced areas Sub-total		С	7,335	0.000	200.000 3,000.000	200.000 3,000.000	0.000	0.000	0.000		0.000 4,335.000
System Expansion			7,555	0.000	3,000.000	3,000.000	0.000	0.000	0.000	0.000	4,000.000
* 103 Zone 1 West Whitby FM from Brock/Victoria St to Rossland Rd, Whitby	242	EA	600	0.000	30.600	30.600	12.540	498.600	0.540	57.720	0.000
* 110 Zone 4 FM on Columbus Rd. from Thickson Rd to Ritson, Oshawa	238	С	15,000	0.000	0.000	0.000	330.000	13,140.000	15.000	1,515.000	0.000
* 130 Zone 1 FM from Bowmanville WSP to Baseline Rd., Bowmanville	305	С	7,600	0.000	0.000	0.000	167.200	6,657.600	7.600		
* 131 Zone 1 FM on Baseline Rd. from Wharf St. to Mearns Ave., Bowmanville	306	EA	520	0.000	0.000	0.000	11.440	455.520	0.520		
* 132 Zone 2 FM on Liberty St. from Concession Rd 3 & 4 to Z 2 Res, Bowmanville Sub-total	309	С	6,800 30,520	0.000	0.000 30.600	0.000 30.600	149.600 670.780	5,956.800 26,708.520	6.800 30.460		
Other Linear Infrastructure			30,320	0.000	30.000	30.000	010.180	20,700.020	30.400	5,075.040	0.000
137 Replacement of meters	+	С	1,800	0.000	1,800.000	1,800.000	0.000	0.000	0.000	0.000	0.000
101 Trehiarement of merera	1		1,000	0.000	1,000.000	1,000.000	0.000	0.000	0.000	0.000	0.000

							Cost	Expenditure Attr	ribution		
Project Description	DC Item No.	EA Land Design Const.	Gross Cost A	Grant/ Subsidy/ Other B	User Ro Benefit to Existing C	Total User Revenue D	Commercial Development Charges E	Residential Development Charges F	Institutional Charges G	Industrial Charges H	Asset Management Reserve Fund I
139 Depots - Replacement of Lead service connections		D,C	5,000	0.000	5,000.000	5,000.000	0.000	0.000	0.000	0.000	0.000
140 Replacement of valves		С	200	0.000	200.000	200.000	0.000	0.000	0.000	0.000	
141 Replacement of hydrants		С	160	0.000		160.000	0.000	0.000			
Sub-total			7,160	0.000	7,160.000	7,160.000	0.000	0.000	0.000	0.000	0.000
B BUILDINGS											
152 Proposed Whitby Zone 5 Pumping Station and feedermain, Whitby	213	EA	500	0.000	0.000	0.000	11.000	438.000			
153 Taunton Rd Zone 2 Reservoir Expansion, Oshawa	203	С	10,800	0.000		0.000	237.600	9,460.800			0.000
* 154 Grandview Zone 2 Pumping Station expansion, Oshawa	209	С	5,300	0.000		212.000	111.300	4,457.300			
* 155 Taunton Rd. Zone 3 Pumping Station expansion, Oshawa	211	D C	650 3,400	0.000		96.200	12.220 63.920	484.900			
* 156 Harmony Rd. Zone 3 Reservoir expansion, Oshawa	204	EA		0.000		503.200		2,536.400			0.000
159 Proposed Zone 5 Pumping Station and feedermain, Oshawa * 165 Bowmanville Zone 2 reservoir expansion, Clarington	214 302		500	0.000		0.000	11.000	438.000			0.000
* 169 Proposed Zone 2 Reservoir, Newcastle	302	C	6,300	0.000		321.300 710.000	131.670 94.000	5,235.300 3,760.000			
170 Proposed Zone z Reservoir, Newcastie 170 Proposed Orono storage facility, Clarington	313	D	5,000 500	0.000	436.000	436.000	1.415	56.000		6.520	
* 183 Beaverton additional water storage from 2 ML to 4.8 ML, Brock	605	EA	500	0.000		258.500	5.300	211.500			
to 3 Beaverior additional water storage from 2 ML to 4.6 ML, Block to 4.6 ML, Block Water Storage Facilities condition assessments and rehabilitation works	003	D,C	150	0.000		0.000	0.000	0.000			
* 185 Wellhead protection at Regional well sites	800	D,C	800	0.000		800.000	0.000	0.000			0.000
Sub-total	000	D,C	34,400	0.000		3,337.200	679.425	27,078.200			
C MACHINERY AND EQUIPMENT					5,551.255	2,000				5,	
* 188 Rosebank WPS - Station Upgrades, Pickering		D	100	0.000		100.000	0.000	0.000	0.000	0.000	
* 189 Cherrywood WPS - Station Upgrades, Pickering		С	2,000	0.000	,	2,000.000	0.000	0.000		0.000	
Sub-total			2,100	0.000	2,100.000	2,100.000	0.000	0.000	0.000	0.000	0.000
D IT INFRASTRUCTURE											
Sub-total			0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
E ALLOWANCES AND OTHER PROVISIONS											
219 Asset Condition Assessments-Report		D	300	0.000		0.000	0.000	0.000			300.000
220 Asset Condition Assessment/Investigation transmission pipe		D	200	0.000		0.000	0.000	0.000			
222 Allowance for acquisition of easements		D,C	150	0.000		150.000	0.000	0.000			
223 Allowance for engineering studies		D,C	300	0.000		300.000	0.000	0.000			
224 Allowance for CTC Source Water Protection Plan		D	500	0.000	500.000	500.000	0.000	0.000		0.000	
225 Preliminary Engineering		D	100	0.000		100.000	0.000	0.000		0.000	
226 Allowance for sundry extensions as per council policy 227 Allowance for unknown requirements		D,C D,C	15 100	0.000		15.000 100.000	0.000 0.000	0.000		0.000	
		D,C	100	0.000		100.000		0.000			
228 Allowance for land severance review and drawing requirements 229 Allowance for Regional share for works in conjunction with residential subdivision development	708	D,C	1,460	0.000		0.000	39.420	1,281.880			
230 Allowance for Regional share for works in conjunction with non-residential development	706	D,C	400	0.000	0.000	0.000	10.800	351.200	1.600	36.400	0.000
231 Well interference works		D	1,000	0.000	0.000	0.000	0.000	1,000.000	0.000	0.000	0.000
Sub-total Sub-total			4,625	0.000	1,265.000	1,265.000	50.220	2,633.080			
Total Cost Attribution			91,655	0.000	22,407.800	22,407.800	1,400.425	56,419.800	92.425	6,349.550	4,985.000

^{*} Indicates Capital project requires prior and/or future funding commitments. Refer to Construction of Municipal Services detail sheet.

								Cost	Expenditure Attr (\$000,'s)	ribution		
F	Project Description	DC Item No.	EA Land Design Const.	Gross Cost A	Grant/ Subsidy/ Other B	User Ro Benefit to Existing C	Total User Revenue D	Commercial Development Charges E	Residential Development Charges F	Institutional Charges G	Industrial Charges H	Asset Management Reserve Fund I
A L	LINEAR INFRASTRUCTURE											
F	Regional Road Program											
* 3 F	R.R. 36 (Hopkins St.) from Consumers Dr. to Dundas St., Whitby		С	400	0.000	400.000	400.000	0.000	0.000	0.000	0.000	
	Allowance for watermains in conjuction with Regional Roads		D,C	2,000	0.000	2,000.000	2,000.000	0.000	0.000		0.000	
S	Sub-total			2,400	0.000	2,400.000	2,400.000	0.000	0.000	0.000	0.000	0.000
A	Area Municipality Road Programs											
17A C	City of Pickering Road Program		D,C	275	0.000	275.000	275.000	0.000	0.000	0.000	0.000	0.000
	Town of Ajax Road Program		D,C	200	0.000	200.000	200.000	0.000	0.000	0.000	0.000	0.000
	Fown of Whitby Road Program		D,C	620	0.000	620.000	620.000		0.000	0.000	0.000	
17D C	City of Oshawa Road Program		D,C	1,100	0.000	1,100.000	1,100.000	0.000	0.000	0.000	0.000	0.000
17E N	Municipality of Clarington Road Program		D,C	370	0.000	370.000	370.000		0.000		0.000	
	Township of Scugog Road Program		D,C	130	0.000	130.000	130.000	0.000	0.000		0.000	
	Fownship of Uxbridge Road Program Fownship of Brock Road Program		D,C D,C	270 250	0.000	270.000 250.000	270.000 250.000	0.000	0.000		0.000	
	Allowance for unknown requirements in conjunction		D,C	200	0.000	200.000	200.000	0.000	0.000	0.000	0.000	
	vith area municipality road programs		D,C	200	0.000	200.000	200.000	0.000	0.000	0.000	0.000	0.000
	Sub-total			3,415	0.000	3,415.000	3,415.000	0.000	0.000	0.000	0.000	0.000
N	MTO & GO Transit projects											
* 18 A	Allowance for unknown requirements		D,C	100	0.000	100.000	100.000	0.000	0.000		0.000	0.000
S	Sub-total			100	0.000	100.000	100.000	0.000	0.000	0.000	0.000	0.000
E	Setterments/Replacement											
	Norks independent of road programs in various locations		D,C	800	0.000	800.000	800.000		0.000		0.000	
	Rehabilitation of existing watermains in various locations		D,C	2,000	0.000	2,000.000	2,000.000	0.000	0.000	0.000	0.000	0.000
	Replacement of wm on Centre St. fr Palmerston Ave to Rossland Rd, Whitby		D	480	0.000	0.000	0.000	0.000	0.000		0.000	
	Replacement of wm on Thornton Rd fr Bloor St to under CNR, Oshawa Replacement of wm on Port Darlington Rd. fr Lake Rd to WSP, Bowmanville		D,C	2,000	0.000	0.000	0.000	0.000	0.000		0.000	, , , , , , , , , , , , , , , , , , , ,
	Allowance for construction of services in unserviced areas		D,C C	2,000 200	0.000	0.000 200.000	0.000 200.000	0.000	0.000		0.000	, , , , , , , , , , , , , , , , , , , ,
	Sub-total		C	7,480	0.000	3,000.000	3,000.000	0.000	0.000		0.000	
	System Expansion			7,400	0.000	0,000.000	0,000.000	0.000	0.000	0.000	0.000	4,400.000
* 95 Z	Zone 1 FM on Bayly St. from Pickering Beach to Toy Ave., Pickering/Ajax	103	D	17,575	3,674.933	0.000	0.000	304.048	12,175.960	14.060	1,406.000	0.000
	Sub-total Sub-total			17,575	3,674.933	0.000	0.000	304.048	12,175.960	14.060	1,406.000	
c	Other Linear Infrastructure											
	Replacement of meters		С	1,300	0.000		1,300.000		0.000		0.000	
	Depots - Replacement of Lead service connections		D,C	5,000	0.000		5,000.000		0.000			
	Replacement of valves		C	200	0.000		200.000		0.000		0.000	
	Replacement of hydrants		С	160	0.000		160.000		0.000		0.000	
١	Sub-total Sub-total	l	1	6,660	0.000	6,660.000	6,660.000	0.000	0.000	0.000	0.000	0.000

							Cost	Expenditure Attı (\$000,'s)	ribution		
Project Description	DC Item No.	EA Land Design Const.	Gross Cost A	Grant/ Subsidy/ Other B	User R Benefit to Existing C	evenue Total User Revenue D	Commercial Development Charges E	Residential Development Charges F	Institutional Charges G	Industrial Charges H	Asset Management Reserve Fund I
B BUILDINGS											
152 Proposed Whitby Zone 5 Pumping Station and feedermain, Whitby	213	D	2,000	0.000	0.000	0.000	44.000	1,752.000	2.000	202.000	0.000
159 Proposed Zone 5 Pumping Station and feedermain, Oshawa	214	D	1,500	0.000	0.000	0.000	33.000	1,314.000	1.500	151.500	0.000
* 177 Sunderland New well and pumphouse with standby power, Brock	603	EA	500	0.000	250.000	250.000	15.950	159.250		73.800	0.000
* 180 Cannington New well and pumphouse with standby power, Brock	601	EA	500	0.000	250.000	250.000	15.950	159.250	1.000	73.800	0.000
* 182 Beaverton Water Supply Plant expansion, Brock	604	EA	500	0.000	250.000	250.000	15.950	159.250		73.800	0.000
* 184 Water Storage Facilities condition assessments and rehabilitation works		D,C	150	0.000	0.000	0.000	0.000	0.000		0.000	150.000
* 185 Wellhead protection at Regional well sites	800	D,C	800	0.000	800.000	800.000	0.000	0.000		0.000	0.000
Sub-total C MACHINERY AND EQUIPMENT			5,950	0.000	1,550.000	1,550.000	124.850	3,543.750	6.500	574.900	150.000
* 188 Rosebank WPS - Station Upgrades, Pickering		D	150	0.000	150.000	150.000	0.000	0.000	0.000	0.000	0.000
* 195 Oshawa WSP - Motor Control Center - replacement		D	200	0.000	200.000	200.000	0.000	0.000	0.000	0.000	0.000
Sub-total D IT INFRASTRUCTURE			350	0.000	350.000	350.000	0.000	0.000	0.000	0.000	0.000
Sub-total E ALLOWANCES AND OTHER PROVISIONS			0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
219 Asset Condition Assessments-Report		D	155	0.000	0.000	0.000	0.000	0.000	0.000	0.000	155.000
220 Asset Condition Assessment/Investigation transmission pipe		D	200	0.000	0.000	0.000	0.000	0.000	0.000	0.000	200.000
222 Allowance for acquisition of easements		D,C	150	0.000	150.000	150.000	0.000	0.000	0.000	0.000	0.000
223 Allowance for engineering studies		D,C	150	0.000	150.000	150.000	0.000	0.000	0.000	0.000	0.000
225 Preliminary Engineering		D	100	0.000	100.000	100.000	0.000	0.000	0.000	0.000	0.000
226 Allowance for sundry extensions as per council policy		D,C	15	0.000	15.000	15.000	0.000	0.000	0.000	0.000	0.000
227 Allowance for unknown requirements		D,C	100	0.000	100.000	100.000	0.000	0.000	0.000	0.000	0.000
228 Allowance for land severance review and drawing requirements		D,C	100	0.000	100.000	100.000	0.000	0.000	0.000	0.000	0.000
229 Allowance for Regional share for works in conjunction with residential subdivision development	708	D,C	1,460		0.000	0.000	39.420	1,281.880			0.000
230 Allowance for Regional share for works in conjunction with non-residential development	706	D,C	400	0.000		0.000	10.800	351.200			0.000
231 Well interference works		D	1,000	0.000	0.000	0.000	0.000	1,000.000		0.000	0.000
Sub-total Sub-total			3,830	0.000	615.000	615.000	50.220	2,633.080	7.440	169.260	355.000
Total Cost Attribution			47,760	3,674.933	18,090.000	18,090.000	479.118	18,352.790	28.000	2,150.160	4,985.000

^{*} Indicates Capital project requires prior and/or future funding commitments. Refer to Construction of Municipal Services detail sheet.

							Cost	Expenditure Attı (\$000,'s)	ribution		
		EA		0	User R		0	Basida etial			Asset
Project Description	DC Item No.	Land Design Const.	Gross Cost A	Grant/ Subsidy/ Other B	Benefit to Existing C	Total User Revenue D	Commercial Development Charges E	Residential Development Charges F	Institutional Charges G	Industrial Charges H	Management Reserve Fund I
A LINEAR INFRASTRUCTURE											
Regional Road Program											
16 Allowance for watermains in conjuction with Regional Roads		D,C	2,000	0.000	2,000.000	2,000.000	0.000	0.000	0.000		0.000
Sub-total			2,000	0.000	2,000.000	2,000.000	0.000	0.000	0.000	0.000	0.000
Area Municipality Road Programs											
17A City of Pickering Road Program		D,C	275		275.000	275.000	0.000	0.000	0.000		0.000
17B Town of Ajax Road Program		D,C	200	0.000	200.000	200.000	0.000	0.000	0.000		0.000
17C Town of Whitby Road Program 17D City of Oshawa Road Program		D,C D,C	620 1,100	0.000	620.000 1,100.000	620.000 1,100.000	0.000	0.000	0.000		0.000
17E Municipality of Clarington Road Program		D,C	370	0.000	370.000	370.000	0.000	0.000	0.000		0.000
17F Township of Scugog Road Program		D,C	130	0.000	130.000	130.000	0.000	0.000	0.000		0.000
17G Township of Uxbridge Road Program		D,C	270	0.000	270.000	270.000	0.000	0.000	0.000		0.000
17H Township of Brock Road Program		D,C	250	0.000	250.000	250.000	0.000	0.000	0.000		0.000
17i Allowance for unknown requirements in conjunction		D,C	200	0.000	200.000	200.000	0.000	0.000	0.000	0.000	0.000
with area municipality road programs Sub-total			3,415	0.000	3,415.000	3,415.000	0.000	0.000	0.000	0.000	0.000
MTO & GO Transit projects			0,410	0.000	0,410.000	0,410.000	0.000	0.000	0.000	0.000	0.000
* 18 Allowance for unknown requirements		D,C	100	0.000	100.000	100.000	0.000	0.000	0.000		0.000
Sub-total			100	0.000	100.000	100.000	0.000	0.000	0.000	0.000	0.000
Betterments/Replacement											
21 Works independent of road programs in various locations		D,C	800	0.000	800.000	800.000	0.000	0.000	0.000		0.000
22 Rehabilitation of existing watermains in various locations 62 Replacement of watermain on Ansley Crt fr Rossland Rd to dead-end, Oshawa		D,C	2,000	0.000	2,000.000	2,000.000	0.000	0.000	0.000		0.000 320.000
63 Replacement of watermain on Ansiey Crt if Rossiand Rd to dead-end, Osnawa 63 Replacement of watermain on Beaupre Ave fr Lakefield Rd to Tremblay St, Oshawa		D,C D,C	320 410	0.000	0.000	0.000	0.000 0.000	0.000	0.000		410.000
* 93 Replacement of watermains in various locations		D,C	3,605	0.000	0.000	0.000	0.000	0.000	0.000		3,605.000
94 Allowance for construction of services in unserviced areas		C	200	0.000	200.000	200.000	0.000	0.000	0.000		0.000
Sub-total			7,335	0.000	3,000.000	3,000.000	0.000	0.000	0.000	0.000	4,335.000
System Expansion											
* 103 Zone 1 West Whitby FM from Brock/Victoria St to Rossland Rd, Whitby	242	D	600	0.000	30.600	30.600	12.540	498.600	0.540		0.000
* 131 Zone 1 FM on Baseline Rd from Wharf St to Mearns Ave, Bowmanville Sub-total	306	D	500 1,100	0.000	0.000 30.600	0.000 30.600	11.000 23.540	438.000 936.600	0.500 1.040	50.500 108.220	0.000 0.000
Other Linear Infrastructure											
137 Replacement of meters		С	1,500	0.000	1,500.000		0.000	0.000	0.000		0.000
139 Depots - Replacement of Lead service connections		D,C	5,000		5,000.000		0.000	0.000	0.000		0.000
140 Replacement of valves		C	200		200.000	200.000	0.000	0.000	0.000		0.000
141 Replacement of hydrants Sub-total		С	160 6,860		160.000 6,860.000	160.000 6,860.000	0.000 0.000	0.000 0.000	0.000 0.000		0.000 0.000
B BUILDINGS											

				Cost Expenditure Attribution (\$000,'s)							
Project Description	DC Item No.	EA Land Design Const.	Gross Cost A	Grant/ Subsidy/ Other B	User R Benefit to Existing C	evenue Total User Revenue D	Commercial Development Charges E	Residential Development Charges F	Institutional Charges G	Industrial Charges H	Asset Management Reserve Fund I
450 Decree AMILIAN Zero 5 Decree of Obstine and for James in Miliah	040	0	40.000	0.000	0.000	0.000	000 000	0.700.000	40.000	4 040 000	0.000
152 Proposed Whitby Zone 5 Pumping Station and feedermain, Whitby	213 214	C	10,000 7.700	0.000	0.000	0.000	220.000 169.400	8,760.000	10.000 7.700	1,010.000 777.700	0.000
159 Proposed Zone 5 Pumping Station and feedermain, Oshawa 170 Proposed Orono storage facility, Clarington	313	C	4,100	0.000	3,575.200		11.603	6,745.200 459.200	0.533	53.464	0.000
* 176 Sunderland additional water storage from 1.4 ML to 3.0 ML, Brock	607	EA	500	0.000	283.000	283.000	4.800	190.000	0.200	22.000	0.000
* 181 Cannington additional water storage facility 1.4 ML to 3.0 ML, Brock	606	EA	500	0.000	283.000	283.000	4.800	190.000	0.200	22.000	0.000
* 183 Beaverton additional water storage 2 ML to 4.8 ML, Brock	605	D	500	0.000	258.500	258.500	5.300	211.500	24.450	0.250	0.000
* 184 Water Storage Facilities condition assessments and rehabilitation works	000	D.C	150	0.000	0.000	0.000	0.000	0.000	0.000	0.000	150.000
* 185 Wellhead protection at Regional well sites	800	D,C	800	0.000	800.000	800.000	0.000	0.000	0.000	0.000	0.000
Sub-total Sub-total			24,250	0.000	5,199.700	5,199.700	415.903	16,555.900	43.083	1,885.414	150.000
C MACHINERY AND EQUIPMENT											
* 188 Rosebank WPS - Station Upgrades, Pickering		С	2,000	0.000	2,000.000	2,000.000	0.000	0.000	0.000	0.000	0.000
* 195 Oshawa WSP - Motor Control Center - replacement		C	1,000	0.000	1,000.000	1,000.000	0.000	0.000	0.000	0.000	0.000
Sub-total			3,000	0.000	3,000.000	3,000.000	0.000	0.000	0.000	0.000	0.000
D IT INFRASTRUCTURE											
Sub-total E ALLOWANCES AND OTHER PROVISIONS			0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
* 217 Regional Water Supply Master Planning Study	701	D.C	800	0.000	0.000	0.000	21.600	702.400	3.200	72.800	0.000
219 Asset Condition Assessments-Report	1.7.	D	300	0.000	0.000	0.000	0.000	0.000	0.000	0.000	300.000
220 Asset Condition Assessment/Investigation transmission pipe		D	200	0.000	0.000	0.000	0.000	0.000	0.000	0.000	200.000
221 Master Planning energy management		D	200	0.000	200.000	200.000	0.000	0.000	0.000	0.000	0.000
222 Allowance for acquisition of easements		D,C	150	0.000	150.000	150.000	0.000	0.000	0.000	0.000	0.000
223 Allowance for engineering studies		D,C	300		300.000	300.000	0.000	0.000	0.000	0.000	0.000
224 Allowance for CTC Source Water Protection Plan		D	500	0.000	500.000	500.000	0.000	0.000	0.000	0.000	0.000
225 Preliminary Engineering		D	100	0.000	100.000	100.000	0.000	0.000	0.000	0.000	0.000
226 Allowance for sundry extensions as per council policy		D,C	15		15.000	15.000	0.000	0.000	0.000	0.000	0.000
227 Allowance for unknown requirements	1	D,C	100	0.000	100.000	100.000	0.000	0.000	0.000	0.000	0.000
228 Allowance for land severance review and drawing requirements 229 Allowance for Regional share for works in conjunction with	708	D,C D,C	100 1,460	0.000	100.000 0.000	100.000 0.000	0.000 39.420	0.000 1,281.880	0.000 5.840	0.000 132.860	0.000 0.000
residential subdivision development	706	D.C	400	0.000	0.000	0.000	10.800	351.200	1 600	36.400	0.000
230 Allowance for Regional share for works in conjunction with non-residential development	700	D,C		0.000	0.000	0.000	10.800	351.200	1.600	30.400	0.000
231 Well interference works		D	1,000	0.000	0.000	0.000	0.000	1,000.000	0.000	0.000	0.000
Sub-total			5,625	0.000	1,465.000	1,465.000	71.820	3,335.480	10.640	242.060	500.000
Total Cost Attribution			53,685	0.000	25,070.300	25,070.300	511.263	20,827.980	54.763	2,235.694	4,985.000

^{*} Indicates Capital project requires prior and/or future funding commitments. Refer to Construction of Municipal Services detail sheet.

WATER SUPPLY SYSTEM

PROJECT LOCATION & DESCRIPTION ITEM NO. 1 REGIONAL ROAD PROGRAM R.R. 14 (Liberty St.) from Baseline Rd to King St., Bowmanville Project No.: R0503 **RELATED PROJECTS** Municipality of Clarington (Bowmanville) King St 2 Baseline Rd 401

BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

		2019		Four Yea	r Forecast		
	Budget Prior to 2019	CAPITAL BUDGET	2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		200.000			48.000		248.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION					1,452.000		1,452.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	200.000	0.000	0.000	1,500.000	0.000	1,700.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES							0.000
COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES		200.000			1,500.000		1,700.000
DEBENTURES							0.000
OTHER							0.000
TOTAL ATTRIBUTION	0.000	200.000	0.000	0.000	1,500.000	0.000	1,700.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

WATER SUPPLY SYSTEM

PROJECT LOCATION & DESCRIPTION ITEM NO. 5 REGIONAL ROAD PROGRAM R.R. 46 (Brock St.) from Water St. to Front St., Whitby Project No.: -**RELATED PROJECTS** Town of Whitby Victoria St St Brock Watson St Front St South Blair St WHITBY HARBOUR **ONTARIO**

BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

		2019		Four Year	r Forecast		
	Budget Prior to 2019		2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		65.000					65.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION		385.000					385.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	450.000	0.000	0.000	0.000	0.000	450.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES							0.000
COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES		450.000					450.000
DEBENTURES							0.000
OTHER							0.000
TOTAL ATTRIBUTION	0.000	450.000	0.000	0.000	0.000	0.000	450.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

WATER SUPPLY SYSTEM

PROJECT LOCATION & DESCRIPTION ITEM NO. 6 REGIONAL ROAD PROGRAM R.R. 52 (Thornton Rd.) from Champlain Ave. to Consumers Dr. and Champlain Ave from Consumers Dr. to Thornton Rd., Whitby Project No.: O1804 **RELATED PROJECTS** City of Oshawa Gibb St **Thickson** Consumers Dr Champlain Av Victoria St_

BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

		2019		Four Yea	r Forecast		
	Budget Prior to 2019		2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING	70.000						70.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION	300.000	200.000					500.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	370.000	200.000	0.000	0.000	0.000	0.000	570.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES							0.000
COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES	370.000	200.000					570.000
DEBENTURES							0.000
OTHER							0.000
TOTAL ATTRIBUTION	370.000	200.000	0.000	0.000	0.000	0.000	570.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

WATER SUPPLY SYSTEM

PROJECT LOCATION & DESCRIPTION ITEM NO. 9 REGIONAL ROAD PROGRAM R.R. 56 (Farewell St.) from Marwood Dr. to Wentworth St., Oshawa Project No.: **RELATED PROJECTS** City of Oshawa Wentworth St 60 Farewell St

BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

				Four Voc	r Forecast		
		2019		Four Yea	r Forecast		
	Budget Prior to 2019	CAPITAL BUDGET	2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		200.000					200.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION			540.000				540.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	200.000	540.000	0.000	0.000	0.000	740.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES							0.000
COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES		200.000	540.000				740.000
DEBENTURES							0.000
OTHER							0.000
TOTAL ATTRIBUTION	0.000	200.000	540.000	0.000	0.000	0.000	740.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

WATER SUPPLY SYSTEM

PROJECT LOCATION & DESCRIPTION ITEM NO. 15 REGIONAL ROAD PROGRAM Highway No. 12 (Brock St.) from 300 m South of Manning Rd. to Rossland Rd., Whitby Project No.: R1523 **RELATED PROJECTS** Town of Whitby Rossland Rd

Manning Rd

BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

		2019		Four Year	Forecast		
	Budget Prior to 2019	CAPITAL BUDGET	2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING	15.000	150.000					165.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION		950.000					950.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	15.000	1,100.000	0.000	0.000	0.000	0.000	1,115.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES							0.000
COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES	15.000	1,100.000					1,115.000
DEBENTURES							0.000
OTHER							0.000
TOTAL ATTRIBUTION	15.000	1,100.000	0.000	0.000	0.000	0.000	1,115.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

PROJECT LOCATION & DESCRIPTION

REGION OF DURHAM, 2019 CAPITAL BUDGET PROJECT DETAIL

ITEM NO. 17A

Area Municipality Road Programs

CITY OF PICKERING ROAD PROGRAM (1 Project)

Refer to Construction of Municipal Services summary for list of streets

Project No.: P1999

2019 Sanitary Sewerage Capital Budget Item No. 11A

BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

		2019		Four Year	Forecast		
	Budget Prior to 2019	CAPITAL BUDGET	2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		75.000	40.000	40.000	40.000	40.000	235.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION		525.000	235.000	235.000	235.000	235.000	1,465.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	600.000	275.000	275.000	275.000	275.000	1,700.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES							0.000
COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES		600.000	275.000	275.000	275.000	275.000	1,700.000
DEBENTURES							0.000
OTHER							0.000
TOTAL ATTRIBUTION	0.000	600.000	275.000	275.000	275.000	275.000	1,700.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

NEED/EXPLANATION OF PROJECT

Replacement of deficient watermains and/or construction of new works in conjunction with road reconstruction proposed by the City of Pickering.

WATER SUPPLY SYSTEM

PROJECT LOCATION & DESCRIPTION

ITEM NO. 17B

Area Municipality Road Programs

TOWN OF AJAX ROAD PROGRAM (5 Projects)

Refer to Construction of Municipal Services summary for list of streets

Project No.: A1999

2019 Sanitary Sewerage Capital Budget Item No. 11B

BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

		2019		Four Year	Forecast		
	Budget Prior to 2019	CAPITAL BUDGET	2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		350.000	35.000	35.000	35.000	210.000	665.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION		2,150.000	165.000	165.000	165.000	1,440.000	4,085.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	2,500.000	200.000	200.000	200.000	1,650.000	4,750.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES							0.000
COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES		2,500.000	200.000	200.000	200.000	1,650.000	4,750.000
DEBENTURES							0.000
OTHER							0.000
TOTAL ATTRIBUTION	0.000	2,500.000	200.000	200.000	200.000	1,650.000	4,750.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

NEED/EXPLANATION OF PROJECT

Replacement of deficient watermains and/or construction of new works in conjunction with road reconstruction proposed by the Town of Ajax

WATER SUPPLY SYSTEM

PROJECT LOCATION & DESCRIPTION

ITEM NO. 17C

Area Municipality Road Programs

TOWN OF WHITBY ROAD PROGRAM

(1 Project)

Refer to Construction of Municipal Services summary

for list of streets Project No.: W1999

2019 Sanitary Sewerage Capital Budget Item No. 11C

BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

		2019		Four Year	Forecast		
	Budget Prior to 2019	CAPITAL BUDGET	2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		150.000	116.000	116.000	116.000	116.000	614.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION		1,200.000	504.000	504.000	504.000	504.000	3,216.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	1,350.000	620.000	620.000	620.000	620.000	3,830.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES							0.000
COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES		1,350.000	620.000	620.000	620.000	620.000	3,830.000
DEBENTURES							0.000
OTHER							0.000
TOTAL ATTRIBUTION	0.000	1,350.000	620.000	620.000	620.000	620.000	3,830.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

NEED/EXPLANATION OF PROJECT

Replacement of deficient watermains and/or construction of new works in conjunction with road reconstruction proposed by the Town of Whitby.

WATER SUPPLY SYSTEM

PROJECT LOCATION & DESCRIPTION

ITEM NO. 17D

Area Municipality Road Programs

CITY OF OSHAWA ROAD PROGRAM

(2 Projects)

Refer to Construction of Municipal Services summary

for list of streets Project No.: O1999

2019 Sanitary Sewerage Capital Budget Item No. 11D

BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

		2019		Four Year	Forecast		
	Budget Prior to 2019	CAPITAL BUDGET	2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		60.000	152.000	152.000	152.000	152.000	668.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION		440.000	948.000	948.000	948.000	948.000	4,232.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	500.000	1,100.000	1,100.000	1,100.000	1,100.000	4,900.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES							0.000
COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES		500.000	1,100.000	1,100.000	1,100.000	1,100.000	4,900.000
DEBENTURES		_			_		0.000
OTHER							0.000
TOTAL ATTRIBUTION	0.000	500.000	1,100.000	1,100.000	1,100.000	1,100.000	4,900.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

NEED/EXPLANATION OF PROJECT

Replacement of deficient watermains and/or construction of new works in conjunction with road reconstruction proposed by the City of Oshawa.

PROJECT LOCATION & DESCRIPTION

REGION OF DURHAM, 2019 CAPITAL BUDGET PROJECT DETAIL

ITEM NO. 17E

Area Municipality Road Programs

MUNICIPALITY OF CLARINGTON ROAD PROGRAM (4 Projects)

Refer to Construction of Municipal Services summary for list of streets

Project No.: C1999

2019 Sanitary Sewerage Capital Budget Item No. 11E

BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

		2019		Four Year	Forecast		
	Budget Prior to 2019	CAPITAL BUDGET	2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		250.000	46.000	46.000	46.000	46.000	434.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION		1,250.000	324.000	324.000	324.000	324.000	2,546.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	1,500.000	370.000	370.000	370.000	370.000	2,980.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES							0.000
COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES		1,500.000	370.000	370.000	370.000	370.000	2,980.000
DEBENTURES							0.000
OTHER							0.000
TOTAL ATTRIBUTION	0.000	1,500.000	370.000	370.000	370.000	370.000	2,980.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

NEED/EXPLANATION OF PROJECT

Replacement of deficient watermains and/or construction of new works in conjunction with road reconstruction proposed by the Municipality of Clarington.

WATER SUPPLY SYSTEM

PROJECT LOCATION & DESCRIPTION

ITEM NO. 17F

Area Municipality Road Programs

TOWNSHIP OF SCUGOG ROAD PROGRAM (0 Projects)

Refer to Construction of Municipal Services summary for list of streets

Project No.: -

2019 Sanitary Sewerage Capital Budget Item No. 17F

No Works proposed in 2019

BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

		2019		Four Year	Forecast		
	Budget Prior to 2019		2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING			17.200	17.200	17.200	17.200	68.800
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION			112.800	112.800	112.800	112.800	451.200
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	0.000	130.000	130.000	130.000	130.000	520.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES							0.000
COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES			130.000	130.000	130.000	130.000	520.000
DEBENTURES							0.000
OTHER							0.000
TOTAL ATTRIBUTION	0.000	0.000	130.000	130.000	130.000	130.000	520.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

NEED/EXPLANATION OF PROJECT

Replacement of deficient watermains and/or construction of new works in conjunction with road reconstruction proposed by the Township of Scugog.

PROJECT LOCATION & DESCRIPTION

ITEM NO. 17G

Area Municipality Road Programs

TOWNSHIP OF UXBRIDGE ROAD PROGRAM (1 Project)

Refer to Construction of Municipal Services summary for list of streets

Project No.: U1999

2019 Sanitary Sewerage Capital Budget Item No. 11G

BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

		2019		Four Year	Forecast		
	Budget Prior to 2019	CAPITAL BUDGET	2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		30.000	38.600	38.600	38.600	38.600	184.400
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION		210.000	231.400	231.400	231.400	231.400	1,135.600
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	240.000	270.000	270.000	270.000	270.000	1,320.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES							0.000
COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES		240.000	270.000	270.000	270.000	270.000	1,320.000
DEBENTURES							0.000
OTHER							0.000
TOTAL ATTRIBUTION	0.000	240.000	270.000	270.000	270.000	270.000	1,320.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

NEED/EXPLANATION OF PROJECT

Replacement of deficient watermains and/or construction of new works in conjunction with road reconstruction proposed by the Township of Uxbridge.

WATER SUPPLY SYSTEM

PROJECT LOCATION & DESCRIPTION

ITEM NO. 17H

Area Municipality Road Programs

TOWNSHIP OF BROCK ROAD PROGRAM (0 Projects)

Refer to Construction of Municipal Services summary for list of streets

Project No.: -

2019 Sanitary Sewerage Capital Budget Item No. 11H

No Works proposed in 2019

BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

		2019		Four Year	Forecast		
	Budget Prior to 2019		2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING			38.000	38.000	38.000	38.000	152.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION			212.000	212.000	212.000	212.000	848.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	0.000	250.000	250.000	250.000	250.000	1,000.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES							0.000
COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES			250.000	250.000	250.000	250.000	1,000.000
DEBENTURES							0.000
OTHER							0.000
TOTAL ATTRIBUTION	0.000	0.000	250.000	250.000	250.000	250.000	1,000.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

NEED/EXPLANATION OF PROJECT

Replacement of deficient watermains and/or construction of new works in conjunction with road reconstruction proposed by the Township of Brock.

80

PROJECT LOCATION & DESCRIPTION

ITEM NO. 17i

Area Municipality Road Programs

ALLOWANCE FOR UNKNOWN WATER SUPPLY REQUIREMENTS IN CONJUNCTION WITH AREA MUNICIPALITY ROAD PROGRAMS IN VARIOUS LOCATIONS Refer to Construction of Municipal Services summary for list of streets

Project No.: M1903

2019 Sanitary Sewerage Capital Budget Item No. 11i

BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

		2019		Four Year	Forecast		
	Budget Prior to 2019	CAPITAL BUDGET	2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		25.000	25.000	25.000	25.000	25.000	125.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION		175.000	175.000	175.000	175.000	175.000	875.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	200.000	200.000	200.000	200.000	200.000	1,000.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES							0.000
COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES		200.000	200.000	200.000	200.000	200.000	1,000.000
DEBENTURES							0.000
OTHER						_	0.000
TOTAL ATTRIBUTION	0.000	200.000	200.000	200.000	200.000	200.000	1,000.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

NEED/EXPLANATION OF PROJECT

This allowance is to provide for unanticipated watermain works in conjunction with area municipality road programs in various locations (Items 17A to 17H)

WATER SUPPLY SYSTEM

PROJECT LOCATION & DESCRIPTION

ITEM NO. 19

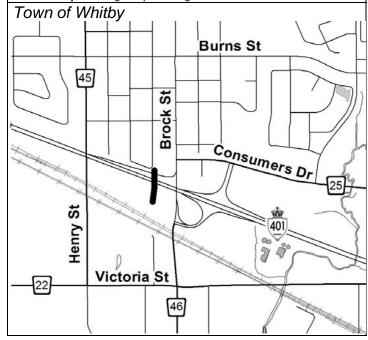
MTO & GO TRANSIT PROJECTS:

Watermain replacement in conjunction with the MTO's bridge work and ramp realignment at Brock St., Whitby

Project No.: D1737

RELATED PROJECTS

2018 Water Supply Capital Budget Item No.: 19 2018 Sanitary Sewerage Capital Budget Item No.: 13



BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

		2019	1	Four Year I	Forecast		
	Budget Prior to 2019	CAPITAL BUDGET	2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING	300.000						300.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION	2,050.000	400.000					2,450.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	2,350.000	400.000	0.000	0.000	0.000	0.000	2,750.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES							0.000
COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES	2,350.000	400.000					2,750.000
DEBENTURES							0.000
OTHER							0.000
TOTAL ATTRIBUTION	2,350.000	400.000	0.000	0.000	0.000	0.000	2,750.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

NEED/EXPLANATION OF PROJECT

WATER SUPPLY SYSTEM

PROJECT LOCATION & DESCRIPTION ITEM NO. 20 MTO & GO TRANSIT PROJECTS: Watermain replacement in conjunction with the MTO's bridge work at Simcoe St. and Albert St., Oshawa Project No.: D1801 **RELATED PROJECTS** 2018 Water Supply Capital Budget Item No.: 20 2019 Sanitary Sewerage Capital Budget Item No.: 13 City of Oshawa Simcoe St Albert St 401 Bloor St Rd Ritson

BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

		2019		Four Year	Forecast		
	Budget Prior to 2019	CAPITAL BUDGET	2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING	100.000	200.000					300.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION			2,000.000				2,000.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	100.000	200.000	2,000.000	0.000	0.000	0.000	2,300.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES							0.000
COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES	100.000	200.000	2,000.000				2,300.000
DEBENTURES							0.000
OTHER							0.000
TOTAL ATTRIBUTION	100.000	200.000	2,000.000	0.000	0.000	0.000	2,300.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

NEED/EXPLANATION OF PROJECT

WATER SUPPLY SYSTEM

PROJECT LOCATION & DESCRIPTION ITEM NO. 21 BETTERMENTS/ REPLACEMENTS Water works to rectify identified system deficiencies independent of road programs in various locations Project No.: M1999 RELATED PROJECTS

BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

		2019		Four Year	Forecast		
	Budget Prior to 2019		2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		75.000	150.000	150.000	150.000	150.000	675.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION		552.693	650.000	650.000	650.000	650.000	3,152.693
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	627.693	800.000	800.000	800.000	800.000	3,827.693
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES							0.000
COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES		627.693	800.000	800.000	800.000	800.000	3,827.693
DEBENTURES							0.000
OTHER							0.000
TOTAL ATTRIBUTION	0.000	627.693	800.000	800.000	800.000	800.000	3,827.693

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

NEED/EVDI	VINTIUM	$\cap \vdash \vdash$	$D \cap I \subseteq \cap T$

RELATED PROJECTS

$\frac{7}{2}$

ITEM NO. 22

Project No.: D1912

BETTERMENTS/ REPLACEMENTS

Rehabilitation of existing watermains in various locations

BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

		2019		Four Year	Forecast		
	Budget Prior to 2019	CAPITAL BUDGET	2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		250.000	250.000	250.000	250.000	250.000	1,250.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION		1,750.000	1,750.000	1,750.000	1,750.000	1,750.000	8,750.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	2,000.000	2,000.000	2,000.000	2,000.000	2,000.000	10,000.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES							0.000
COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES		2,000.000	2,000.000	2,000.000	2,000.000	2,000.000	10,000.000
DEBENTURES							0.000
OTHER							0.000
TOTAL ATTRIBUTION		2,000.000	2,000.000	2,000.000	2,000.000	2,000.000	10,000.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, leftertive July 1, 2018

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

NEED/EXPLANATION OF PROJECT

Rehabilitation (cement mortar lining) of watermains in various locations.

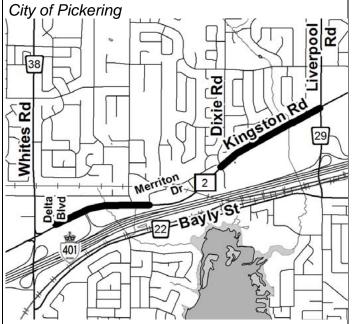
ITEM NO.: 23

BETTERMENTS/ REPLACEMENTS

Replacement of watermain on Kingston Rd. (Highway No. 2) from 240 m east of Delta Blvd. to Merritton Dr. & Dixie Rd. to Liverpool Rd., Pickering

Project No.: D1848

RELATED PROJECTS



BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

		2019		Four Year	Forecast		
	Budget Prior to 2019	CAPITAL BUDGET	2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING	130.000	100.000					230.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION		1,400.000					1,400.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	130.000	1,500.000	0.000	0.000	0.000	0.000	1,630.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES							0.000
COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES	130.000	1,500.000					1,630.000
DEBENTURES			_	_			0.000
ASSET MGMT RESERVE FUND							0.000
TOTAL ATTRIBUTION	130.000	1,500.000	0.000	0.000	0.000	0.000	1,630.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

NEED/EXPLANATION OF PROJECT

Will be completed in conjunction with the Bus Rapid Transit (BRT). Watermain has reached the end of its useful service life.

Phase 1 Delta Blvd. to Merritton Dr.

Phase 2 Dixie Rd. to Liverpool Rd.

WATER SUPPLY SYSTEM

PROJECT LOCATION & DESCRIPTION

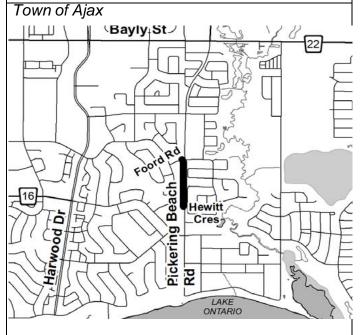
ITEM NO. 29

BETTERMENTS/ REPLACEMENTS

Replacement of watermain on Pickering Beach Rd. from Foord Rd. to Hewitt Cres., Ajax

Project No.: A1906

RELATED PROJECTS



BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

		2019		Four Year	Forecast		
	Budget Prior to 2019	CAPITAL BUDGET	2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		120.000					120.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION			450.000				450.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	120.000	450.000	0.000	0.000	0.000	570.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES							0.000
COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES		120.000	450.000				570.000
DEBENTURES							0.000
ASSET MGMT RESERVE FUND							0.000
TOTAL ATTRIBUTION	0.000	120.000	450.000	0.000	0.000	0.000	570.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

NEED/EXPLANATION OF PROJECT

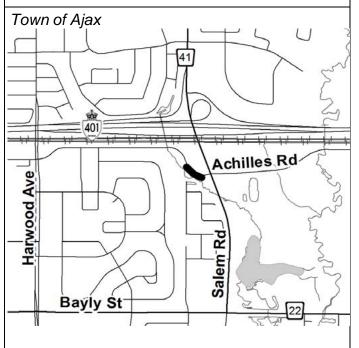
ITEM NO. 30

BETTERMENTS/ REPLACEMENTS

Watermain extension on Achilles Rd. from Salem Rd. to 100 m west of Salem Rd., Ajax

Project No.: A1903

RELATED PROJECTS



BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

		2019		Four Year	Forecast		
	Budget Prior to 2019	CAPITAL BUDGET	2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		50.000					50.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION			150.000				150.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	50.000	150.000	0.000	0.000	0.000	200.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES							0.000
COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES		50.000	150.000				200.000
DEBENTURES			İ				0.000
ASSET MGMT RESERVE FUND							0.000
TOTAL ATTRIBUTION	0.000	50.000	150.000	0.000	0.000	0.000	200.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

NEED/EXPLANATION OF PROJECT

Watermain extension required to provide looping and system security

WATER SUPPLY SYSTEM

PROJECT LOCATION & DESCRIPTION

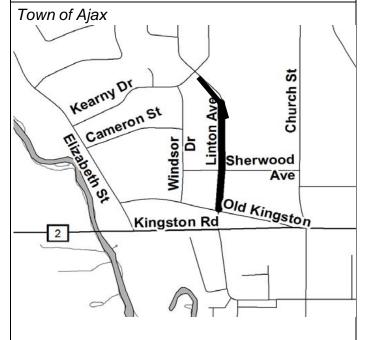
ITEM NO. 31

BETTERMENTS/ REPLACEMENTS

Replacement of a watermain on Linton Ave. from Kearney Dr. S. from Old Kingston Rd., Ajax

Project No.: A1904

RELATED PROJECTS



BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

		2019		Four Year	Forecast		
	Budget Prior to 2019	CAPITAL BUDGET	2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		40.000					40.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION			410.000				410.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	40.000	410.000	0.000	0.000	0.000	450.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES							0.000
COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES							0.000
DEBENTURES							0.000
ASSET MGMT RESERVE FUND		40.000	410.000				450.000
TOTAL ATTRIBUTION	0.000	40.000	410.000	0.000	0.000	0.000	450.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

NEED/EXPLANATION OF PROJECT

WATER SUPPLY SYSTEM

PROJECT LOCATION & DESCRIPTION

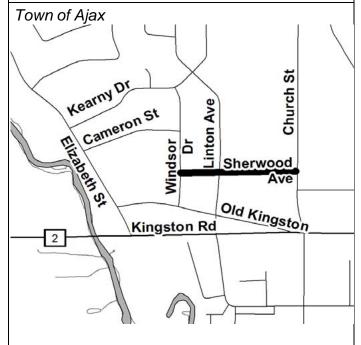
ITEM NO. 32

BETTERMENTS/ REPLACEMENTS

Replacement of a watermain on Sherwood Rd. W. from Windsor Dr. to dead-end, Ajax

Project No.: A1905

RELATED PROJECTS



BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

		2019		Four Year	Forecast		
	Budget Prior to 2019		2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		150.000					150.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION		205.000	665.000				870.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	355.000	665.000	0.000	0.000	0.000	1,020.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES							0.000
COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES							0.000
DEBENTURES							0.000
ASSET MGMT RESERVE FUND		355.000	665.000				1,020.000
TOTAL ATTRIBUTION	0.000	355.000	665.000	0.000	0.000	0.000	1,020.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

NEED/EXPLANATION OF PROJECT

WATER SUPPLY SYSTEM

PROJECT LOCATION & DESCRIPTION ITEM NO. 33 BETTERMENTS/ REPLACEMENTS Replacement of a watermain on Cameron St. from Elizabeth St. to Windsor Dr., Ajax Project No.: A1801 RELATED PROJECTS Town of Ajax Kearny Dr Linton Ave Cameron St Sherwood Ave Old Kingston Kingston Rd 2

BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

		2019		Four Year	Forecast		
	Budget Prior to 2019	CAPITAL BUDGET	2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING	40.000						40.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION		360.000					360.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	40.000	360.000	0.000	0.000	0.000	0.000	400.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES							0.000
COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES							0.000
DEBENTURES							0.000
ASSET MGMT RESERVE FUND	40.000	360.000					400.000
TOTAL ATTRIBUTION	40.000	360.000	0.000	0.000	0.000	0.000	400.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, leftertive, July 1, 2018

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

NEED/EXPLANATION OF PROJECT

Kingston Rd

REGION OF DURHAM, 2019 CAPITAL BUDGET PROJECT DETAIL

WATER SUPPLY SYSTEM

PROJECT LOCATION & DESCRIPTION ITEM NO. 34 BETTERMENTS/ REPLACEMENTS Replacement of a watermain on Windsor Dr. from Old Kingston Rd. to Cameron St., Ajax Project No.: A1802 RELATED PROJECTS 2018 Water Supply Capital Budget No.: 28 Town of Ajax Church St Windsor Dr Cameron St Old Kingston Rd

BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

		2019		Four Year	Forecast		
	Budget Prior to 2019		2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING	40.000						40.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION		410.000					410.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	40.000	410.000	0.000	0.000	0.000	0.000	450.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES							0.000
COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES							0.000
DEBENTURES				_	_	_	0.000
ASSET MGMT RESERVE FUND	40.000	410.000					450.000
TOTAL ATTRIBUTION	40.000	410.000	0.000	0.000	0.000	0.000	450.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges,

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

NEED/EXPLANATION OF PROJECT

Asset Management Project - the watermain has reached the end of its useful service life.

2

REGION OF DURHAM, 2019 CAPITAL BUDGET PROJECT DETAIL

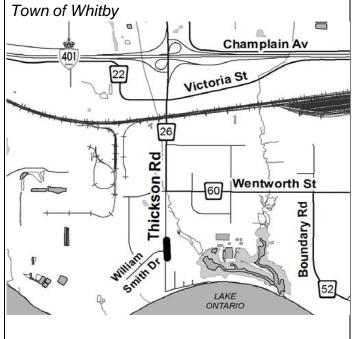
ITEM NO. 38

BETTERMENTS/ REPLACEMENTS

Replacement of the watermain on R.R. 26 (Thickson Rd.) from 84 m north of William Smith Dr. to 60 m south of William Smith Dr., Whitby

Project No.: W1901

RELATED PROJECTS



BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

		2019		Four Year	Forecast		
	Budget Prior to 2019	CAPITAL BUDGET	2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		60.000					60.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION		160.000					160.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	220.000	0.000	0.000	0.000	0.000	220.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES							0.000
COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES							0.000
DEBENTURES							0.000
ASSET MGMT RESERVE FUND		220.000					220.000
TOTAL ATTRIBUTION	0.000	220.000	0.000	0.000	0.000	0.000	220.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

NEED/EXPLANATION OF PROJECT

WATER SUPPLY SYSTEM

PROJECT LOCATION & DESCRIPTION ITEM NO. 43 BETTERMENTS/ REPLACEMENTS Watermain replacement on Harmony Rd. N. from Adelaide Ave. to 200 m north of Adelaide Ave., Oshawa Project No.: O1901 RELATED PROJECTS City of Oshawa Rossland Rd Adelaide Ave Bond St King St

BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

		2019		Four Year	Forecast		
	Budget Prior to 2019		2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		60.000					60.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION		140.000					140.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	200.000	0.000	0.000	0.000	0.000	200.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES							0.000
COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES		200.000					200.000
DEBENTURES							0.000
ASSET MGMT RESERVE FUND							0.000
TOTAL ATTRIBUTION	0.000	200.000	0.000	0.000	0.000	0.000	200.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

NEED/EXPLANATION OF PROJECT

REGION OF DURHAM, 2019 CAPITAL BUDGET PROJECT DETAIL

ITEM NO. 44

BET<u>TERMENTS/ REPLACEMENTS</u>

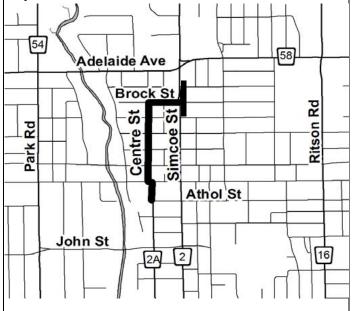
Replacement of watermain on R.R. 2A (Centre St.) from Athol St. to Brock St., and Simcoe St. from Brock St. W. to Adelaide Ave., Oshawa

Project No.: O1503

RELATED PROJECTS

2016 Water Supply Capital Budget Item No.: 53 2015 Sanitary Sewerage Capital Budget Item No.: 26 2018 Sanitary Sewerage Capital Budget Item No.: 31

City of Oshawa



BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

		2019		Four Year	Forecast		
	Budget Prior to 2019	CAPITAL BUDGET	2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING	120.000	150.000					270.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION		1,590.000					1,590.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	120.000	1,740.000	0.000	0.000	0.000	0.000	1,860.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES							0.000
COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES							0.000
DEBENTURES							0.000
ASSET MGMT RESERVE FUND	120.000	1,740.000					1,860.000
TOTAL ATTRIBUTION	120.000	1,740.000	0.000	0.000	0.000	0.000	1,860.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

NEED/EXPLANATION OF PROJECT

WATER SUPPLY SYSTEM

PROJECT LOCATION & DESCRIPTION ITEM NO. 46 BETTERMENTS/ REPLACEMENTS Replacement of watermain on Simcoe St. S. from Bloor St. to Erie St., Oshawa Project No.: O1902 RELATED PROJECTS City of Oshawa 401 Bloor St 16

BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

		2019		Four Year	Forecast		
	Budget Prior to 2019	CAPITAL BUDGET	2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		100.000	100.000				200.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION			1,100.000				1,100.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	100.000	1,200.000	0.000	0.000	0.000	1,300.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES							0.000
COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES							0.000
DEBENTURES							0.000
ASSET MGMT RESERVE FUND		100.000	1,200.000				1,300.000
TOTAL ATTRIBUTION	0.000	100.000	1,200.000	0.000	0.000	0.000	1,300.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

NEED/EXPLANATION OF PROJECT

ITEM NO. 55

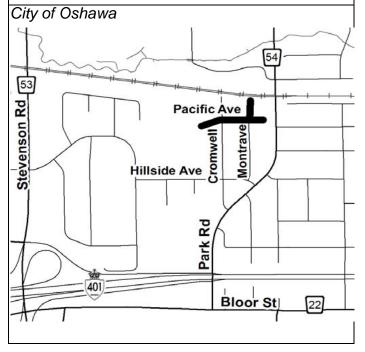
BETTERMENTS/ REPLACEMENTS

Replacement of watermain on Montrave Ave. from Pacific Ave. to 49 m north of Pacific Ave., & Pacific Ave. from 50 m west of Cromwell Ave. to dead-end, Oshawa

Project No.: O1601

RELATED PROJECTS

2016 Water Supply Capital Budget Item No.: 55



BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

		2019		Four Year	Forecast		
	Budget Prior to 2019	CAPITAL BUDGET	2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING	125.000						125.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION		410.000					410.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	125.000	410.000	0.000	0.000	0.000	0.000	535.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES							0.000
COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES							0.000
DEBENTURES							0.000
ASSET MGMT RESERVE FUND	125.000	410.000					535.000
TOTAL ATTRIBUTION	125.000	410.000	0.000	0.000	0.000	0.000	535.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

NEED/EXPLANATION OF PROJECT

REGION OF DURHAM, 2019 CAPITAL BUDGET PROJECT DETAIL

ITEM NO. 57

BETTERMENTS/ REPLACEMENTS

Replacement of a watermain on Olive Ave. from Simcoe St. to Drew St., Oshawa

Project No.: O1903

RELATED PROJECTS

2019 Sanitary Sewerage Capital Budget Item No.: 30



BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

		2019		Four Year	Forecast		
	Budget Prior to 2019	CAPITAL BUDGET	2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		250.000					250.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION			930.000				930.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	250.000	930.000	0.000	0.000	0.000	1,180.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES							0.000
COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES		250.000	930.000				1,180.000
DEBENTURES					_		0.000
ASSET MGMT RESERVE FUND							0.000
TOTAL ATTRIBUTION	0.000	250.000	930.000	0.000	0.000	0.000	1,180.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

NEED/EXPLANATION OF PROJECT

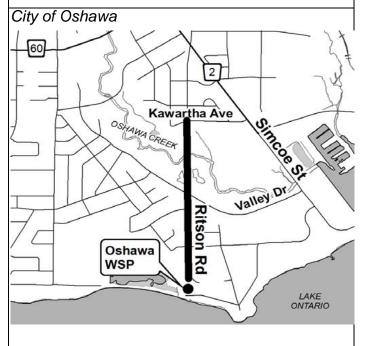
ITEM NO. 58

BETTERMENTS/ REPLACEMENTS

Replacement of feedermain on Ritson Rd. S. from Oshawa Water Supply Plant valve chamber to Kawartha Ave., Oshawa

Project No.: O1904

RELATED PROJECTS



BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

		2019		Four Year	Forecast		
	Budget Prior to 2019	CAPITAL BUDGET	2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		500.000					500.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION				3,500.000			3,500.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	500.000	0.000	3,500.000	0.000	0.000	4,000.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES							0.000
COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES		500.000		3,500.000			4,000.000
DEBENTURES							0.000
ASSET MGMT RESERVE FUND							0.000
TOTAL ATTRIBUTION	0.000	500.000	0.000	3,500.000	0.000	0.000	4,000.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

NEED/EXPLANATION OF PROJECT

Feedermain replacement to be completed in conjunction with valve chamber upgrades.

REGION OF DURHAM, 2019 CAPITAL BUDGET PROJECT DETAIL

ITEM NO. 60

BETTERMENTS/ REPLACEMENTS

Replacement of watermain on Grassmere Ave. from west limits to Ritson Rd. S., Oshawa

Project No.: O1905

RELATED PROJECTS



BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

		2019		Four Year	Forecast		
	Budget Prior to 2019	CAPITAL BUDGET	2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		100.000					100.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION		545.000					545.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	645.000	0.000	0.000	0.000	0.000	645.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES							0.000
COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES		645.000					645.000
DEBENTURES							0.000
ASSET MGMT RESERVE FUND							0.000
TOTAL ATTRIBUTION	0.000	645.000	0.000	0.000	0.000	0.000	645.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

NEED/EXPLANATION OF PROJECT

The watermain has reached the end of its useful service life.

PROJECT LOCATION & DESCRIPTION ITEM NO. 64 BETTERMENTS/ REPLACEMENTS Replacement of watermain on Grenfell St. from 60 m south of Marland Ave. to Gibb St., Oshawa Project No.: O1906

RELATED PROJECTS



BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

		2019		Four Year	Forecast		
	Budget Prior to 2019	CAPITAL BUDGET	2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		65.000					65.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION		355.000					355.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	420.000	0.000	0.000	0.000	0.000	420.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES							0.000
COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES		420.000					420.000
DEBENTURES							0.000
ASSET MGMT RESERVE FUND							0.000
TOTAL ATTRIBUTION	0.000	420.000	0.000	0.000	0.000	0.000	420.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

NEED/EXPLANATION OF PROJECT

The watermain has reached the end of its useful service life.

ITEM NO. 65

BETTERMENTS/ REPLACEMENTS

Replacement of watermain on Marland Ave. from Grenfell St. to Park Rd. S., Oshawa

Project No.: O1907

RELATED PROJECTS



BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

		2019		Four Year	Forecast		
	Budget Prior to 2019	CAPITAL BUDGET	2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		60.000					60.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION		340.000					340.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	400.000	0.000	0.000	0.000	0.000	400.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES							0.000
COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES		400.000					400.000
DEBENTURES							0.000
ASSET MGMT RESERVE FUND				_			0.000
TOTAL ATTRIBUTION	0.000	400.000	0.000	0.000	0.000	0.000	400.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

NEED/EXPLANATION OF PROJECT

The watermain has reached the end of its useful service life.

REGION OF DURHAM, 2019 CAPITAL BUDGET PROJECT DETAIL

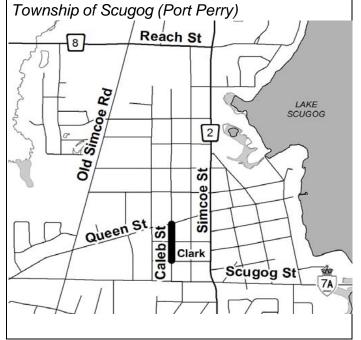
ITEM NO. 71

BETTERMENTS/ REPLACEMENTS

Replacement of watermain on Caleb St. from Clarke St. to Queen St. Port Perry

Project No.: S1901

RELATED PROJECTS



BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

		2019		Four Year	Forecast		
	Budget Prior to 2019	CAPITAL BUDGET	2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		50.000					50.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION		300.000					300.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	350.000	0.000	0.000	0.000	0.000	350.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES							0.000
COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES							0.000
DEBENTURES							0.000
ASSET MGMT RESERVE FUND		350.000		_			350.000
TOTAL ATTRIBUTION	0.000	350.000	0.000	0.000	0.000	0.000	350.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

NEED/EXPLANATION OF PROJECT

WATER SUPPLY SYSTEM

PROJECT LOCATION & DESCRIPTION

ITEM NO. 73

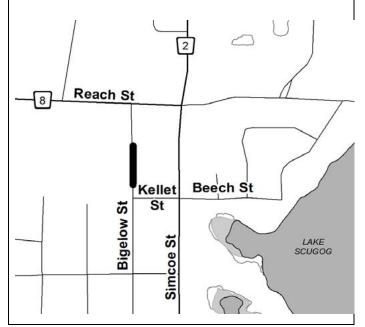
BETTERMENTS/ REPLACEMENTS

Replacement of watermain on Bigelow St. from 30 m north of Kellett St. to 100 m north of Kellett St., Port Perry

Project No.: S1902

RELATED PROJECTS

Township of Scugog (Port Perry)



BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

		2019		Four Year	Forecast		
	Budget Prior to 2019	CAPITAL BUDGET	2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		50.000					50.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION		100.000					100.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	150.000	0.000	0.000	0.000	0.000	150.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES							0.000
COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES							0.000
DEBENTURES							0.000
ASSET MGMT RESERVE FUND		150.000					150.000
TOTAL ATTRIBUTION	0.000	150.000	0.000	0.000	0.000	0.000	150.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

NEED/EXPLANATION OF PROJECT

WATER SUPPLY SYSTEM

PROJECT LOCATION & DESCRIPTION

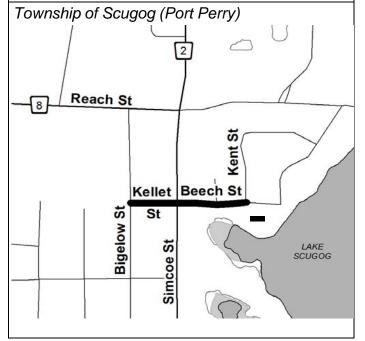
ITEM NO. 74

BETTERMENTS/ REPLACEMENTS

Replacement of watermain on Kellett St./Beech St. from Bigelow St. to 100 east of Kent St., Port Perry

Project No.: S1903

RELATED PROJECTS



BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

		2019		Four Year	Forecast		
	Budget Prior to 2019	CAPITAL BUDGET	2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		60.000					60.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION			405.000				405.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	60.000	405.000	0.000	0.000	0.000	465.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES							0.000
COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES							0.000
DEBENTURES							0.000
ASSET MGMT RESERVE FUND		60.000	405.000				465.000
TOTAL ATTRIBUTION	0.000	60.000	405.000	0.000	0.000	0.000	465.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

NEED/EXPLANATION OF PROJECT

WATER SUPPLY SYSTEM

PROJECT LOCATION & DESCRIPTION

ITEM NO. 82

BETTERMENTS/ REPLACEMENTS

Replacement of watermain on Simcoe St. from Union St. to 480 m south of Union St., Beaverton

Project No.: K1901

RELATED PROJECTS

Township of Brock (Beaverton) LAKE SIMCOE Main St Main

BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

		2019		Four Year	Forecast		
	Budget Prior to 2019	CAPITAL BUDGET	2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		100.000					100.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION			660.000				660.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	100.000	660.000	0.000	0.000	0.000	760.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES							0.000
COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES							0.000
DEBENTURES							0.000
ASSET MGMT RESERVE FUND		100.000	660.000				760.000
TOTAL ATTRIBUTION	0.000	100.000	660.000	0.000	0.000	0.000	760.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, leffective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

NEED/EXPLANATION OF PROJECT

WATER SUPPLY SYSTEM

PROJECT LOCATION & DESCRIPTION ITEM NO. 84 BETTERMENTS/ REPLACEMENTS Replacement of watermain on Bay St. from Union St. to Osborne St., Beaverton Project No.: K1902 RELATED PROJECTS Township of Brock (Beaverton) LAKE SIMCOE Main St

BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

		2019		Four Year	Forecast		
	Budget Prior to 2019	CAPITAL BUDGET	2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		80.000					80.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION				480.000			480.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	80.000	0.000	480.000	0.000	0.000	560.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES							0.000
COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES							0.000
DEBENTURES							0.000
ASSET MGMT RESERVE FUND		80.000		480.000			560.000
TOTAL ATTRIBUTION	0.000	80.000	0.000	480.000	0.000	0.000	560.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

NEED/EXPLANATION OF PROJECT

WATER SUPPLY SYSTEM

PROJECT LOCATION & DESCRIPTION ITEM NO. 85 BETTERMENTS/ REPLACEMENTS Replacement of watermain on Bay St. from Osborne St. to Mill St., Beaverton Project No.: K1903 RELATED PROJECTS Township of Brock (Beaverton) LAKE SIMCOE Main St Simcoe St

BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

		2019		Four Year	Forecast		
	Budget Prior to 2019	-	2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		60.000					60.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION				310.000			310.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	60.000	0.000	310.000	0.000	0.000	370.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES							0.000
COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES							0.000
DEBENTURES							0.000
ASSET MGMT RESERVE FUND		60.000		310.000			370.000
TOTAL ATTRIBUTION	0.000	60.000	0.000	310.000	0.000	0.000	370.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

NEED/EXPLANATION OF PROJECT

WATER SUPPLY SYSTEM

PROJECT LOCATION & DESCRIPTION ITEM NO. 86 BETTERMENTS/ REPLACEMENTS Replacement of watermain on Church St. from Osborne St. to Mill St., Beaverton Project No.: K1904 **RELATED PROJECTS** Township of Brock (Beaverton) LAKE SIMCOE Main St Sincoe St

BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

		2019		Four Year	Forecast		
	Budget Prior to 2019	CAPITAL BUDGET	2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		70.000					70.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION				430.000			430.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	70.000	0.000	430.000	0.000	0.000	500.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES							0.000
COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES							0.000
DEBENTURES							0.000
ASSET MGMT RESERVE FUND		70.000		430.000			500.000
TOTAL ATTRIBUTION	0.000	70.000	0.000	430.000	0.000	0.000	500.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

NEED/EXPLANATION OF PROJECT

WATER SUPPLY SYSTEM

PROJECT LOCATION & DESCRIPTION ITEM NO. 87 BETTERMENTS/ REPLACEMENTS Replacement of watermain on Mill St. from Church St. to Bay St., Beaverton Project No.: K1905 **RELATED PROJECTS** Township of Brock (Beaverton) SIMCOE Main St Sincoe St

BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

		2019		Four Year	Forecast		
	Budget Prior to 2019	CAPITAL BUDGET	2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		60.000					60.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION				300.000			300.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	60.000	0.000	300.000	0.000	0.000	360.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES							0.000
COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES							0.000
DEBENTURES						_	0.000
ASSET MGMT RESERVE FUND		60.000		300.000			360.000
TOTAL ATTRIBUTION	0.000	60.000	0.000	300.000	0.000	0.000	360.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

NEED/EXPLANATION OF PROJECT

WATER SUPPLY SYSTEM

PROJECT LOCATION & DESCRIPTION ITEM NO. 88 BETTERMENTS/ REPLACEMENTS Replacement of watermain on Bay St. from Mill St. to Main St., Beaverton Project No.: K1906 RELATED PROJECTS Township of Brock (Beaverton) LAKE SIMCOE Main St Simcoe St

BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

		2019		Four Year	Forecast		
	Budget Prior to 2019	CAPITAL BUDGET	2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		70.000					70.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION				480.000			480.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	70.000	0.000	480.000	0.000	0.000	550.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES							0.000
COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES							0.000
DEBENTURES							0.000
ASSET MGMT RESERVE FUND		70.000		480.000			550.000
TOTAL ATTRIBUTION	0.000	70.000	0.000	480.000	0.000	0.000	550.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

NEED/EXPLANATION OF PROJECT

PROJECT LOCATION & DESCRIPTION ITEM NO. 96 SYSTEM EXPANSION Zone 1 feedermain on Rossland Rd. from Church St. to Westney Rd., Ajax Project No.: D1522 **RELATED PROJECTS** 2016 Water Supply Capital Budget Item No. 66 2018 Water Supply Capital Budget Item No. 61 Town of Ajax Rossland Rd

REGION OF DURHAM, 2019 CAPITAL BUDGET PROJECT DETAIL

BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

		2019		Four Year	Forecast		
	Budget Prior to 2019	CAPITAL BUDGET	2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING	200.000	700.000					900.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION		7,650.000					7,650.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	200.000	8,350.000	0.000	0.000	0.000	0.000	8,550.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES	113.500	4,727.770					4,841.270
COMMERCIAL DEVELOPMENT CHARGES*	3.480	118.570					122.050
USER REVENUES	12.300	551.100					563.400
DEBENTURES							0.000
OTHER	70.720	2,952.560					3,023.280
TOTAL ATTRIBUTION	200.000	8,350.000	0.000	0.000	0.000	0.000	8,550.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

NEED/EXPLANATION OF PROJECT

Construction of feedermain to service new development. Timing of construction dependent on rate of development.

Magill Dr

PROJECT LOCATION & DESCRIPTION ITEM NO. 97 SYSTEM EXPANSION Zone 1 feedermain on Harwood Ave. from Kerrison Dr. to Rossland Rd., Ajax Project No.: D1803 **RELATED PROJECTS** 2018 Water Supply Capital Budget Item No. 63 Town of Ajax Rossland Rd

BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

		2019		Four Year	Forecast		
	Budget Prior to 2019	CAPITAL BUDGET	2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING	400.000	240.000					640.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION		3,860.000					3,860.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	400.000	4,100.000	0.000	0.000	0.000	0.000	4,500.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES	219.640	2,246.390					2,466.030
COMMERCIAL DEVELOPMENT CHARGES*	6.760	56.170					62.930
USER REVENUES	23.760	261.580					285.340
DEBENTURES							0.000
OTHER	149.840	1,535.860					1,685.700
TOTAL ATTRIBUTION	400.000	4,100.000		0.000	0.000	0.000	4,500.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

NEED/EXPLANATION OF PROJECT

Construction of feedermain to service new development. Timing of construction dependent on rate of development.

Kerrison Dr

ITEM NO. 99

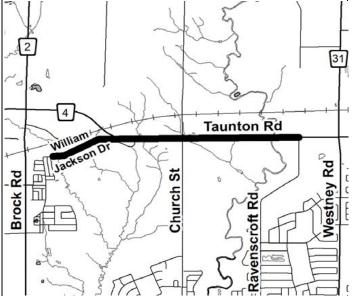
SYSTEM EXPANSION

Zone 2 feedermain on William Jackson Dr. & Taunton Rd. from Earl Grey Ave. to Ravenscroft Rd., Pickering/Ajax

Project No.: D1904

RELATED PROJECTS

City of Pickering/Town of Ajax



BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

		2019		Four Year	Forecast		
	Budget Prior to 2019	CAPITAL BUDGET	2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		400.000		500.000			900.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION				5,300.000			5,300.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	400.000	0.000	5,800.000	0.000	0.000	6,200.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES		350.400		5,080.800			5,431.200
COMMERCIAL DEVELOPMENT CHARGES*		8.800		127.600			136.400
USER REVENUES		40.800		591.600			632.400
DEBENTURES							0.000
OTHER							0.000
TOTAL ATTRIBUTION	0.000	400.000	0.000	5,800.000	0.000	0.000	6,200.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

NEED/EXPLANATION OF PROJECT

Construction of feedermain to service new development. Timing of construction dependent on rate of development.

ITEM NO. 101

SYSTEM EXPANSION

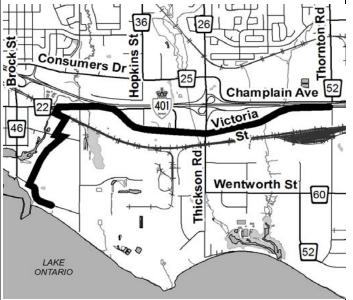
Zone 1 feedermain from Whitby Water Supply Plant to Thornton Rd., Whitby/Oshawa

Project No.: W1001

RELATED PROJECTS

2012 Water Supply Capital Budget Item No. 49 2013 Water Supply Capital Budget Item No. 48 2014 Water Supply Capital Budget Item No. 62

Town of Whitby



BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

		2019		Four Year	Forecast		
	Budget Prior to 2019	CAPITAL BUDGET	2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING	1,700.000			4,500.000			6,200.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION		3,000.000		8,000.000	25,200.000		36,200.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	1,700.000	3,000.000	0.000	12,500.000	25,200.000	0.000	42,400.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES	1,439.250	2,628.000		10,950.000	22,075.200		37,092.450
COMMERCIAL DEVELOPMENT CHARGES*	46.670	66.000		275.000	554.400		942.070
USER REVENUES	214.080	306.000		1,275.000	2,570.400		4,365.480
DEBENTURES							0.000
OTHER							0.000
TOTAL ATTRIBUTION	1,700.000	3,000.000	0.000	12,500.000	25,200.000	0.000	42,400.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

NEED/EXPLANATION OF PROJECT

Project to be completed in phases:

Phase 1: Victoria St. from 400 m west of Thickson Rd. to Thickson Rd.

Phase 2:Victoria St./Bloor St. from Thickson Rd. to Thornton Rd.

Phase 3: Whitby Water Supply Plant to 400 m west of Thickson Rd.

ITEM NO. 107

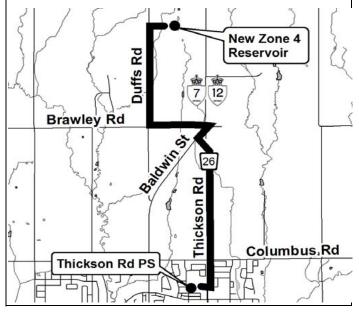
SYSTEM EXPANSION

Zone 4 feedermain from Thickson Rd. Zone 4 pumping station to Zone 4 Reservoir, Whitby

Project No.: D1905

RELATED PROJECTS

Town of Whitby



BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

		2019		Four Year F	orecast		
	Budget Prior to 2019	CAPITAL BUDGET	2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		1,600.000		900.000			2,500.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION				15,000.000			15,000.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	1,600.000	0.000	15,900.000	0.000	0.000	17,500.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES		1,401.600		13,928.400			15,330.000
COMMERCIAL DEVELOPMENT CHARGES*		35.200		349.800			385.000
USER REVENUES		163.200		1,621.800			1,785.000
DEBENTURES							0.000
OTHER			_				0.000
TOTAL ATTRIBUTION	0.000	1,600.000	0.000	15,900.000	0.000	0.000	17,500.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

NEED/EXPLANATION OF PROJECT

PROJECT LOCATION & DESCRIPTION ITEM NO. 108 SYSTEM EXPANSION Zone 4 feedermain on Brawley Rd. from Ashburn Rd. to Duffs Rd., Whitby Project No.: D1907 **RELATED PROJECTS** Town of Whitby Ashburn Rd 7 12 Brawley Rd Thickson Columbus, Rd

BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

	Budget Prior to 2019	2019 CAPITAL BUDGET	Four Year Forecast				
			2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		600.000		200.000			800.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION				5,100.000			5,100.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	600.000	0.000	5,300.000	0.000	0.000	5,900.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES		525.600		4,642.800			5,168.400
COMMERCIAL DEVELOPMENT CHARGES*		13.200		116.600			129.800
USER REVENUES		61.200		540.600			601.800
DEBENTURES							0.000
OTHER			_				0.000
TOTAL ATTRIBUTION	0.000	600.000	0.000	5,300.000	0.000	0.000	5,900.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

NEED/EXPLANATION OF PROJECT

PROJECT LOCATION & DESCRIPTION ITEM NO. 112 SYSTEM EXPANSION Zone 1 feedermain on Bloor St. from Ritson Rd. to Wilson Rd., Oshawa (including new valve chamber east of Albert St.) Project No.: O1709 RELATED PROJECTS 2018 Water Supply Capital Budget Item No. 77 City of Oshawa



BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

		2019		Four Year	Forecast		
	Budget Prior to 2019	CAPITAL BUDGET	2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING	500.000	400.000					900.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION		5,100.000					5,100.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	500.000	5,500.000	0.000	0.000	0.000	0.000	6,000.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES	439.000	4,818.000					5,257.000
COMMERCIAL DEVELOPMENT CHARGES*	13.500	121.000					134.500
USER REVENUES	47.500	561.000					608.500
DEBENTURES							0.000
OTHER				_			0.000
TOTAL ATTRIBUTION	500.000	5,500.000	0.000	0.000	0.000	0.000	6,000.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

NEED/EXPLANATION OF PROJECT

Project to be completed in phases:

Phase 1: Albert St. to Ritson Rd. - Completed

Phase 2: Stevenson Rd. to Albert St.- Construction has commenced

Phase 3: Ritson Rd. Wilson Rd. - Detailed design initiated

ITEM NO.: 114

SYSTEM EXPANSION

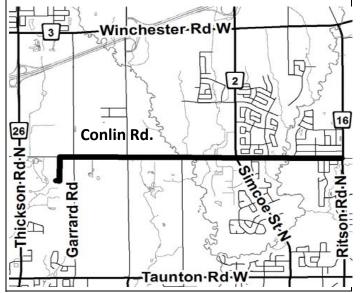
Zone 3 feedermain on Conlin Rd. from Garrard Rd. Zone 3 pumping station to Ritson Rd., Oshawa

Project No.: D1602

RELATED PROJECTS

2016 Water Supply Capital Budget Item No. 85 2018 Water Supply Capital Budget Item No. 79

City of Oshawa



BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

		2019		Four Year	Forecast		
	Budget Prior to 2019	CAPITAL BUDGET	2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING	1,100.000	1,500.000					2,600.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION		16,800.000					16,800.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	1,100.000	18,300.000	0.000	0.000	0.000	0.000	19,400.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES	965.800	16,030.800					16,996.600
COMMERCIAL DEVELOPMENT CHARGES*	29.700	402.600					432.300
USER REVENUES	104.500	1,866.600					1,971.100
DEBENTURES				Ì			0.000
AMRF				Ì			0.000
TOTAL ATTRIBUTION	1,100.000	18,300.000	0.000	0.000	0.000	0.000	19,400.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

PROJECT LOCATION & DESCRIPTION ITEM NO.: 116

Zone 3 feedermain on Harmony Rd. from Coldstream Dr. to 400 m south of Conlin Rd., Oshawa

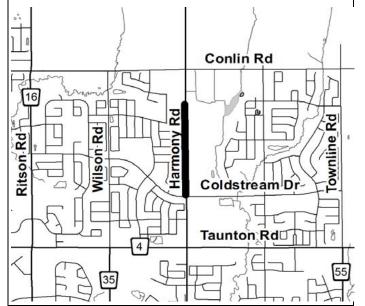
Project No.: D1604

SYSTEM EXPANSION

RELATED PROJECTS

2016 Water Supply Capital Budget Item No. 88

City of Oshawa



BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

		2019		Four Year	Forecast		
	Budget Prior to 2019	CAPITAL BUDGET	2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING	60.000	400.000					460.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION		3,060.000					3,060.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	60.000	3,460.000	0.000	0.000	0.000	0.000	3,520.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES	52.680	3,030.960					3,083.640
COMMERCIAL DEVELOPMENT CHARGES*	1.620	76.120					77.740
USER REVENUES	5.700	352.920					358.620
DEBENTURES							0.000
OTHER							0.000
TOTAL ATTRIBUTION	60.000	3,460.000	0.000	0.000	0.000	0.000	3,520.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

ITEM NO.: 118

SYSTEM EXPANSION

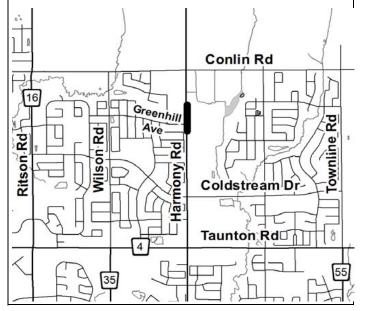
Zone 4 feedermain on Harmony Rd. from Greenhill Ave. to 400 m south of Conlin Rd., Oshawa

Project No.: D1615

RELATED PROJECTS

2016 Water Supply Capital Budget Item No. 89

City of Oshawa



BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

		2019		Four Year	Forecast		
	Budget Prior to 2019	CAPITAL BUDGET	2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING	60.000	40.000					100.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION		600.000					600.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	60.000	640.000	0.000	0.000	0.000	0.000	700.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES	52.680	560.640					613.320
COMMERCIAL DEVELOPMENT CHARGES*	1.620	14.080					15.700
USER REVENUES	5.700	65.280					70.980
DEBENTURES							0.000
OTHER							0.000
TOTAL ATTRIBUTION	60.000	640.000	0.000	0.000	0.000	0.000	700.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

PROJECT LOCATION & DESCRIPTION ITEM NO.: 120 SYSTEM EXPANSION Zone 4 feedermain from proposed Zone 4 Pumping Station at Harmony Rd. Reservoir to proposed Oshawa Zone 4 Reservoir, Oshawa Project No.: D1908

RELATED PROJECTS

Columbus Rd Columbus Rd New Zone 4 Reservoir New Zone 4 Aud 5 PS

BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

		2019		Four Year	Forecast			
	Budget Prior to 2019		2020	2021	2022	2023	TOTAL	
EXPENDITURES:								
ENVIRONMENTAL ASSESSMENT							0.000	
ENGINEERING		1,000.000		1,200.000			2,200.000	
LAND ACQUISITION		,		,			0.000	
UTILITY RELOCATION							0.000	
CONSTRUCTION				13,800.000			13,800.000	
CONTINGENCY							0.000	
OTHER							0.000	
TOTAL EXPENDITURES	0.000	1,000.000	0.000	15,000.000	0.000	0.000	16,000.000	
ATTRIBUTION:								
SUBSIDY/GRANTS							0.000	
RESIDENTIAL DEVELOPMENT CHARGES		876.000		13,140.000			14,016.000	
COMMERCIAL DEVELOPMENT CHARGES*		22.000		330.000			352.000	
USER REVENUES		102.000		1,530.000			1,632.000	
DEBENTURES							0.000	
OTHER							0.000	
TOTAL ATTRIBUTION	0.000	1,000.000	0.000	15,000.000	0.000	0.000	16,000.000	

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

ITEM NO. 123

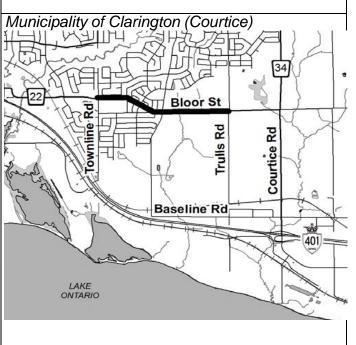
SYSTEM EXPANSION

Zone 2 feedermain on Bloor St. from Townline Rd. to Trulls Rd., Courtice

Project No. C1201

RELATED PROJECTS

2012 Water Supply Capital Budget Item No. 59 2018 Water Supply Capital Budget Item No. 88



BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

		2019		Four Year	Forecast		
	Budget Prior to 2019	CAPITAL BUDGET	2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING	750.000	250.000					1,000.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION		6,000.000					6,000.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	750.000	6,250.000	0.000	0.000	0.000	0.000	7,000.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES	632.050	5,475.000					6,107.050
COMMERCIAL DEVELOPMENT CHARGES*	20.700	137.500					158.200
USER REVENUES	97.250	637.500					734.750
DEBENTURES							0.000
OTHER							0.000
TOTAL ATTRIBUTION	750.000	6,250.000	0.000	0.000	0.000	0.000	7,000.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

ITEM NO. 124

SYSTEM EXPANSION

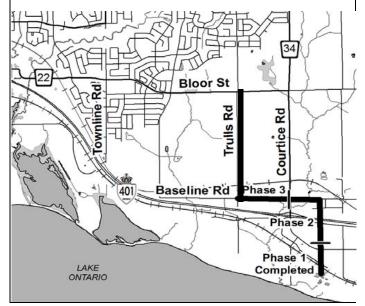
Courtice - Zone 1 feedermain Phase 3: Baseline Rd. from Trulls Rd. to Courtice Rd. & Trulls Rd. from Baseline Rd. to Bloor St.

Project No. D1303

RELATED PROJECTS

2013 Water Supply Capital Budget Item No. 61 2014 Water Supply Capital Budget Item No. 83 2018 Water Supply Capital Budget Item No. 89

Municipality of Clarington (Courtice)



BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

		2019		Four Year I	Forecast		
	Budget Prior to 2019	CAPITAL BUDGET	2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING	1,050.000						1,050.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION	4,800.000	4,200.000					9,000.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	5,850.000	4,200.000	0.000	0.000	0.000	0.000	10,050.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES	5,092.400	3,679.200					8,771.600
COMMERCIAL DEVELOPMENT CHARGES*	156.600	92.400					249.000
USER REVENUES	601.000	428.400					1,029.400
DEBENTURES							0.000
OTHER						_	0.000
TOTAL ATTRIBUTION	5,850.000	4,200.000	0.000	0.000	0.000	0.000	10,050.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

NEED/EXPLANATION OF PROJECT

Phase 1- 400 m South of Energy Dr. to 100 m North of Energy Rd. - completed

Phase 2- 100 m North of Energy Dr. to the intersection of Baseline Rd. and Courtice Rd. - construction has commenced

Phase 3 - Baseline Rd. from Courtice Rd. to Trulls Rd. and Trulls Rd. from Baseline Rd. to Bloor St.

ITEM NO. 126

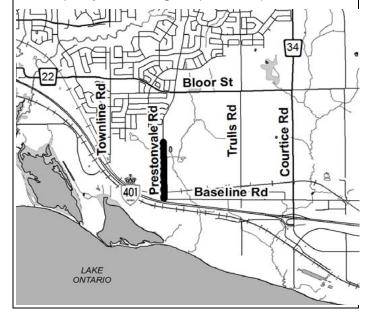
SYSTEM EXPANSION

Zone 1 feedermain on Prestonvale Rd. from Baseline Rd. to 950 m North of Baseline Rd., Courtice

Project No.: D1909

RELATED PROJECTS

Municipality of Clarington (Courtice)



BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

		2019		Four Year	Forecast		
	Budget Prior to 2019	CAPITAL BUDGET	2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		350.000					350.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION				1,500.000			1,500.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	350.000	0.000	1,500.000	0.000	0.000	1,850.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES		306.600		1,314.000			1,620.600
COMMERCIAL DEVELOPMENT CHARGES*		7.700		33.000			40.700
USER REVENUES		35.700		153.000			188.700
DEBENTURES							0.000
OTHER							0.000
TOTAL ATTRIBUTION	0.000	350.000	0.000	1,500.000	0.000	0.000	1,850.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

NEED/EXPLANATION OF PROJECT

Construction of feedermain to service new development. Timing of construction dependent on rate of development

WATER SUPPLY SYSTEM

PROJECT L	OCATION & DESCRIPTION									
ITEM NO. 137										
OTHER LINEAR INFRASTE	<u>UCTURE</u>									
Replacement of meters										
Project No.: D1906 RELATED PROJECTS										
RE	LATED PROJECTS									

BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

	Budget	2019		Four Year	Forecast		
	Prior to 2019	CAPITAL BUDGET	2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING							0.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION		3,100.000	3,100.000	1,000.000	1,000.000	1,000.000	9,200.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	3,100.000	3,100.000	1,000.000	1,000.000	1,000.000	9,200.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES							0.000
COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES		3,100.000	3,100.000	1,000.000	1,000.000	1,000.000	9,200.000
DEBENTURES							0.000
OTHER							0.000
TOTAL ATTRIBUTION	0.000	3,100.000	3,100.000	1,000.000	1,000.000	1,000.000	9,200.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

REGION OF DURHAM, 2019 CAPITAL BUDGET PROJECT DETAIL

ITEM NO.: 138

OTHER LINEAR INFRASTRUCTURE

Depot - Replacement of polybutylene service connections in various locations

Project No.: M1925

RELATED PROJECTS

BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

	Budget	2019		Four Year	Forecast		
	Prior to 2019	CAPITAL BUDGET	2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING							0.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION		300.000					300.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	300.000	0.000	0.000	0.000	0.000	300.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES							0.000
COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES		300.000					300.000
DEBENTURES							0.000
OTHER							0.000
TOTAL ATTRIBUTION	0.000	300.000	0.000	0.000	0.000	0.000	300.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

WATER SUPPLY SYSTEM

PROJECT LOCATION & DESCRIPTION

REGION OF DURHAM, 2019 CAPITAL BUDGET PROJECT DETAIL

ITEM NO.: 139

OTHER LINEAR INFRASTRUCTURE

Replacement of lead service connections in various locations

Project No.: M1932

RELATED PROJECTS

BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

	Budget	2019		Four Year	Forecast		
	Prior to 2019	CAPITAL BUDGET	2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		100.000	100.000	100.000	100.000	100.000	500.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION		900.000	900.000	900.000	900.000	900.000	4,500.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	1,000.000	1,000.000	1,000.000	1,000.000	1,000.000	5,000.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES							0.000
COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES		1,000.000	1,000.000	1,000.000	1,000.000	1,000.000	5,000.000
DEBENTURES							0.000
OTHER							0.000
TOTAL ATTRIBUTION	0.000	1,000.000	1,000.000	1,000.000	1,000.000	1,000.000	5,000.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

ITEM NO. 140

OTHER LINEAR INFRASTRUCTURE

Replacement of valves

Project No. M1926

RELATED PROJECTS

BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

	Budget	2019		Four Year	Forecast		
	Prior to CAPITAL 2019 BUDGET	2020	2021	2022	2023	TOTAL	
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING							0.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION		200.000	200.000	200.000	200.000	200.000	1,000.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	200.000	200.000	200.000	200.000	200.000	1,000.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES							0.000
COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES		200.000	200.000	200.000	200.000	200.000	1,000.000
DEBENTURES							0.000
OTHER							0.000
TOTAL ATTRIBUTION	0.000	200.000	200.000	200.000	200.000	200.000	1,000.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

WATER SUPPLY SYSTEM

PROJECT LOCATION & DESCRIPTION	
ITEM NO. 141	
OTHER LINEAR INFRASTRUCTURE	
Replacement of hydrants	EXPENDITUR
Project No. M1927	ENVIRONMENTAL AS
RELATED PROJECTS	ENGINEERING
	LAND ACQUISITION
	UTILITY RELOCATION
	CONSTRUCTION
	CONTINGENCY OTHER
	TOTAL EXPEND
	ATTRIBUTIO
	SUBSIDY/GRANTS
	RESIDENTIAL DEVELO
	COMMERCIAL DEVEL
	CHARGES*
	USER REVENUES
	DEBENTURES
	OTHER
	TOTAL ATTRIB
	Under the Council approved Charges, effective July 1, 20

BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

	Budget	2019		Four Year	Forecast		
	Prior to CAPITAL 2019 BUDGET	2020	2021	2022	2023	TOTAL	
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING							0.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION		160.000	160.000	160.000	160.000	160.000	800.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	160.000	160.000	160.000	160.000	160.000	800.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES							0.000
COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES		160.000	160.000	160.000	160.000	160.000	800.000
DEBENTURES							0.000
OTHER							0.000
TOTAL ATTRIBUTION	0.000	160.000	160.000	160.000	160.000	160.000	800.000

d Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

NEED/EXPLANATION OF PROJEC	از
----------------------------	----

WATER SUPPLY SYSTEM

PROJECT LOCATION & DESCRIPTION ITEM NO. 143 BUILDINGS Ajax Water Supply Plant - expansion joint rehabilitation work Project No.: D1850 **RELATED PROJECTS** Town of Ajax _______Bayly.St □□□□ Westney Rd **Ajax WSP** Lake Driveway LAKE ONTARIO

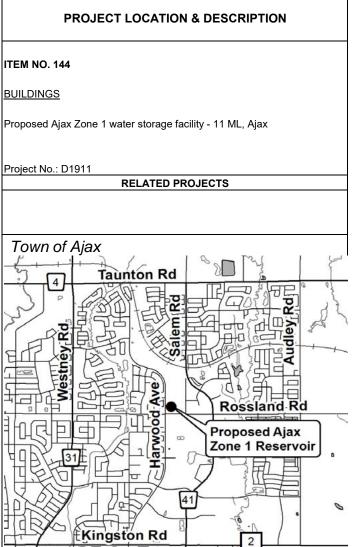
BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

	Budget	2019		Four Year I	Forecast		
	Prior to 2019		2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING	60.000	340.000					400.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION			4,000.000				4,000.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	60.000	340.000	4,000.000	0.000	0.000	0.000	4,400.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES							0.000
COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES	60.000	340.000	4,000.000				4,400.000
DEBENTURES							0.000
OTHER							0.000
TOTAL ATTRIBUTION	60.000	340.000	4,000.000	0.000	0.000	0.000	4,400.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

WATER SUPPLY SYSTEM



BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

	Budget	2019		Four Year	Forecast		
	Prior to 2019	Prior to CAPITAL	2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT			600.000				600.000
ENGINEERING		200.000			600.000		800.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION							0.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	200.000	600.000	0.000	600.000	0.000	1,400.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES		175.200	525.600		525.600		1,226.400
COMMERCIAL DEVELOPMENT CHARGES*		4.400	13.200		13.200		30.800
USER REVENUES		20.400	61.200		61.200		142.800
DEBENTURE							0.000
OTHER					_		0.000
TOTAL ATTRIBUTION	0.000	200.000	600.000	0.000	600.000	0.000	1,400.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

WATER SUPPLY SYSTEM

PROJECT LOCATION & DESCRIPTION ITEM NO.: 148 **BUILDINGS** Garrard Rd. Zone 3 Water Pumping Station - upgrades, Whitby Project No.: D1915 RELATED PROJECTS Town of Whitby Winchester Rd Conlin Rd **Garrard Rd** Zone 3 PS Taunton Rd

BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

	Budget	2019		Four Year I	Forecast		
	Prior to 2019	CAPITAL BUDGET	2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		260.000					260.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION			1,140.000				1,140.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	260.000	1,140.000	0.000	0.000	0.000	1,400.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES		227.760	998.640				1,226.400
COMMERCIAL DEVELOPMENT CHARGES*		5.720	25.080				30.800
USER REVENUES		26.520	116.280				142.800
DEBENTURES							0.000
OTHER							0.000
TOTAL ATTRIBUTION	0.000	260.000	1,140.000	0.000	0.000	0.000	1,400.000

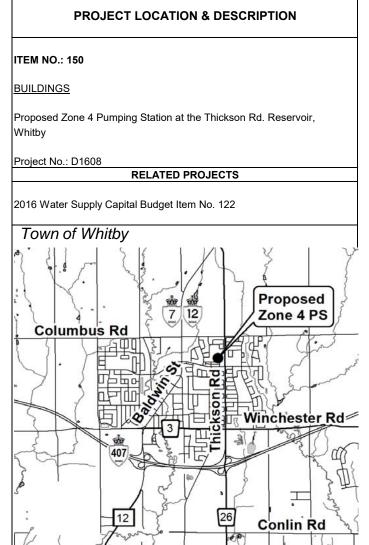
Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

9

REGION OF DURHAM, 2019 CAPITAL BUDGET PROJECT DETAIL

WATER SUPPLY SYSTEM



BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

	Budget	2019		Four Year I	Forecast		
	Prior to 2019	CAPITAL BUDGET	2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT	600.000						600.000
ENGINEERING		500.000					500.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION				6,400.000			6,400.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	600.000	500.000	0.000	6,400.000	0.000	0.000	7,500.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES	526.800	438.000		5,606.400			6,571.200
COMMERCIAL DEVELOPMENT CHARGES*	16.200	11.000		140.800			168.000
USER REVENUES	57.000	51.000		652.800			760.800
DEBENTURES							0.000
OTHER				_		_	0.000
TOTAL ATTRIBUTION	600.000	500.000	0.000	6,400.000	0.000	0.000	7,500.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

PROJECT LOCATION & DESCRIPTION ITEM NO.: 151

REGION OF DURHAM, 2019 CAPITAL BUDGET PROJECT DETAIL

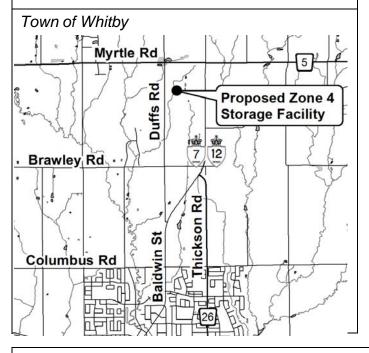
BUILDINGS

Proposed Whitby Zone 4 Storage Facility - 11 ML

Project No.: D1505

RELATED PROJECTS

2015 Water Supply Capital Budget Item No. 126



BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

	Budget	2019		Four Year F	orecast		
	Prior to 2019	CAPITAL BUDGET	2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT	500.000						500.000
ENGINEERING		500.000		700.000			1,200.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION				10,800.000			10,800.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	500.000	500.000	0.000	11,500.000	0.000	0.000	12,500.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES	439.000	385.500		8,866.500			9,691.000
COMMERCIAL DEVELOPMENT CHARGES*	13.500	9.650		221.950			245.100
USER REVENUES	47.500	104.850		2,411.550			2,563.900
DEBENTURES							0.000
OTHER							0.000
TOTAL ATTRIBUTION	500.000	500.000	0.000	11,500.000	0.000	0.000	12,500.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

REGION OF DURHAM, 2019 CAPITAL BUDGET PROJECT DETAIL

ITEM NO. 157

BUILDINGS

Proposed Zone 4 Pumping Station at the Harmony Rd. Reservoir Oshawa

Project No. D1507

RELATED PROJECTS

2015 Water Supply Capital Budget Item No. 129

City of Oshawa



BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

	Budget	2019	Four Year Forecast					
	Prior to 2019	CAPITAL BUDGET	2020	2021	2022	2023	TOTAL	
EXPENDITURES:								
ENVIRONMENTAL ASSESSMENT	500.000						500.000	
ENGINEERING		500.000					500.000	
LAND ACQUISITION							0.000	
UTILITY RELOCATION							0.000	
CONSTRUCTION				6,500.000			6,500.000	
CONTINGENCY							0.000	
OTHER							0.000	
TOTAL EXPENDITURES	500.000	500.000	0.000	6,500.000	0.000	0.000	7,500.000	
ATTRIBUTION:								
SUBSIDY/GRANTS							0.000	
RESIDENTIAL DEVELOPMENT CHARGES	439.000	379.500		4,933.500			5,752.000	
COMMERCIAL DEVELOPMENT CHARGES*	13.500	9.550		124.150			147.200	
USER REVENUES	47.500	110.950		1,442.350			1,600.800	
DEBENTURES				j			0.000	
OTHER							0.000	
TOTAL ATTRIBUTION	500.000	500.000	0.000	6,500.000	0.000	0.000	7,500.000	

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

WATER SUPPLY SYSTEM

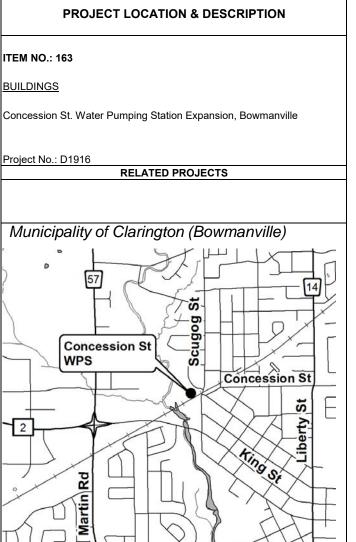
PROJECT LOCATION & DESCRIPTION ITEM NO.: 158 **BUILDINGS** Proposed Oshawa Zone 4 Storage Facility - 11 ML Project No.: D1609 RELATED PROJECTS 2016 Water Supply Capital Budget Item No. 132 City of Oshawa **Proposed Zone 4** Columbus Rd Storage Facility 407 Winchester Rd Rd Harmony Conlin Rd

BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

	Budget	2019		Four Year F	orecast		
	Prior to 2019	CAPITAL BUDGET	2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT	500.000						500.000
ENGINEERING		500.000		700.000			1,200.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION				10,300.000			10,300.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	500.000	500.000	0.000	11,000.000	0.000	0.000	12,000.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES	439.000	363.500		7,997.000			8,799.500
COMMERCIAL DEVELOPMENT CHARGES*	13.500	9.115		200.530			223.145
USER REVENUES	47.500	127.385		2,802.470			2,977.355
DEBENTURES							0.000
OTHER				_		_	0.000
TOTAL ATTRIBUTION	500.000	500.000	0.000	11,000.000	0.000	0.000	12,000.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.



BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

	Budget	2019		Four Year	Forecast		
	Prior to 2019	CAPITAL BUDGET	2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		600.000					600.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION			5,000.000				5,000.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	600.000	5,000.000	0.000	0.000	0.000	5,600.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES		493.800	4,115.000				4,608.800
COMMERCIAL DEVELOPMENT CHARGES*		12.420	103.500				115.920
USER REVENUES		93.780	781.500				875.280
DEBENTURES							0.000
OTHER							0.000
TOTAL ATTRIBUTION	0.000	600.000	5,000.000	0.000	0.000	0.000	5,600.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

ITEM NO.: 164

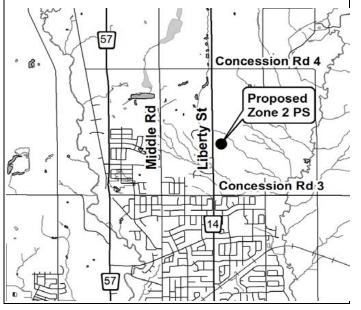
BUILDINGS

Proposed Zone 2 Pumping Station at the Zone 1 Reservoir, Bowmanville

Project No.: D1917

RELATED PROJECTS

Municipality of Clarington (Bowmanville)



BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

	Budget	2019		Four Year I	Forecast		
	Prior to 2019	CAPITAL BUDGET	2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		550.000					550.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION			8,000.000				8,000.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	550.000	8,000.000	0.000	0.000	0.000	8,550.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES		452.650	6,584.000				7,036.650
COMMERCIAL DEVELOPMENT CHARGES*		11.385	165.600				176.985
USER REVENUES		85.965	1,250.400				1,336.365
DEBENTURES							0.000
OTHER							0.000
TOTAL ATTRIBUTION	0.000	550.000	8,000.000	0.000	0.000	0.000	8,550.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

ITEM NO.: 166

BUILDINGS

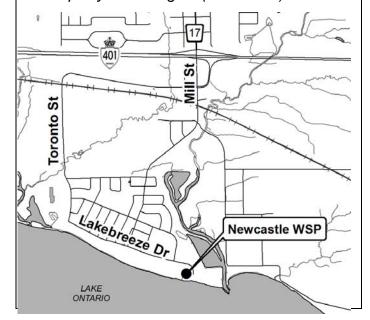
Expansion of Newcastle Water Supply Plant from 8.2 MLD to 16.4 MLD and demolish the existing plant

Project No.: D1107

RELATED PROJECTS

2014 Water Supply Capital Budget Item No. 115 2015 Water Supply Capital Budget Item No. 139 2018 Water Supply Capital Budget Item No. 136

Municipality of Clarington (Newcastle)



BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

	Budget	2019		Four Year	Forecast		
	Prior to 2019	CAPITAL BUDGET	2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING	7,700.000						7,700.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION	36,200.000	10,240.000					46,440.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	43,900.000	10,240.000	0.000	0.000	0.000	0.000	54,140.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES	19,382.700	4,270.080					23,652.780
COMMERCIAL DEVELOPMENT CHARGES*	2,415.600	430.080					2,845.680
USER REVENUES	3,121.508	5,539.840					8,661.348
DEBENTURES	17,580.192						17,580.192
INDUSTRIAL CHARGES	1,400.000						1,400.000
TOTAL ATTRIBUTION	43,900.000	10,240.000	0.000	0.000	0.000	0.000	54,140.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

ITEM NO.: 167

BUILDINGS

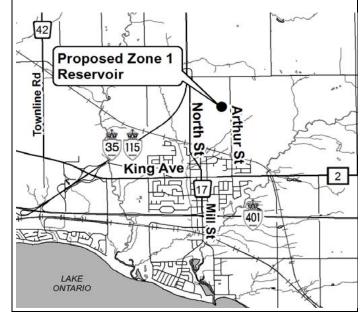
Proposed Zone 1 Reservoir 7 ML and feedermain

Project No.: D1202

RELATED PROJECTS

2012 Water Supply Capital Budget Item No. 84

Municipality of Carington (Newcastle)



BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

	Budget	2019		Four Year I	orecast		
	Prior to 2019	CAPITAL BUDGET	2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT	300.000						300.000
ENGINEERING		900.000					900.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION				7,900.000			7,900.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	300.000	900.000	0.000	7,900.000	0.000	0.000	9,100.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES	272.700	746.100		6,549.100			7,567.900
COMMERCIAL DEVELOPMENT CHARGES*	9.600	18.630		163.530			191.760
USER REVENUES	17.700	135.270		1,187.370			1,340.340
DEBENTURES							0.000
OTHER							0.000
TOTAL ATTRIBUTION	300.000	900.000	0.000	7,900.000	0.000	0.000	9,100.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

PROJECT LOCATION & DESCRIPTION ITEM NO.: 168 BUILDINGS Proposed Zone 2 Water Pumping Station Project No.: D1610 **RELATED PROJECTS** 2016 Water Supply Capital Budget Item No. 139 Municipality of Carington (Newcastle) **Proposed Townline Rd** Zone 2 PS 35 115 King Ave LAKE ONTARIO

BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

	Budget	2019		Four Year I	orecast		
	Prior to 2019	CAPITAL BUDGET	2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT	500.000						500.000
ENGINEERING		500.000					500.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION				3,800.000			3,800.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	500.000	500.000	0.000	3,800.000	0.000	0.000	4,800.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES	439.000	376.000		2,857.600			3,672.600
COMMERCIAL DEVELOPMENT CHARGES*	13.500	9.400		71.440			94.340
USER REVENUES	47.500	114.600		870.960			1,033.060
DEBENTURES							0.000
OTHER							0.000
TOTAL ATTRIBUTION	500.000	500.000	0.000	3,800.000	0.000	0.000	4,800.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

REGION OF DURHAM, 2019 CAPITAL BUDGET PROJECT DETAIL

ITEM NO. 176

BUILDINGS

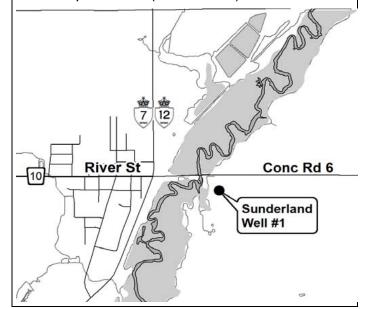
Sunderland WSS - New Well and Pumphouse with Standby power

Project No. K0601

RELATED PROJECTS

2006 Water Supply Capital Budget Item No. 66 2010 Water Supply Capital Buget Item No. 86

Township of Brock (Sunderland)



BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

	Budget	2019		Four Year F	orecast		
	Prior to 2019	CAPITAL BUDGET	2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING	650.000	170.000					820.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION		430.000	500.000	3,300.000			4,230.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	650.000	600.000	500.000	3,300.000	0.000	0.000	5,050.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES	464.100	74.400	62.000	409.200			1,009.700
COMMERCIAL DEVELOPMENT CHARGES*	64.300	7.500	6.250	41.250			119.300
USER REVENUES	121.600	518.100	431.750	2,849.550			3,921.000
DEBENTURES							0.000
OTHER							0.000
TOTAL ATTRIBUTION	650.000	600.000	500.000	3,300.000	0.000	0.000	5,050.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

RELATED PROJECTS

Water Storage Facilities condition assessment and rehabilitation

17

ITEM NO. 184

BUILDINGS

Project No. D1918

works

BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

	Budget	2019		Four Year F	orecast		
	Prior to 2019	CAPITAL BUDGET	2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		30.000		30.000	30.000	30.000	120.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION		120.000		120.000	120.000	120.000	480.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	150.000	0.000	150.000	150.000	150.000	600.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES							0.000
COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES							0.000
DEBENTURES							0.000
ASSET MGMT RESERVE FUND		150.000		150.000	150.000	150.000	600.000
TOTAL ATTRIBUTION	0.000	150.000	0.000	150.000	150.000	150.000	600.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

NEED/EXPLANATION OF PROJECT

Water Storage facility condition assessments and rehabilitation works

RELATED PROJECTS

172

ITEM NO. 185

BUILDINGS

Project No. M0101

Wellhead protection at Regional well sites

BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

	Budget	2019		Four Year F	orecast		
	Prior to 2019	CAPITAL BUDGET	2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		114.000	114.000	114.000	114.000	114.000	570.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION		686.000	686.000	686.000	686.000	686.000	3,430.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	800.000	800.000	800.000	800.000	800.000	4,000.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES							0.000
COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES		800.000	800.000	800.000	800.000	800.000	4,000.000
DEBENTURES							0.000
OTHER							0.000
TOTAL ATTRIBUTION	0.000	800.000	800.000	800.000	800.000	800.000	4,000.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

WATER SUPPLY SYSTEM

PROJECT LOCATION & DESCRIPTION

ITEM NO. 186

MACHINERY AND EQUIPMENT

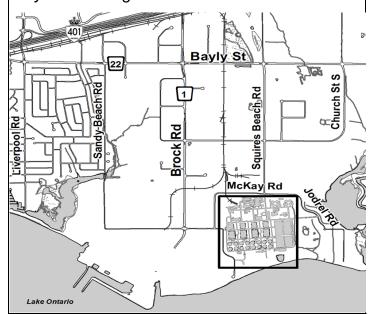
Regional Environmental Laboratory Upgrades and ventilation associated works, Pickering

Project No.: Y1602

RELATED PROJECTS

2016 Water Supply Capital Budget Item No. 116 2017 Water Supply Capital Budget Item No. 121 2019 Sanitary Sewerage Capital Budget Item No. 118

City of Pickering



BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

	Budget	2019		Four Year	Forecast		
	Prior to 2019	CAPITAL BUDGET	2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING	450.000						450.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION	3,100.000	650.000					3,750.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	3,550.000	650.000	0.000	0.000	0.000	0.000	4,200.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES	1,558.450	285.350					1,843.800
COMMERCIAL DEVELOPMENT CHARGES*	47.925	8.775					56.700
USER REVENUES	168.625	30.875					199.500
DEBENTURES							0.000
OTHER - YORK REGION	1,775.000	325.000					2,100.000
TOTAL ATTRIBUTION	3,550.000	650.000	0.000	0.000	0.000	0.000	4,200.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

NEED/EXPLANATION OF PROJECT

Cost sharing with York Region

WATER SUPPLY SYSTEM

PROJECT LOCATION & DESCRIPTION ITEM NO. 187 MACHINERY AND EQUIPMENT Finch Ave. Elevated Water Storage Tank - Recoating Project No.: D1919 **RELATED PROJECTS** City of Pickering Finch Ave **Finch Ave Elevated Tank**

BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

	Budget	2019		Four Year	Forecast		
	Prior to 2019	CAPITAL BUDGET	2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		120.000					120.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION			500.000				500.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	120.000	500.000	0.000	0.000	0.000	620.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES							0.000
COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES		120.000	500.000				620.000
DEBENTURES							0.000
OTHER							0.000
TOTAL ATTRIBUTION	0.000	120.000	500.000	0.000	0.000	0.000	620.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

WATER SUPPLY SYSTEM

PROJECT LOCATION & DESCRIPTION

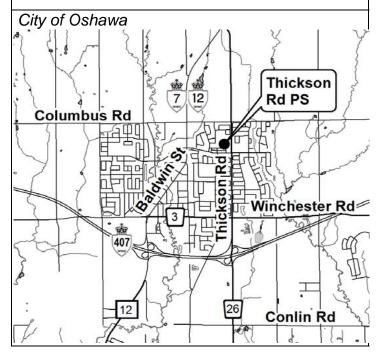
ITEM NO. 190

MACHINERY AND EQUIPMENT

Thickson Rd. Water Pumping Station - replacement of the Motor Control Centre (MCC), Oshawa

Project No.: D1922

RELATED PROJECTS



BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

	Budget	2019		Four Year	Forecast		
	Prior to 2019	CAPITAL BUDGET	2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		50.000					50.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION		200.000					200.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	250.000	0.000	0.000	0.000	0.000	250.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES							0.000
COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES		250.000					250.000
DEBENTURES							0.000
OTHER							0.000
TOTAL ATTRIBUTION	0.000	250.000	0.000	0.000	0.000	0.000	250.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

NEED/EXPLANATION OF PROJECT

Low lift pump motor control centre replacement

WATER SUPPLY SYSTEM

PROJECT LOCATION & DESCRIPTION ITEM NO. 193 MACHINERY AND EQUIPMENT Oshawa Water Supply Plant - Valve Chamber Upgrades Project No.: D1923 **RELATED PROJECTS** City of Oshawa Wentworth Dr 56 60 Farewell S š Valley Or Cedar OSHAWA! HARBOUR Oshawa WSP LAKE ONTARIO

BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

	Budget	2019		Four Year	Forecast		
	Prior to 2019	CAPITAL BUDGET	2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		100.000					100.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION				570.000			570.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	100.000	0.000	570.000	0.000	0.000	670.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES							0.000
COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES		100.000		570.000			670.000
DEBENTURES							0.000
OTHER							0.000
TOTAL ATTRIBUTION	0.000	100.000	0.000	570.000	0.000	0.000	670.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

NEED/EXPLANATION OF PROJECT

Valve replacement and interconnection capability.

WATER SUPPLY SYSTEM

PROJECT LOCATION & DESCRIPTION

ITEM NO.: 194

MACHINERY AND EQUIPMENT

Oshawa Water Supply Plant - Header & Backwash valve replacement and associated piping rehabilitation/replacement

Project No.: D1924

RELATED PROJECTS



BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

	Budget	2019		Four Year	Forecast		
	Prior to 2019	CAPITAL BUDGET	2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		400.000					400.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION			1,600.000				1,600.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	400.000	1,600.000	0.000	0.000	0.000	2,000.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES							0.000
COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES		400.000	1,600.000				2,000.000
DEBENTURES							0.000
OTHER							0.000
TOTAL ATTRIBUTION	0.000	400.000	1,600.000	0.000	0.000	0.000	2,000.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

NEED/EXPLANATION OF PROJECT

The backwash valves have reached the end of their useful and require replacement.

WATER SUPPLY SYSTEM

PROJECT LOCATION & DESCRIPTION

ITEM NO. 196

MACHINERY AND EQUIPMENT

Oshawa Water Supply Plant - Plant No. 1 Filter Rehabilitation

Project No.: O1516

RELATED PROJECTS

2017 Water Supply Capital Budget Item No. 133

City of Oshawa



BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

	Budget Prior to 2019	2019 CAPITAL BUDGET	Four Year Forecast				
			2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING	1,000.000						1,000.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION	3,200.000	2,500.000					5,700.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	4,200.000	2,500.000	0.000	0.000	0.000	0.000	6,700.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES							0.000
COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES	4,200.000	2,500.000					6,700.000
DEBENTURES							0.000
OTHER							0.000
TOTAL ATTRIBUTION	4,200.000	2,500.000	0.000	0.000	0.000	0.000	6,700.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

NEED/EXPLANATION OF PROJECT

Rehabiliation works required to provide safe and sustainable drinking water.

Phase 1: Filter Media & underdrain Removal - completed

Phase 2: Plant No. 1 Filter Rehabilitation Works

WATER SUPPLY SYSTEM

PROJECT LOCATION & DESCRIPTION ITEM NO. 199 MACHINERY AND EQUIPMENT Hortop Reservoir - replacement of Fill and Check Valves at the reservoir, Oshawa Project No.: D1925 **RELATED PROJECTS** City of Oshawa Taunton Rd Simcoe St Hortop Reservoir Rossland Rd

BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

	Budget Prior to 2019	2019 CAPITAL BUDGET	Four Year Forecast				
			2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		30.000					30.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION		120.000					120.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	150.000	0.000	0.000	0.000	0.000	150.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES							0.000
COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES		150.000					150.000
DEBENTURES							0.000
OTHER							0.000
TOTAL ATTRIBUTION	0.000	150.000	0.000	0.000	0.000	0.000	150.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

LAKE

ONTARIO

WATER SUPPLY SYSTEM

PROJECT LOCATION & DESCRIPTION ITEM NO. 200 MACHINERY AND EQUIPMENT Bowmanville Water Supply Plant - Condition assessment and process study, Bowmanville Project No.: D1926 **RELATED PROJECTS** Municipality of Clarington (Bowmanville) š Baseline Rd Lake Rd Darlington **Bowmanville** WSP

BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

	Budget Prior to 2019	2019 CAPITAL BUDGET	Four Year Forecast				
			2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		300.000					300.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION							0.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	300.000	0.000	0.000	0.000	0.000	300.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES							0.000
COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES		300.000					300.000
DEBENTURES							0.000
OTHER							0.000
TOTAL ATTRIBUTION	0.000	300.000	0.000	0.000	0.000	0.000	300.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

WATER SUPPLY SYSTEM

PROJECT LOCATION & DESCRIPTION ITEM NO. 201 MACHINERY AND EQUIPMENT Bowmanville Water Supply Plant - Disinfection upgrades Project No.: D1927 **RELATED PROJECTS** Municipality of Clarington (Bowmanville) š Baseline Rd Lake Rd Darlington **Bowmanville** WSP LAKE ONTARIO

BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

	Budget	2019		Four Year I	Forecast		
	Prior to 2019	CAPITAL BUDGET	2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		100.000					100.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION			570.000				570.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	100.000	570.000	0.000	0.000	0.000	670.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES							0.000
COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES		100.000	570.000				670.000
DEBENTURES							0.000
OTHER					_	_	0.000
TOTAL ATTRIBUTION	0.000	100.000	570.000	0.000	0.000	0.000	670.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

WATER SUPPLY SYSTEM

PROJECT LOCATION & DESCRIPTION

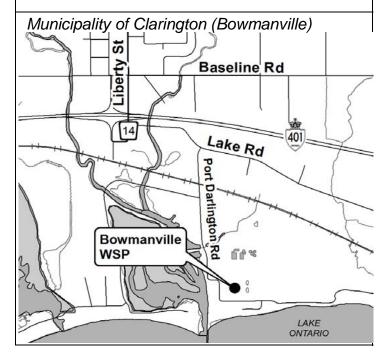
ITEM NO. 202

MACHINERY AND EQUIPMENT

Bowmanville Water Supply Plant - Header and pump replacement with associated piping rehabiliation/replacement

Project No.: D1928

RELATED PROJECTS



BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

	Budget	2019		Four Year	Forecast		
	Prior to 2019	CAPITAL BUDGET	2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		90.000					90.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION		360.000					360.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	450.000	0.000	0.000	0.000	0.000	450.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES							0.000
COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES		450.000					450.000
DEBENTURES							0.000
OTHER					_	_	0.000
TOTAL ATTRIBUTION	0.000	450.000	0.000	0.000	0.000	0.000	450.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

WATER SUPPLY SYSTEM

PROJECT LOCATION & DESCRIPTION

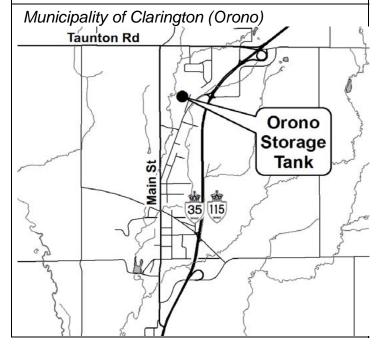
ITEM NO. 206

MACHINERY AND EQUIPMENT

Orono Water Supply System - Standpipe Water Storage Tank recoating

Project No.: D1704

RELATED PROJECTS



BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

	Budget	2019		Four Year	Forecast		
	Prior to 2019	CAPITAL BUDGET	2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING	60.000	30.000					90.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION		370.000					370.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	60.000	400.000	0.000	0.000	0.000	0.000	460.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES							0.000
COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES	60.000	400.000					460.000
DEBENTURES							0.000
OTHER							0.000
TOTAL ATTRIBUTION	60.000	400.000	0.000	0.000	0.000	0.000	460.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

WATER SUPPLY SYSTEM

PROJECT LOCATION & DESCRIPTION

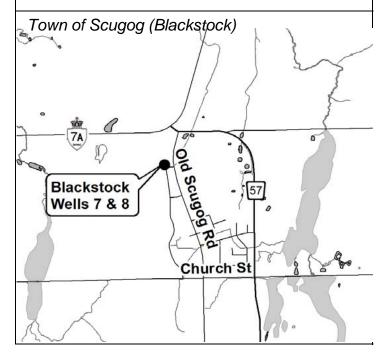
ITEM NO. 211

MACHINERY AND EQUIPMENT

Blackstock Water Supply System - Header replacement and associated piping rehabilitation/replacement

Project No.: D1929

RELATED PROJECTS



BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

	Budget	2019		Four Year	Forecast		
	Prior to 2019	CAPITAL BUDGET	2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		20.000					20.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION		80.000					80.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	100.000	0.000	0.000	0.000	0.000	100.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES							0.000
COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES		100.000					100.000
DEBENTURES							0.000
OTHER							0.000
TOTAL ATTRIBUTION	0.000	100.000	0.000	0.000	0.000	0.000	100.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

WATER SUPPLY SYSTEM

PROJECT LOCATION & DESCRIPTION

ITEM NO. 214

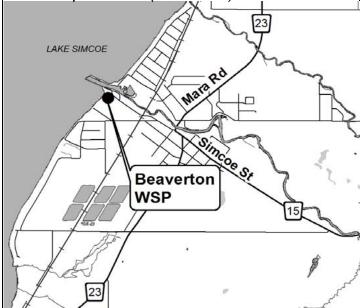
MACHINERY AND EQUIPMENT

Beaverton Water Supply Plant - Chlorine line replacement

Project No.: D1930

RELATED PROJECTS





BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

	Budget	2019		Four Year	Forecast		
	Prior to 2019	CAPITAL BUDGET	2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		60.000					60.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION		240.000					240.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	300.000	0.000	0.000	0.000	0.000	300.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES							0.000
COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES		300.000					300.000
DEBENTURES							0.000
OTHER							0.000
TOTAL ATTRIBUTION	0.000	300.000	0.000	0.000	0.000	0.000	300.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

WATER SUPPLY SYSTEM

PROJECT LOCATION & DESCRIPTION

ITEM NO. 215

MACHINERY AND EQUIPMENT

Automatic Bulk Water Dispensing System

Project No.: D1717

RELATED PROJECTS

2017 Water Supply Capital Budget Item No. 169 2018 Water Supply Capital Budget Item No. 174

BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

	Budget	2019		Four Year I	Forecast		
	Prior to 2019	CAPITAL BUDGET	2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING	180.000	60.000	60.000	60.000	60.000	60.000	480.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION	720.000	380.000	380.000	380.000	240.000	240.000	2,340.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	900.000	440.000	440.000	440.000	300.000	300.000	2,820.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES							0.000
COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES	900.000	440.000	440.000	440.000	300.000	300.000	2,820.000
DEBENTURES						İ	0.000
OTHER							0.000
TOTAL ATTRIBUTION	900.000	440.000	440.000	440.000	300.000	300.000	2,820.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

NEED/EXPLANATION OF PROJECT

Required to provide a secure, efficient and accessible method of supplying bulk water to customers.

WATER SUPPLY SYSTEM

PROJECT LOCATION & DESCRIPTION

ITEM NO. 220

ALLOWANCES AND OTHER PROVISIONS

Asset Condition/Investigation on transmission pipe

Project No.: D1420

RELATED PROJECTS

2014 Water Supply Capital Budget Item No. 141 2015 Water Supply Capital Budget Item No. 166 2019 Sanitary Sewerage Budget Item No. 133

BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

	Budget	2019		Four Year	Forecast		
	Prior to 2019	CAPITAL BUDGET	2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING	400.000	200.000	100.000	195.000	209.000	200.000	1,304.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION							0.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	400.000	200.000	100.000	195.000	209.000	200.000	1,304.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES							0.000
COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES							0.000
DEBENTURES							0.000
ASSET MGMT RESERVE FUND	400.000	200.000	100.000	195.000	209.000	200.000	1,304.000
TOTAL ATTRIBUTION	400.000	200.000	100.000	195.000	209.000	200.000	1,304.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

NEED/EXPLANATION OF PROJECT

Allowance for assessments on large transmission pipe

WATER SUPPLY SYSTEM

PROJECT LOCATION & DESCRIPTION

ITEM NO. 222

ALLOWANCES AND OTHER PROVISIONS

Allowance for acquisition of easements

Project No. M1901

RELATED PROJECTS

2019 Sanitary Sewerage Budget Item No. 135

BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

	Budget	2019		Four Year	Forecast		
	Prior to 2019	CAPITAL BUDGET	2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING							0.000
LAND ACQUISITION		150.000	150.000	150.000	150.000	150.000	750.000
UTILITY RELOCATION							0.000
CONSTRUCTION							0.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	150.000	150.000	150.000	150.000	150.000	750.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES							0.000
COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES		150.000	150.000	150.000	150.000	150.000	750.000
DEBENTURES							0.000
OTHER							0.000
TOTAL ATTRIBUTION	0.000	150.000	150.000	150.000	150.000	150.000	750.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

NEED/EXPLANATION OF PROJECT

A number of watermains are located on easements to which the Region does not have a clear title.

This allowance is for acquisition of easement for existing watermains in various locations.

WATER SUPPLY SYSTEM

PROJECT LOCATION & DESCRIPTION

ITEM NO. 223

ALLOWANCES AND OTHER PROVISIONS

Allowance for engineering studies

Project No.: M1907

RELATED PROJECTS

2019 Sanitary Sewerage Budget Item No. 136

BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

	Budget	2019		Four Year	Forecast		
	Prior to 2019	CAPITAL BUDGET	2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		150.000	300.000	150.000	300.000	150.000	1,050.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION							0.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	150.000	300.000	150.000	300.000	150.000	1,050.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES							0.000
COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES		150.000	300.000	150.000	300.000	150.000	1,050.000
DEBENTURE							0.000
OTHER							0.000
TOTAL ATTRIBUTION	0.000	150.000	300.000	150.000	300.000	150.000	1,050.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

WATER SUPPLY SYSTEM

PROJECT LOCATION & DESCRIPTION

ITEM NO. 225

ALLOWANCES AND OTHER PROVISIONS

Preliminary Engineering

Project No. 66143

RELATED PROJECTS

2019 Sanitary Sewerage Budget Item No. 138

BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

	Budget	2019		Four Year	Forecast		
	Prior to 2019	CAPITAL BUDGET	2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		100.000	100.000	100.000	100.000	100.000	500.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION							0.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	100.000	100.000	100.000	100.000	100.000	500.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES							0.000
COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES		100.000	100.000	100.000	100.000	100.000	500.000
DEBENTURES							0.000
OTHER							0.000
TOTAL ATTRIBUTION	0.000	100.000	100.000	100.000	100.000	100.000	500.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

NEED/EXPLANATION OF PROJECT

Allowance for preliminary engineering carried out in advance of budget provision.

PROJECT LOCATION & DESCRIPTION

ITEM NO. 226

ALLOWANCES AND OTHER PROVISIONS

Allowance for sundry extensions as per Council policy

Project No. M1908

RELATED PROJECTS

2019 Sanitary Sewerage Budget Item No. 139

BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

	Budget	2019		Four Year	Forecast		
	Prior to 2019	CAPITAL BUDGET	2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		15.000	15.000	15.000	15.000	15.000	75.00
LAND ACQUISITION							0.00
UTILITY RELOCATION							0.00
CONSTRUCTION							0.00
CONTINGENCY							0.00
OTHER							0.00
TOTAL EXPENDITURES	0.000	15.000	15.000	15.000	15.000	15.000	75.00
ATTRIBUTION:							
SUBSIDY/GRANTS							0.00
RESIDENTIAL DEVELOPMENT CHARGES							0.000
COMMERCIAL DEVELOPMENT CHARGES*							0.00
USER REVENUES		15.000	15.000	15.000	15.000	15.000	75.000
DEBENTURES							0.00
OTHER							0.00
TOTAL ATTRIBUTION	0.000	15.000	15.000	15.000	15.000	15.000	75.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

NEED/EXPLANATION OF PROJECT

Regional share for sundry extensions.

PROJECT LOCATION & DESCRIPTION

ITEM NO. 227

ALLOWANCES AND OTHER PROVISIONS

Allowance for unknown requirements

Project No. M1909

RELATED PROJECTS

2019 Sanitary Sewerage Budget Item No. 140

BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

	Budget	2019		Four Year	Forecast		
	Prior to 2019	CAPITAL BUDGET	2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		100.000	100.000	100.000	100.000	100.000	500.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION							0.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	100.000	100.000	100.000	100.000	100.000	500.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES							0.000
COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES		100.000	100.000	100.000	100.000	100.000	500.000
DEBENTURES							0.000
OTHER							0.000
TOTAL ATTRIBUTION	0.000	100.000	100.000	100.000	100.000	100.000	500.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

NEED/EXPLANATION OF PROJECT

Allowance for unanticipated works.

PROJECT LOCATION & DESCRIPTION

ITEM NO. 228

ALLOWANCES AND OTHER PROVISIONS

Allowance for land severance review and drawing requirements

Project No. M1962

RELATED PROJECTS

2019 Sanitary Sewerage Budget Item No. 141

BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

	Budget	2019		Four Year	Forecast		
	Prior to 2019	CAPITAL BUDGET	2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		100.000	100.000	100.000	100.000	100.000	500.000
LAND ACQUISITION							0.00
UTILITY RELOCATION							0.00
CONSTRUCTION							0.00
CONTINGENCY							0.00
OTHER							0.00
TOTAL EXPENDITURES	0.000	100.000	100.000	100.000	100.000	100.000	500.00
ATTRIBUTION:							
SUBSIDY/GRANTS							0.00
RESIDENTIAL DEVELOPMENT CHARGES							0.00
COMMERCIAL DEVELOPMENT CHARGES*							0.00
USER REVENUES		100.000	100.000	100.000	100.000	100.000	500.000
DEBENTURES							0.00
OTHER							0.00
TOTAL ATTRIBUTION	0.000	100.000	100.000	100.000	100.000	100.000	500.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

NEED/EXPLANATION OF PROJECT

Allowance for works required to product drawings for the location of stubbed services in the field.

PROJECT LOCATION & DESCRIPTION

ITEM NO. 229

ALLOWANCES AND OTHER PROVISIONS

Allowance for Regional share for works in conjunction with residential subdivision development.

Project No. M1910

RELATED PROJECTS

2019 Sanitary Sewerage Budget Item No. 142

BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

	Budget	2019		Four Year	Forecast		
	Prior to 2019	CAPITAL BUDGET	2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		200.000	200.000	200.000	200.000	200.000	1,000.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION		1,260.000	1,260.000	1,260.000	1,260.000	1,260.000	6,300.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	1,460.000	1,460.000	1,460.000	1,460.000	1,460.000	7,300.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES		1,281.880	1,281.880	1,281.880	1,281.880	1,281.880	6,409.400
COMMERCIAL DEVELOPMENT CHARGES*		39.420	39.420	39.420	39.420	39.420	197.100
USER REVENUES		138.700	138.700	138.700	138.700	138.700	693.500
DEBENTURES							0.000
OTHER							0.000
TOTAL ATTRIBUTION	0.000	1,460.000	1,460.000	1,460.000	1,460.000	1,460.000	7,300.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

NEED/EXPLANATION OF PROJECT

Regional share for watermains related to existing, new residential and new non-residential development, in conjunction with new residential subdivisions.

PROJECT LOCATION & DESCRIPTION

ITEM NO. 230

ALLOWANCES AND OTHER PROVISIONS

Allowance for Regional share for works in conjunction with non residential development.

Project No. M1911

RELATED PROJECTS

2019 Sanitary Sewerage Budget Item No. 143

BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

	Budget	2019		Four Year	Forecast		
	Prior to 2019	CAPITAL BUDGET	2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		57.200	57.200	57.200	57.200	57.200	286.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION		342.800	342.800	342.800	342.800	342.800	1,714.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	400.000	400.000	400.000	400.000	400.000	2,000.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES		351.200	351.200	351.200	351.200	351.200	1,756.000
COMMERCIAL DEVELOPMENT CHARGES*		10.800	10.800	10.800	10.800	10.800	54.000
USER REVENUES		38.000	38.000	38.000	38.000	38.000	190.000
DEBENTURES							0.000
OTHER							0.000
TOTAL ATTRIBUTION	0.000	400.000	400.000	400.000	400.000	400.000	2,000.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

NEED/EXPLANATION OF PROJECT

Allowance for possible Regional share in design and construction of watermains for non- residential development.

PROJECT LOCATION & DESCRIPTION

ITEM NO. 231

ALLOWANCES AND OTHER PROVISIONS

Well interference works

Project No. M1914

RELATED PROJECTS

BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

	Budget	2019		Four Year	Forecast		
	Prior to 2019	CAPITAL BUDGET	2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		65.000	65.000	65.000	65.000	110.000	370.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION		335.000	335.000	335.000	335.000	890.000	2,230.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	400.000	400.000	400.000	400.000	1,000.000	2,600.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES		400.000	400.000	400.000	400.000	1,000.000	2,600.000
COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES							0.000
DEBENTURES							0.000
OTHER							0.000
TOTAL ATTRIBUTION	0.000	400.000	400.000	400.000	400.000	1,000.000	2,600.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

NEED/EXPLANATION OF PROJECT

Allowance for construction of well interference works in accordance with Regional policy.

			BUDGET	2040				N*	Van Fan						
ITEN	PROJECT DESCRIPTION	Project No.	BUDGET PRIOR TO 2019	2019 CAPITAL BUDGET	2020	2021	2022	2023	Year Forecas	st 2025	2026	2027	2028	TOTAL	REMARKS
NO.	CONSTRUCTION OF MUNICIPAL SERVICES	IVU.	2019	DODGET	2020	2021	2022	2023	2024	2020	2020	2021	2020	TOTAL	NLIHANNO
	ROAD RELATED PROJECTS														
Α	LINEAR INFRASTRUCTURE														Replacement of deficient watermains
	Regional Road Program														and/or construction of required works in conjunction with the Regional Road Program.
1	R.R. 14 (Liberty St.) from Baseline Rd. to King St., Bowmanville Detailed Design Construction Total	R0503		200,000			1,500,000							200,000 1,500,000 1,700,000	
2	R.R. 26 (Thickson Rd.) from Wentworth St. to Canadian National Railway bridge, Whitby Detailed Design Construction Total	R0710	25,000		180,000									25,000 180,000 205,000	
3	R.R. 36 (Hopkins St.) from Consumers Dr. to Dundas St., Whitby Detailed Design Construction Total								125,000			400,000		125,000 400,000 525,000	
4	R.R. 43 (Cochrane St.) from Ferguson St. to Bonacord Ave., Whitby Detailed Design Construction Total	R1519	85,000			850,000								85,000 850,000 935,000	
5	R.R. 46 (Brock St.) from Water St. to Front St., Whitby Detailed Design Construction Total			65,000 385,000										65,000 385,000 450,000	
6	R.R. 52 (Thornton Rd.) from Champlain Ave. to Consumer Dr. and Champlain Ave. from Consumers Dr. to Thornton Rd., Whitby Detailed Design Construction	O1804	70,000 300,000	200,000										70,000 500,000 570,000	
7	R.R. 53 (Stevenson Rd.) from Canadian Pacific Railway to Bond St., Oshawa Detailed Design Construction Total	R1820	150,000					1,100,000						150,000 1,100,000 1,250,000	
8	R.R. 53 (Stevenson Rd.) from Bond St. to Rossland Rd., Oshawa Detailed Design Construction Total					140,000				1,240,000				140,000 1,240,000 1,380,000	
9	R.R.56 (Farewell St.) from Marwood Dr. to Wentworth St., Oshawa Detailed Design Construction Total			200,000	540,000									200,000 540,000 740,000	
10	R.R.57 (Bowmanville Ave.) from Baseline Rd. to Nash Rd. Bowmanville Detailed Design Construction Total	R1309	25,000		385,000	150,000								25,000 535,000 560,000	Phase 1 - Intersection improvements Hwy 2 and Stevens Rd. Phase 2 - Baseline Rd. to Hwy No. 2 Phase 3 - Stevens Rd. to Nash Rd. (beyond forecast)
11	R.R. 58 Manning Rd./Adelaide Ave. interconnection from Garrard Rd. to Thornton Rd., Whitby and Oshawa Detailed Design Construction Total	R0517	100,000				800,000							100,000 800,000 900,000	Looping required for system security, fire protection and to maintain the Region's standard of water quality.

		l											1		
ITEN		Project	BUDGET PRIOR TO	2019 CAPITAL				Nine	Year Forecas	st	1				
No.	PROJECT DESCRIPTION R.R. 59 (Gibb St.) from Stevenson Rd. to Simcoe St.,	No. R0604	2019	BUDGET	2020	2021	2022	2023	2024	2025	2026	2027	2028	TOTAL	REMARKS
12	Detailed Design Construction Total	K0004	100,000			800,000								100,000 800,000 900,000	
13	R.R. 59 (Gibb St.)/Olive Ave. Interconnection from Drew St. to Ritson Rd., Oshawa Detailed Design Construction Total	R0116					100,000		230,000					100,000 230,000 330,000	
14	R.R. 60 (Wentworth St.) from Cedar St. to Farewell St., Oshawa (Rehabilitation) Preliminary Work Detailed Design Construction Total	O1704	20,000 130,000		1,350,000									20,000 130,000 1,350,000 1,500,000	
	Highway 12 (Brock St.) from 300 m South of Manning Rd. to Rossland Rd., Whitby Detailed Design Construction Total	R1523	15,000	150,000 950,000										165,000 950,000 1,115,000	
16	Allowance for watermains in conjunction with the Regional Road Program							1,000,000	800,000	600,000	2,000,000	2,000,000	2,000,000	8,400,000	
	Sub-total Regional road program		1,020,000	2,150,000	2,455,000	1,940,000	2,400,000	2,100,000	1,155,000	1,840,000	2,000,000	2,400,000	2,000,000	21,460,000	
17	Area Municipality Road Programs														
	The repair and replacement of deficient watermains are proposed to be carried out both in conjunction with area municipality road programs (Item No.'s 17A to 17I), 14 projects and independent of road programs in various locations including watermain cement mortar lining program (Item No. 20 & 21) 5 projects. Total 19 projects.														
17A	City of Pickering Road Program (1 Project) Sandy Beach Rd. from 300 m north of Alyssum St. to 210 m south of Alyssum St.	P1999		600,000										600,000	Replacement of deficient watermains and/or construction of required works in conjunction with the City of Pickering road program.
	Works forecast for 2020 to 2028				275,000	275,000	275,000	275,000	275,000	275,000	275,000	275,000	275,000	2,475,000	
17B	Town of Ajax Road Program (5 Projects) Dreyer Dr. from Harwood Ave. to Pickering Beach Rd.	A1999		2,500,000										2,500,000	Replacement of deficient watermains and/or construction of required works in conjunction with the Town of Ajax road program.
	Graham Crt from Dreyer Dr. to dead-end Farley Ct. from Dreyer Dr. to dead-end Admiral Rd. from Roosevelt Ave. to Parry Rd. Hunt St. from 340 m west of MacKenzie Ave. to Harwood Ave. (Design only)														
	Works forecast for 2020 to 2028				200,000	200,000	200,000	1,650,000	200,000	200,000	200,000	200,000	200,000	3,250,000	
17C	Town of Whitby Road Program (1 Project)	W1999		1,350,000										1,350,000	Replacement of deficient watermains and/or construction of required works in conjunction with the Town of Whitby
	Centre St. from Miller St. to Dunlop St.														conjunction with the Town of Whitipy
	Works forecast for 2020 to 2028				620,000	620,000	620,000	620,000	620,000	620,000	620,000	620,000	620,000	5,580,000	

			BUDGET	2019				Nino	Year Foreca	et					
ITEN	PROJECT DESCRIPTION	Project No.	PRIOR TO 2019	CAPITAL BUDGET	2020	2021	2022	2023	2024	2025	2026	2027	2028	TOTAL	REMARKS
	City of Oshawa Road Program (2 Projects) Hillside Ave. from Laval St. to Park Rd. S. Bermuda Ave. Culvert Replacement	O1999	2019	500,000	2020	2021	2022	2023	2024	2025	2026	2021	2026		Replacement of deficient watermains and/or construction of required works in conjunction with the City of Oshawa road program.
17E	Works forecast for 2020 to 2028 Municipality of Clarington Road Program. (4 Projects)	C1999		1,500,000	1,100,000	1,100,000	1,100,000	1,100,000	1,100,000	1,100,000	1,100,000	1,100,000	1,100,000	9,900,000	Replacement of deficient watermains and/or construction of required works in conjunction with the Municipality of
	Prospect St. from Odell St. to Fourth St. Second St. from Prospect St. to Lambs Lane Veterans Ave. from Prospect St. to Lambs Lane Brown St. from Queen St. to Victoria St. Works forecast for 2020 to 2028				370,000	370,000	370,000	370,000	370,000	370,000	370,000	370,000	370,000	3,330,000	Clarington road program.
17F	Township of Scugog Road Program (0 Projects)														Replacement of deficient watermains and/or construction of required works in conjunction with the Township of Scugog road program.
	Works forecast for 2020 to 2028				130,000	130,000	130,000	130,000	130,000	130,000	130,000	130,000	130,000	1,170,000	
17G	Township of Uxbridge Road Program (1 Project) Planks Lane from Main St. to Third Ave.	U1999		240,000										240,000	Replacement of deficient watermains and/or construction of required works in conjunction with the Township of Uxbridge road program.
	Works forecast for 2020 to 2028				270,000	270,000	270,000	270,000	270,000	270,000	270,000	270,000	270,000	2,430,000	
17H	Township of Brock Road Program (0 Projects)														Replacement of deficient watermains and/or construction of required works in conjunction with the Township of Brock road program.
	Works forecast for 2020 to 2028				250,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000	2,250,000	
17i	Allowance for unknown Water Supply requirements in conjunction with area municipality road programs in various locations	M1903		200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000		Allowance to provide for unanticipated watermain works in conjunction with area municipality road programs in various locations (Items No. 17A to 17H).
	Sub-total works to rectify identified deficiencies and/or construction of required works in conjunction with area municipality road programs (Items 17A to 17I)			6,890,000	3,415,000	3,415,000	3,415,000	4,865,000	3,415,000	3,415,000	3,415,000	3,415,000	3,415,000	39,075,000	
	MTO & Go Transit projects:														
18	Allowance for watermains in conjunction with the MTO & Go Transit projects				100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	900,000	
19	Watermain replacement in conjunction with the MTO's bridge work and ramp realignment at Brock St., Whitby	D1737	2,350,000	400,000										2,750,000	Allowance for watermain replacement
20	Watermain replacement in various locations in conjunction with the MTO's bridge work at Simcoe St., Albert St. and Highway 401, Oshawa	D1801	100,000	200,000	2,000,000									2,300,000	Works in conjunction with the MTO for the replacement and/or realignment of watermains.
	Sub-total works in conjunction with the MTO and GO Transit projects		2,450,000	600,000	2,100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	5,950,000	

WATER SUPPLY SYSTEM

													J		
ITEN		Project	BUDGET PRIOR TO	2019 CAPITAL	1	1			Year Forecas						
No.	PROJECT DESCRIPTION	No.	2019	BUDGET	2020	2021	2022	2023	2024	2025	2026	2027	2028	TOTAL	REMARKS
21	Betterments/Replacement Water works to rectify identified system deficiencies independent of road programs in various locations (5 Projects)	M1999		627,693										627,693	Provision for replacement and/or rehabilitation of deficient watermains independent of road programs in various
	Erosion protection for watermains in various locations	M1915													locations.
	Allowance for final restoration for remedial works constructed in prior years	M1916													
	Remedial works in various locations (Locations and priorities under review)	M1918													
	Preliminary engineering/surveys for future construction of remedial works	M1917													
	Future remedial works in various locations				800,000	800,000	800,000	800,000	800,000	800,000	800,000	800,000	800,000	7,200,000	
22	Rehabilitation of existing watermains in various locations	D1912		2,000,000	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000	20,000,000	Rehabilitation (cement mortar lining) of watermains in various locations.
	PICKERING/ AJAX SYSTEM														
23	Replacement of watermain on Kingston Rd. (Highway No. 2) from 240 m east of Delta Blvd. to Merritton Dr. and Dixie Rd. to Liverpool Rd., Pickering Detailed Design Construction Total	D1848	130,000	100,000 1,400,000										230,000 1,400,000 1,630,000	Will be completed in conjunction with the BRT. Watermain has reached the end of its useful service life. Phase 1: Delta Bivd. to Merritton Dr. Phase 2: Dixie Rd. to Liverpool Rd.
24	Replacement of a watermain on Rougemount Dr. from Kingston Rd. to approx. 100 m South, Pickering								150,000					150,000	Asset Management Project - watermain has reached the end of its useful service life.
25	Replacement of a watermain on Brock Rd. from Feldspar Crt. to Clements Rd., Pickering										500,000			500,000	Asset Management Project - watermain has reached the end of its useful service life.
26	Replacement of a watermain on Notion Rd. from Kingston Rd. to approx. 230 m South, Pickering										300,000			300,000	Asset Management Project - watermain has reached the end of its useful service life.
	Replacement of a watermain on Alliance Rd. from 20 m North of Bayly St. S. to dead-end, Pickering								460,000						Asset Management Project - watermain has reached the end of its useful service life.
	Replacement of watermain on Krosno Blvd. from Liverpool Rd. E. to Fanshaw Place, Pickering				200,000	885,000									Asset Management Project - watermain has reached the end of its useful service life.
29	Replacement of watermain on Pickering Beach Rd from Foord Rd. to Hewitt Cres., Ajax	A1906		120,000	450,000									570,000	Watermain has reached the end of its useful service life.
30	Watermain extension on Achilles Rd. from Salem Rd. to 100 west of Salem Rd., Ajax	A1903		50,000	150,000									200,000	Watermain extension required to provide looping and
31	Replacement of watermain on Linton Ave. from Kearney Dr. S. to Old Kingston Rd., Ajax	A1904		40,000	410,000									450,000	Asset Management Project - watermain has reached the end of its useful service life.
32	Replacement of watermain on Sherwood Rd. W. from Windsor Dr. to dead-end, Ajax	A1905		355,000	665,000									1,020,000	Asset Management Project - watermain has reached the end of its useful service life.
33	Replacement of watermain on Cameron St. from Elizabeth St. to Windsor Dr., Ajax	A1801	40,000	360,000										400,000	Asset Management Project - watermain has reached the end of its useful service life.
34	Replacement of watermain on Windsor Dr. from Old Kingston Rd. to Cameron St., Ajax	A1802	40,000	410,000										450,000	Asset Management Project - watermain has reached the end of its useful service life.
35	Replacement of a watermain on Dowty Rd. from Thomson St. to Hunt St., Ajax										700,000			700,000	Asset Management Project - watermain has reached the end of its useful service life.
36	Replacement of a watermain on Cedar St. from Tudor Ave. W. to Beatty Rd., Ajax								450,000					450,000	Asset Management Project - watermain has reached the end of its useful service life.
37	Replacement of a watermain on Clements Rd. E. from Burcher Rd. E. to Dryer Dr., Ajax						200,000	1,200,000						1,400,000	Asset Management Project - watermain has reached the end of its useful service life.

REGION OF DURHAM, WORKS DEPARTMENT WATER SUPPLY SYSTEM

			BUDGET	2019				Nine	Year Forecas	st					
ITE	PROJECT DESCRIPTION	Project No.	PRIOR TO 2019	CAPITAL BUDGET	2020	2021	2022	2023	2024	2025	2026	2027	2028	TOTAL	REMARKS
NO.	WHITBY / OSHAWA / CLARINGTON (COURTICE)	NO.	2019	DUDGET	2020	2021	2022	2023	2024	2020	2020	2021	2020	TOTAL	CANAMIAN
	SYSTEM														
38	Replacement of watermain on R.R. 26 (Thickson Rd.) from 84 m north of William Smith Dr. to 60 m south of William Smith Dr., Whitby	W1901		220,000										220,000	Asset Management Project - watermain has reached the end of its useful service life.
39	Replacement of watermain on R.R. 26 (Thickson Rd.) from south of Nichol Ave. to Bellwood Rd., Whitby								570,000					570,000	Asset Management Project - watermain has reached the end of its useful service life.
40	Replacement of watermain on Consumers Dr. from 140 m west of Thickson Rd. S to 110 m east of Sunray St., Whitby									650,000				650,000	Asset Management Project - watermain has reached the end of its useful service life.
41	Replacement of watermain on Centre St. N. from Palmerston Ave. to Rossland Rd. W., Whitby											480,000		480,000	Asset Management Project - watermain has reached the end of its useful service life.
42	Replacement of a watermain on Maria St. from Annes St. to Frances St., Whitby								500,000					500,000	Asset Management Project - watermain has reached the end of its useful service life.
43	Replacement of watermain on Harmony Rd. N. from Adelaide Ave. to 200 m north of Adelaide Ave., Oshawa	O1901		200,000										200,000	Watermain has reached the end of its useful service life.
44	Replacement of watermain on R.R. 2A (Centre St.) from Athol St. to Brock St., and Simcoe St. from Brock St. W. to Adelaide Ave., Oshawa	O1503	120,000	1,740,000										1,860,000	Asset Management Project - watermain has reached the end of its useful service life.
45	Replacement of a watermain on Simcoe St. S. from Quebec St. to Gibb St., Oshawa								120,000					120,000	Asset Management Project - watermain has reached the end of its useful service life.
46	Replacement of a watermain on Simcoe St. S. from Bloor St. to Erie St., Oshawa	O1902		100,000	1,200,000									,,	Asset Management Project - watermain has reached the end of its useful service life. Works to be completed in conjunction with the MTO's project
47	Replacement of a feedermain on R.R. 22 (Bloor St.) from Cubert St. to Oxford St., Oshawa					270,000								270,000	Asset Management Project - feedermain has reached the end of its useful service life.
48	Replacement of watermain on R.R. 22 (Bloor St.) from Wilson Rd. to Holland St., Oshawa					370,000								370,000	Asset Management Project - watermain has reached the end of its useful service life.
49	Replacement of watermain on R.R. 52 (Thornton Rd.) from South of Bloor St. under the Canadian National Railway, Oshawa										350,000	2,000,000		2,350,000	Asset Management Project - watermain has reached the end of its useful service life.
50	Replacement of watermain on Highway No. 2 (King St. W.) from Garrard Rd. to Thornton Rd., Oshawa								150,000					150,000	Asset Management Project - watermain has reached the end of its useful service life.
51	Replacement of watermain on Highway No. 2 (King St. W.) from Midtown Dr. to Queen St., Oshawa							450,000						450,000	Asset Management Project - watermain has reached the end of its useful service life.
52	Replacement of watermain on Highway No. 2 (King St. E.) from Wilson Rd. to 30 m east of Harmony Creek, Oshawa								820,000					820,000	Asset Management Project - watermain has reached the end of its useful service life.
53	Replacement of watermain on Highway No. 2 (King St. E.) from Harmony Rd. to Kingsway College, Oshawa								100,000	1,300,000				1,400,000	Asset Management Project - watermain has reached the end of its useful service life.
54	Replacement of watermain on RR 56 (Farewell St.) from Canadian National Railway to Bloor St., Oshawa	O1701	470,000		130,000									600,000	Asset Management Project - watermain has reached the end of its useful service life.
55	Replacement of watermain on Montrave Ave from Pacific Ave. to 49 m north of Pacific Ave., & Pacific Ave. from 50 m west of Cromwell Ave. to dead-end, Oshawa	O1601	125,000	410,000										535,000	Asset Management Project - watermain has reached the end of its useful service life.
56	Replacement of watermain on Valencia Rd. from Oxford St. to dead-end, Oshawa								300,000					300,000	Asset Management Project - watermain has reached the end of its useful service life.
57	Replacement of watermain on Olive Ave. from Simcoe St. S. to Drew St., Oshawa	O1903		250,000	930,000									1,180,000	Watermain has reached the end of its useful service life.
ı	I	ı 1	ı I I	ı I	ı I			ı I		ı		ı I			ı

REGION OF DURHAM, WORKS DEPARTMENT WATER SUPPLY SYSTEM

-															
ITEN		Project	BUDGET PRIOR TO	CAPITAL											
No. 58	PROJECT DESCRIPTION Replacement of feedermain on Ritson Rd. from Oshawa Water Supply	No. O1904	2019	BUDGET	2020	2021	2022	2023	2024	2025	2026	2027	2028	TOTAL	REMARKS Feedermain replacement to be completed in conjunction
	Plant Valve Chamber to Kawartha Ave., Oshawa Preliminary Works/Detailed Design Construction Total			500,000		3,500,000								500,000 3,500,000 4,000,000	with valve chamber upgrades.
59	Replacement of a watermain on Ritson Rd. S. from Kawartha Ave. to Grassmere Court, Oshawa				820,000									820,000	Watermain has reached the end of its useful service life.
60	Replacement of a watermain on Grassmere Avenue from West limits to Ritson Rd. S., Oshawa	O1905		645,000										645,000	Watermain has reached the end of its useful service life.
61	Replacement of a watermain on Rossland Rd. from Attersley Dr. to Gladfern St., Oshawa							600,000						600,000	Asset Management Project - watermain has reached the end of its useful service life.
62	Replacement of a watermain on Ansley Crt from Rossland Rd. to dead-end Oshawa												320,000	320,000	Asset Management Project - watermain has reached the end of its useful service life.
63	Replacement of a watermain on Beaupre Ave. from Lakefield St. to Tremblay St., Oshawa												410,000	410,000	Asset Management Project - watermain has reached the end of its useful service life.
64	Replacement of a watermain on Grenfell St. from 60 m south of Marland Ave. to Gibb St., Oshawa	O1906		420,000										420,000	Watermain has reached the end of its useful service life.
65	Replacement of a watermain on Marland Ave. from Grenfell St. to Park Rd. South, Oshawa	O1907		400,000										400,000	Watermain has reached the end of its useful service life.
	CLARINGTON (BOWMANVILLE) SYSTEM														
66	Replacement of watermain on Port Darlington Rd. from Lake Rd. to Bowmanville Water Supply Plant, Bowmanville Detailed Design Total											2,000,000		2,000,000	Asset Management Project - watermain has reached the end of its useful service life. Replacement to be completed in conjunction with feedermain works. Construction beyond forecast.
67	Replacement of watermain on Baseline Rd. E. from Liberty St. to Mearns Ave., Bowmanville Detailed Design Construction Total								200,000	1,000,000				200,000 1,000,000 1,200,000	Asset Management Project - watermain has reached the end of its useful service life. Replacement to be completed in conjunction with feedermain works.
	CLARINGTON (NEWCASTLE) SYSTEM														
68	Replacement of watermain on North St. from Wilmot St. to Concession Rd. 3, Newcastle Detailed Design Construction Total	C1601	190,000 740,000		300,000	1,240,000								490,000 1,980,000 2,470,000	Construction of watermain to service existing and new development. Timing of construction dependent on rate development
69	Replacement of watermain on Amos St. from Toronto St. to Highway 401 Newcastle										250,000			250,000	Asset Management Project - watermain has reached the end of its useful service life.
	UXBRIDGE (UXBRIDGE) SYSTEM														
70	Replacement of watermain on First Ave. from Brock St. to Dominion St., Uxbridge						280,000							280,000	Asset Management Project - watermain has reached the end of its useful service life.
	SCUGOG (PORT PERRY) SYSTEM														
71	Replacement of watermain on Caleb St. from Clarke St. to Queen St. Port Perry Detailed Design Construction Total	S1901		50,000 300,000										50,000 300,000 350,000	Asset Management Project - watermain has reached the end of its useful service life.
72	Replacement of watermain on Rosa St. from Paxton St to dead-end, Port Perry						600,000							600,000	Asset Management Project - watermain has reached the end of its useful service life.
73	Replacement of watermain on Bigelow St. from 30 m north of Kellett St. to 100 m north of Kellett St., Port Perry	S1902		150,000										150,000	Asset Management Project - watermain has reached the end of its useful service life.

			BUDGET	2019				Nine	Year Forecas	st					
ITEN No.	PROJECT DESCRIPTION	Project No.	PRIOR TO 2019	CAPITAL BUDGET	2020	2021	2022	2023	2024	2025	2026	2027	2028	TOTAL	REMARKS
74	Replacement of watermain on Kellett St./Beech St. from Bigelow St. to 100 m east of Kent St., Port Perry Detailed Design Construction Total	S1903		60,000	405,000							-		60,000 405,000 465,000	Asset Management Project - watermain has reached the end of its useful service life.
75	Replacement of watermain on Ottawa St. from Queen St. to MacDonald St., Port Perry						300,000							300,000	Asset Management Project - watermain has reached the end of its useful service life.
76	Replacement of watermain on Bay St. from Old Simcoe St. to Bigelow St., Port Perry							550,000						550,000	Asset Management Project - watermain has reached the end of its useful service life.
77	Replacement of watermain on Perry St. from North St. to Paxton St., Port Perry									200,000				200,000	Asset Management Project - watermain has reached the end of its useful service life.
	BROCK (SUNDERLAND) SYSTEM														
78	Replacement of watermain on Jane St. from Ida St. to 220 m north of Ida St., Sunderland						430,000							430,000	Asset Management Project - watermain has reached the end of its useful service life.
79	Replacement of watermain on Maple St. W. from River St. to dead-end, Sunderland							110,000						110,000	Asset Management Project - watermain has reached the end of its useful service life.
	BROCK (CANNINGTON) SYSTEM														
80	Replacement of watermain on Cameron St. from 215 m east of McRae St. to 750 m west of R.R. 2 (Simcoe St.), Cannington									250,000	750,000			1,000,000	Asset Management Project - watermain has reached the end of its useful service life.
81	Replacement of watermain on Laidlaw St. from Cameron St. to Park St. Cannington										450,000			450,000	Asset Management Project - watermain has reached the end of its useful service life.
	BROCK (BEAVERTON) SYSTEM														
82	Replacement of watermain on Simcoe St. from Union St. to 480 m south of Union St., Beaverton	K1901		100,000	660,000									760,000	Asset Management Project - watermain has reached the end of its useful service life.
83	Replacement of watermain on Centre St. from Mara Rd. to James St., Beaverton							480,000						480,000	Asset Management Project - watermain has reached the end of its useful service life.
84	Replacement of watermain on Bay St. from Union St. to Osborne St., Beaverton	K1902		80,000		480,000								560,000	Asset Management Project - watermain has reached the end of its useful service life.
85	Replacement of watermain on Bay St. from Osborne St. to Mill St., Beaverton	K1903		60,000		310,000								370,000	Asset Management Project - watermain has reached the end of its useful service life.
86	Replacement of watermain on Church St. from Osborne St. to Mill St., Beaverton	K1904		70,000		430,000								500,000	Asset Management Project - watermain has reached the end of its useful service life.
87	Replacement of watermain on Mill St. from Church St. to Bay St., Beaverton	K1905		60,000		300,000								360,000	Asset Management Project - watermain has reached the end of its useful service life.
88	Replacement of watermain on Bay St. from Mill St. to Main St., Beaverton	K1906		70,000		480,000								550,000	Asset Management Project - watermain has reached the end of its useful service life.
89	Replacement of watermain on Simcoe St. from Canadian National Railway to John St., Beaverton				250,000	550,000								800,000	Asset Management Project - watermain has reached the end of its useful service life.
90	Replacement of watermain on Simcoe St. from Beaverton Water Supply Plant to 60 m west of Canadian National Railway, Beaverton				435,000	325,000								760,000	Asset Management Project - watermain has reached the end of its useful service life.
91	Replacement of watermain on James St. from Main St. to Centre St./ Highland Crt., Beaverton				300,000									300,000	Asset Management Project - watermain has reached the end of its useful service life.
92	Replacement of watermain on King St. from Mara Rd. to dead-end Beaverton						500,000							500,000	Asset Management Project - watermain has reached the end of its useful service life.
93	Allowance for replacement of watermains in various locations						2,016,000	945,000	515,000	1,100,000	1,035,000		3,605,000	9,216,000	Asset Management Allowance for replacement of watermains that have reached the end of its useful service life.
94	Allowance for construction of services in unserviced areas in response to requests or petitions				200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	1,800,000	Allowance for construction of watermains in unserviced areas in response to requests or petitions.

		BUDGET	2019				Nino	Year Forecas	et					
ITEM No. PROJECT DESCRIPTION	Project No.	PRIOR TO	CAPITAL BUDGET	2020	2021	2022	2023	2024	2025	2026	2027	2028	TOTAL	REMARKS
Sub-total Betterments/Replacement	NO.	1,855,000	11,347,693	10,305,000	12,140,000	7,326,000	7,335,000	7,335,000	7,500,000	7,335,000	7,480,000	7,335,000	87,293,693	
System Expansion														
PICKERING / AJAX SYSTEM 95 Zone 1 feedermain on Bayly St. from Pickering Beach Rd. to Toy Ave., Pickering/Ajax Detailed Design Construction Total									1,000,000		17,575,000			Construction of feedermain to service new development. Timing of construction dependent on the rate of development.
96 Zone 1 feedermain on Rossland Rd. from Church St. to Westney Rd., Ajax Detailed Design Construction Total	D1522	200,000	700,000 7,650,000											Construction of feedermain to service new development. Timing of construction dependent on the rate of development.
97 Zone 1 feedermain on Harwood Ave. from Kerrison Dr. to Rossland Rd., Ajax Detailed Design Construction Total	D1803	400,000	240,000 3,860,000											
98 Zone 2 feedermain on Taunton Rd. from Westney Rd. to 200 m west of Harwood Ave., Ajax Detailed Design Construction Total					300,000	2,600,000								
99 Zone 2 feedermain on William Jackson Dr. & Taunton Rd. from Earl Grey Ave. to Ravenscroft Rd., Pickering/ Ajax Detailed Design Construction Total	D1904		400,000		500,000 5,300,000								900,000 5,300,000 6,200,000	
100 Zone 2 feedermain on Church St. from south side of the hydro right of way to Taunton Rd., Ajax Detailed Design Construction Total WHITEY / OSHAWA / CLARINGTON (COURTICE) SYSTEM						600,000	3,000,000						3,000,000	Construction of feedermain to service new development. Timing of construction dependent on the rate of development. Phase 1: Rossland Rd. to Hydro Right of way Phase 2: Hydro Right of way to Taunton Rd.
101 Zone 1 feedermain from Whitby Water Supply Plant to Thornton Rd., Whitby/Oshawa Conceptual Planning - Corridor Study Detailed Design Construction Total 102 Zone 1 feedermain on Manning Rd. from Anderson St. to	W1001	100,000 1,600,000	3,000,000		4,500,000 8,000,000	25,200,000							100,000 6,100,000 36,200,000 42,400,000	Construction of feedermain to service new development. Timing of construction dependent on the rate of development. Phase 1: Victoria St. from 400 m west of Thickson Rd. to Thickson Rd. Phase 2: Victoria St./Bloor St. from Thickson Rd. to Thornton Rd. Phase 3: Whitby WSP to 400 m west of Thickson Rd.
Hydro corridor., Whitby Detailed Design Construction Total						400,000	1,500,000						400,000 1,500,000 1,900,000	
103 Zone 1 West Whitby feedermain on Brock St./Victoria St. to Rossland Rd., Whitby Environmental Assessment Detailed Design Total										600,000		600,000	600,000 600,000	Construction of feedermain to service new development. Timing of construction dependent on the rate of development. Phase 1 - Brock St./Victoria St. to Hwy No. 2 Phase 2 - Hwy No. 2 to Rossland Rd. Construction beyond forecast
104 Zone 3 feedermain on Conlin Rd. from Anderson St. to Garrard Rd. Pumping Station., Whitby Detailed Design Construction Total	D1804	500,000		4,000,000										Construction of feedermain to service new development. Timing of construction dependent on the rate of development.

			BUDGET	2019				Nino	Year Foreca	ot.					
ITEM	PROJECT DESCRIPTION	Project No.	PRIOR TO	CAPITAL BUDGET	2020	2021	2022	2023	2024	2025	2026	2027	2028	TOTAL	REMARKS
	TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TO THE STREET THE STREET TOTAL TO	No.	2019	BUDGET	2020	2021	600,000	6,600,000	2024	2025	2026	2027	2028		Construction of feedermain to service new development. Timing of construction dependent on the rate of development.
106	Zone 3 feedermain on Anderson St. from Conlin Rd. to Clair Ave., Whitby Detailed Design Construction Total				500,000	4,650,000								500,000 4,650,000 5,150,000	
107	Zone 4 feedermain from Thickson Rd. Zone 4 pumping station to Zone 4 Reservoir, Whitby Detailed Design Construction Total	D1905		1,600,000		900,000 15,000,000								2,500,000 15,000,000 17,500,000	Construction of feedermain to service new development. Timing of construction dependent on the rate of development.
108	Zone 4 feedermain on Brawley Rd. from Ashburn Rd. to Duffs Rd., Whitby Detailed Design Construction Total	D1907		600,000		200,000 5,100,000								800,000 5,100,000 5,900,000	Construction of feedermain to service new development. Timing of construction dependent on the rate of development.
109	Zone 4 feedermain on Ashburn Rd. from Brawley Rd. to Columbus Rd., Whitby Detailed Design Construction Total								700,000	6,900,000				700,000 6,900,000 7,600,000	
110	Zone 4 feedermain on Columbus Rd. from Thickson Rd. to Ritson Rd., Whitby/Oshawa Detailed Design Construction Total								1,500,000		15,000,000			1,500,000 15,000,000 16,500,000	
111	Watermain on Britannia Dr. from Thornton Rd. to Windfields Farm Dr., Oshawa Detailed Design Construction Total	D1614	80,000					260,000	1,560,000					340,000 1,560,000 1,900,000	
112	Zone 1 feedermain on Bloor St. from Ritson Rd. to Wilson Rd., Oshawa Phase 3 (including new valve chamber east Albert St.) Detailed Design Construction Total	O1709	500,000	400,000 5,100,000											Phase 1: Albert St. to Ritson Rd completed Phase 2: Stevenson Rd. to Albert St construction has commenced Phase 3: Ritson Rd. to Wilson Rd detailed design
113	Watermain modifications in conjunction with the twinning of northwest branch of Harmony Creek sub-trunk sanitary sewer from 200 m south of Beatrice St. to Ritson Rd., Oshawa				150,000									150,000	Allowance for relocation of existing watermains in conjunction with the construction of the sanitary sewer.
114	Zone 3 feedermain on Conlin Rd. from Garrard Rd Zone 3 Pumping Station to Ritson Rd., Whitby/Oshawa Preliminary/Detailed Design Construction Total	D1602	1,100,000	1,500,000 16,800,000										2,600,000 16,800,000 19,400,000	
115	Zone 3 feedermain on Conlin Rd. from Ritson Rd. to Wilson Rd., Oshawa Detailed Design Construction Total	D1405	300,000			3,800,000								300,000 3,800,000 4,100,000	
116	Zone 3 feedermain on Harmony Rd. from Coldstream Dr. to 400 m South of Conlin Rd., Oshawa Detailed Design Construction Total	D1604	60,000	400,000 3,060,000										460,000 3,060,000 3,520,000	

-															
ITEM		Project	BUDGET PRIOR TO	2019 CAPITAL					Year Foreca						
No.	PROJECT DESCRIPTION	No.	2019	BUDGET	2020	2021	2022	2023	2024	2025	2026	2027	2028	TOTAL	REMARKS
	Zone 4 feedermain on Conlin Rd. from Harmony Rd. to Grandview St., Oshawa Detailed Design Construction Total						300,000	1,250,000						300,000 1,250,000 1,550,000	
118	Zone 4 feedermain on Harmony Rd. from Greenhill Ave. to 400 m south of Conlin Rd., Oshawa Detailed Design Construction Total	D1615	60,000	40,000 600,000										100,000 600,000 700,000	Construction of feedermain to service new development. Timing of construction dependent on the rate of development.
	Zone 4 feedermain on Harmony Rd. from Conlin Rd. to New Zone 4 Pumping Station, Oshawa Detailed Design Construction Total					900,000	3,600,000							900,000 3,600,000 4,500,000	Construction of feedermain to service new development. Timing of construction dependent on the rate of development.
	Zone 4 feedermain from Proposed Zone 4 Pumping Station at Harmony Reservoir to Proposed Oshawa Zone 4 Reservoir, Oshawa Detailed Design Construction Total	D1908		1,000,000		1,200,000 13,800,000									Construction of feedermain to service new development. Timing of construction dependent on the rate of development. Construction of feedermain beyond forecast
121	Zone 4 feedermain on Ritson Rd. from Columbus Rd. to Winchester Rd., Oshawa Detailed Design Construction Total							600,000		6,000,000				600,000 6,000,000 6,600,000	Construction of feedermain to service new development. Timing of construction dependent on the rate of development.
	Zone 4 feedermain on Winchester Rd. from Ritson Rd. to Harmony Rd., Oshawa Detailed Design Construction Total							600,000		5,700,000				600,000 5,700,000 6,300,000	Construction of feedermain to service new development. Timing of construction dependent on the rate of development.
123	Zone 2 feedermain on Bloor St. from Townline Rd. to Trulls Rd., Courtice Detailed Design Construction Total	C1201	750,000	250,000 6,000,000										1,000,000 6,000,000 7,000,000	Construction of feedermain to service new development. Timing of construction dependent on the rate of development.
	Courtice - Zone 1 feedermain Phase 1 - 400 m South of Energy Dr. to 100 m North of Energy Rd. Phase 2 - 100 m North of Energy Dr. to the intersection of Baseline Rd. and Courtice Rd. Phase 3 - Baseline Rd. from Trulls Rd. to Courtice Rd. & Trulls Rd. from Baseline Rd. to Bloor St. Detailed Design Construction Total	D1303	1,050,000 4,800,000	4,200,000										1,050,000 9,000,000 10,050,000	Project to be coordinated with the Courtice Trunk Sanitary Sewer. Construction of feedermain to service new development. Timing of construction dependent on the rate of development.
	Zone 1 feedermain on Baseline Rd. from Prestonvale Rd. to Trulls Rd., Courtice Detailed Design Construction Total	D1805	150,000		2,800,000										Construction of feedermain to service new development. Timing of construction dependent on the rate of development.
	Zone 1 feedermain on Prestonvale Rd. from Baseline Rd. to 950 m North of Baseline Rd., Courtice Detailed Design Construction Total	D1909		350,000		1,500,000								350,000 1,500,000 1,850,000	Construction of feedermain to service new development. Timing of construction dependent on the rate of development.
	Zone 1 feedermain on easement from Townline Rd. to Prestonvale Rd., Courtice Detailed Design Construction Total				500,000	2,600,000								500,000 2,600,000 3,100,000	Construction of feedermain to service new development. Timing of construction dependent on the rate of development.

			BUDGET	2019				Nino	Year Forecas	et					
ITEN	PROJECT DESCRIPTION	Project No.	PRIOR TO 2019	CAPITAL BUDGET	2020	2021	2022	2023	2024	2025	2026	2027	2028	TOTAL	REMARKS
NO.	CLARINGTON (BOWMANVILLE) SYSTEM	NO.	2019	BUDGET	2020	2021	2022	2023	2024	2025	2026	2027	2028	TOTAL	REMARKS
128	Zone 1 feedermain on Lambs Rd. from Hwy No. 2 (King St.) to Zone 1 Liberty Street Reservoir, Bowmanville Environmental Assessment & Detailed Design Construction	C1202	3,820,500 11,179,505		12,400,000									3,820,500 23,579,505 27,400,005	Required to accommodate new development. Construction to be completed in conjunction with Liberty St. Zone 1 Reservoir. Feedermain will be completed in phases. Phase 1: Hwy No. 2 to Concession St. Phase 2: Concession St. to reservoir
129	Zone 1 feedermain on Baseline Rd. from R.R. 57 (Martin Rd.) to Liberty St., Bowmanville Detailed Design Construction Total	D1807	400,000		4,500,000										Construction of feedermain to service new development. Timing of construction dependent on the rate of development.
130	Zone 1 feedermain from Bowmanville Water Supply Plant to Baseline Rd., Bowmanville Environmental Assessment Detailed Design Construction Total						500,000		500,000		7,600,000				Construction of feedermain to service new development. Timing of construction dependent on the rate of development.
131	Zone 1 feedermain on Baseline Rd. from Wharf St. to Mearns Ave., Bowmanville Environmental Assessment Detailed Design										520,000		500,000	520,000 500,000 1,020,000	Construction of feedermain to service new development. Timing of construction dependent on the rate of development. Construction beyond forecast
132	Zone 2 feedermain on Liberty St. from Concession 3 and Concession 4 to Zone 2 Reservoir, Bowmanville Detailed Design Construction Total								600,000		6,800,000			600,000 6,800,000 7,400,000	Construction of feedermain to service new development. Timing of construction dependent on rate of development.
133	CLARINGTON (NEWCASTLE) SYSTEM Zone 1 feedermain from Arthur Street reservoir to future Zone 1 reservoir, Newcastle Detailed Design Construction Total	C1203	250,000			2,650,000									Feedermain required to connect the proposed reservoir to the water supply system.
134	Zone 1 feedermain on King Ave. (Highway No. 2) from Rudell Rd. to 200 m west of North St., Newcastle Detailed Design Construction Total	D1406	200,000		1,300,000									200,000 1,300,000 1,500,000	To provide looping and security to the existing system.
135	Zone 2 feedermain on Arthur St. from the Zone 2 pumping station to existing Arthur St. pumping station, Newcastle Detailed Design Construction Total	D1605	180,000 120,000			3,950,000								180,000 4,070,000 4,250,000	Construction of feedermain to service new development. Timing of construction dependent on the rate of development.
136	Watermain on Grady Dr. from Whitehand Cres. to North St., Newcastle Detailed Design Construction Total				100,000	670,000								100,000 670,000 770,000	To provide looping and security to the existing system.
	Sub-total System Expansion		27,800,005	57,750,000	26,250,000	75,520,000	33,800,000	13,810,000	4,860,000	19,600,000	30,520,000	17,575,000	1,100,000	308,585,005	
	Other Linear Infrastructure														
137	Replacement of meters	D1906		3,100,000	3,100,000	1,000,000	1,000,000	1,000,000	1,000,000	1,500,000	1,800,000	1,300,000	1,500,000	16,300,000	Replacement of meters that have reached the end of their service life.
138	Depots - Replacement of polybutylene service connections in various locations	M1925		300,000										300,000	
139	Replacement of lead service connection in various locations	M1932		1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000	30,000,000	
140	Replacement of valves	M1926		200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	2,000,000	

			BUDGET	2019				A1:	Year Foreca	et .					
ITEN	A PROJECT DESCRIPTION	Project No.	PRIOR TO 2019	CAPITAL BUDGET	2020	2021	2022	2023	2024	2025	2026	2027	2028	TOTAL	REMARKS
	Replacement of hydrants	M1927	2019	160.000	160,000	160.000	160.000	160.000	160.000	160,000	160.000	160.000	160.000	1,600,000	
141	Replacement of flydrants	W11921		160,000	160,000	160,000	100,000	160,000	160,000	160,000	100,000	160,000	160,000	1,000,000	
	Sub-total Other Linear Infrastructure			4,760,000	4,460,000	2,360,000	2,360,000	2,360,000	6,360,000	6,860,000	7,160,000	6,660,000	6,860,000	50,200,000	
В	BUILDINGS														
	PICKERING / AJAX SYSTEM														
142	Expansion of the Ajax Water Supply Plant from 163.6 MLD to 327 MLD, Ajax Environmental Assessment Detailed Design Construction Total				1,500,000		4,500,000		102,000,000					4,500,000	Construction of future expansion required to accommodate new development. Timing of construction dependent on the rate of development.
143	Ajax Water Supply Plant - expansion joint rehabilitation work Study/Preliminary work/Detailed design Construction Total	D1850	60,000	340,000	4,000,000									400,000 4,000,000 4,400,000	
144	Proposed Ajax Zone 1 Water Storage facility - 11 ML, Ajax Transient Study Environmental Assessment Detailed Design Construction Total	D1911		200,000	600,000		600,000		10,800,000						
145	WHITBY / OSHAWA / CLARINGTON (COURTICE) SYSTEM Expansion of the Whitby Water Supply Plant from 109 MLD to 218 MLD, Whitby Land and Detailed Design Construction Total	D9944	7,350,000		2,000,000		145,000,000							9,350,000 145,000,000 154,350,000	
146	Whitby Water Supply Plant - Plant 1 Upgrades and Rehabilitation Works Proposed works to include but not limit to building envelope improvements, upgrades and rehabilitation works for electrical, mechanical and process systems Detailed Design Construction Total					2,000,000			10,000,000					2,000,000 10,000,000 12,000,000	
147	Garrard Rd. Zone 1 Reservoir Expansion from 31 ML to 50 ML, Whitby Environmental Assessment and Detailed Design Construction Total					3,350,000		13,350,000						3,350,000 13,350,000 16,700,000	
148	Garrard Rd. Zone 3 Water Pumping Station - upgrades Whitby Detailed Design Construction Total	D1915		260,000	1,140,000									260,000 1,140,000 1,400,000	
149	Thickson Rd. Zone 3 Water Pumping Station Expansion to 22.7 MLD, Whitby Environmental Assessment Detailed Design Construction Total					500,000		1,100,000		10,600,000				500,000 1,100,000 10,600,000 12,200,000	
150	Proposed Zone 4 Pumping Station at the Thickson Rd. Reservoir, Whitby Environmental Assessment Detailed Design Construction Total	D1608	600,000	500,000		6,400,000								600,000 500,000 6,400,000 7,500,000	

-				1	1								1		
ITEN		Project	BUDGET PRIOR TO	2019 CAPITAL	-	l 1		Nine	Year Foreca	st					
No.	PROJECT DESCRIPTION Proposed Whitby Zone 4 Storage Facility - 11 ML	No. D1505	2019	BUDGET	2020	2021	2022	2023	2024	2025	2026	2027	2028	TOTAL	REMARKS
151	Proposed whitely Zone 4 Storage Facility - 11 ML Whitby Environmental Assessment Detailed Design Construction Total	D1505	500,000	500,000		700,000 10,800,000								500,000 1,200,000 10,800,000 12,500,000	
152	Proposed Whitby Zone 5 Pumping Station at Duffs Rd. Reservoir and feedermain, Whitby Environmental Assessment Detailed Design Construction Total										500,000	2,000,000	10,000,000	500,000 2,000,000 10,000,000 12,500,000	
153	Taunton Rd. Zone 2 Reservoir Expansion from 13 ML to 27 ML, Oshawa Environmental Assessment Detailed Design Construction Total						500,000		1,200,000		10,800,000			500,000 1,200,000 10,800,000 12,500,000	
154	Grandview Zone 2 Pumping Station Expansion, Oshawa Environmental Assessment Detailed Design Construction Total						500,000		600,000		5,300,000			500,000 600,000 5,300,000 6,400,000	
155	Taunton Rd. Zone 3 Water Pumping Station Expansion from 27 ML to 75 ML, Oshawa Environmental Assessment Detailed Design Total								500,000		650,000			500,000 650,000 1,150,000	Pumping station expansion required to accommodate new development. Construction beyond forecast.
156	Harmony Rd. Zone 3 Reservoir Expansion, Oshawa Environmental Assessment Detailed Design Construction								500,000	500,000	3,400,000			500,000 500,000 3,400,000 4,400,000	
157	Proposed Zone 4 Pumping Station at the Harmony Rd. Reservoir, Oshawa Environmental Assessment Detailed Design Construction Total	D1507	500,000	500,000		6,500,000								500,000 500,000 6,500,000 7,500,000	
158	Proposed Oshawa Zone 4 Storage Facility - 11 ML Oshawa Environmental Assessment Detailed Design Construction Total	D1609	500,000	500,000		700,000 10,300,000								500,000 1,200,000 10,300,000 12,000,000	
159	Proposed Zone 5 Pumping Station at Harmony Rd. Reservoir and feedermain, Oshawa Environmental Assessment Detailed Design Construction Total										500,000	1,500,000	7,700,000	500,000 1,500,000 7,700,000 9,700,000	
160	Hortop Water Pumping Station - pumping station replacement, Oshawa Detailed Design Construction Total						1,000,000	9,000,000						1,000,000 9,000,000 10,000,000	
161	CLARINGTON (BOWMANVILLE) SYSTEM Bowmanville Water Supply Plant Expansion from 36 MLD to 55 MLD Environmental Assessment Detailed Design Construction Total				500,000		1,500,000		38,000,000					500,000 1,500,000 38,000,000 40,000,000	

			BUDGET	2019				Nino	Year Forecas	et .					
ITEN	PROJECT DESCRIPTION	Project No.	PRIOR TO 2019	CAPITAL BUDGET	2020	2021	2022	2023	2024	2025	2026	2027	2028	TOTAL	REMARKS
	Proposed Liberty Street Zone 1 Reservoir (11 ML) and demolition of the Existing Elevated Tank Update Environmental Assessment and Detailed Design Construction Total	D1106	1,200,000	Boboti	11,600,000	2021	TOPE	1010	2024	1010	1020	2027	2020	1,200,000	Construction of future reservoir required to accommodate new development. Upon completion the existing elevated tank will be decommissioned.
163	Concession St. Water Pumping Station Expansion Environmental Assessment/Detailed Design Construction Total	D1916		600,000	5,000,000									600,000 5,000,000 5,600,000	Timing of expansion dependent on rate of development.
164	Proposed Zone 2 Pumping Station at the Zone 1 Reservoir Detailed Design Construction Total	D1917		550,000	8,000,000									550,000 8,000,000 8,550,000	Construction of pumping station required to accommodate development.
165	Bowmanville Zone 2 reservoir expansion, Clarington Environmental Assessment Detailed Design Construction Total						600,000		1,000,000		6,300,000			600,000 1,000,000 6,300,000 7,900,000	
166	CLARINGTON (NEWCASTLE) SYSTEM Expansion of Newcastle Water Supply Plant from 8.2 MLD to 16.4 MLD and demolish the existing plant Process study and detailed design Construction Total	D1107	7,700,000 36,200,000	10,240,000										7,700,000 46,440,000 54,140,000	
167	Proposed Zone 1 Reservoir 7 ML and feedermain Environmental Assessment Detailed Design Construction Total	D1202	300,000	900,000		7,900,000								900,000	Construction of future reservoir required to accommodate new development. Timing of construction dependent on rate of development.
168	Proposed Zone 2 Water Pumping Station Environmental Assessment & Land Detailed Design Construction Total	D1610	500,000	500,000		3,800,000								500,000 500,000 3,800,000 4,800,000	
169	Proposed Zone 2 reservoir Environmental Assessment & Land Detailed Design Construction Total						500,000		600,000		5,000,000			600,000	Construction of future reservoir required to accommodate new development. Timing of construction dependent on rate of development.
170	CLARINGTON (ORONO) SYSTEM Proposed Zone 1 Orono Storage Facility (1 ML) Environmental Assessment Detailed Design Construction Total								400,000		500,000		4,100,000	500,000	Construction of future water storage facility required to accommodate new development. Timing of construction dependent on rate of development.
171	SCUGOG (PORT PERRY) SYSTEM Alternative Water Supply Source Environmental Assessment and Detailed Design Construction Total	S0102	4,530,000			17,600,000								4,530,000 17,600,000 22,130,000	Environmental Assessment and engineering required to identify a new water supply source to provide improved water quality.
172	Port Perry Storage Facility - additional capacity 2.8 ML Detailed Design Construction Total					1,000,000		11,100,000						1,000,000 11,100,000 12,100,000	New Reservoir to provide increased system security and capacity for new development
173	SCUGOG (GREENBANK) SYSTEM Greenbank Water Supply System - Replacement of Municipal Well 1 Detailed Design Construction Total					250,000		1,000,000						250,000 1,000,000 1,250,000	

REGION OF DURHAM, WORKS DEPARTMENT WATER SUPPLY SYSTEM

			BUDGET	2019				M!	Voor Forces	ot.					
ITE!	PROJECT DESCRIPTION	Project No.	PRIOR TO 2019	2019 CAPITAL BUDGET	2020	2021	2022	2023	Year Foreca	2025	2026	2027	2028	TOTAL	REMARKS
140.	UXBRIDGE (UXBRIDGE) SYSTEM	140.	2013	BODOLI	2020	2021	LULL	2020	2024	2020	2020	2021	2020	TOTAL	Remotivo
174	New Well and Pumphouse, Uxbridge Environmental Assessment Detailed Design Construction Total	D1508	500,000		620,000	3,000,000								500,000	Provision for EA and land acquisition for future construction of a new well and pumphouse.
175	Expansion of Quaker Hill Reservoir from 2.8 ML to 5.2 ML Detailed Design Construction					400,000	3,420,000								Required to provide storage capacity for new development.
176	BROCK (SUNDERLAND) SYSTEM New Well and Pumphouse with standby power Study/Environmental Assessment/ Detailed Design Construction Total	K0601	650,000	170,000 430,000	500,000	3,300,000									Required to provide security to the system and capacity for new development.
177	New Well and Pumphouse with standby power Environmental Assessment and Detailed Design Total											500,000			Required to provide security to the system and capacity for new development. Detailed design and construction beyond forecast.
178	Additional Water Storage from 1.4 ML to 3.0 ML Environmental Assessment												500,000	500,000	Required to provide security to the system and capacity for new development. Detailed design and construction beyond forecast.
179	BROCK (CANNINGTON) SYSTEM New Well and Pumphouse Environmental Assessment and Detailed Design Construction Total	K0701	1,750,000		4,500,000									4,500,000	Required to provide security to the system and capacity for new development. EA completed Detailed Design phase.
180	New Well and Pumphouse with standby power Environmental Assessment and Detailed Design Total											500,000		500,000	Required to provide security to the system and capacity for new development. Construction beyond forecast.
181	Additional Water Storage from 1.4 ML to 3.0 ML Environmental Assessment												500,000	500,000	Required to provide security to the system and capacity for new development. Detailed design and construction beyond forecast.
182	BROCK (BEAVERTON) SYSTEM Beaverton Water Supply Plant Expansion Environmental Assessment											500,000			Timing of expansion dependent on rate of development. Detailed design and construction beyond forecast.
183	Additional Water Storage from 2 ML to 4.8 ML Environmental Assessment Detailed Design Total REGION WIDE										500,000		500,000	500,000	Required to provide security to the system and capacity for new development. Construction beyond forecast.
184	Water Storage Facilities condition assessment and rehabilitation works	D1918		150,000		150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	1,350,000	Asset Management Project - Water storage facility condition assessments and rehabilitation works
185	Wellhead protection at Regional well sites	M0101		800,000	800,000	800,000	800,000	800,000	800,000	800,000	800,000	800,000	800,000	8,000,000	Monitoring and studies required to identify aquifer protection zones for the existing and future well systems operated by the Region. Implementation of some Wellhead Protection Study findings. Includes Permit to Take Water requirements.
	Sub-total Buildings		62,840,000	17,140,000	40,760,000	79,450,000	159,070,000	36,500,000	166,550,000	12,050,000	34,400,000	5,950,000	24,250,000	638,960,000	

			BUDGET	2019				Nina	Year Forecas	st					
ITEN	PROJECT DESCRIPTION	Project No.	PRIOR TO	CAPITAL BUDGET	2020	2021	2022	2023	2024	2025	2026	2027	2028	TOTAL	REMARKS
С	MACHINERY AND EQUIPMENT	110.	20.0	202021					2021		2020	202.			reas unite
	PICKERING / AJAX SYSTEM														
186	Regional Environmental Laboratory Upgrades and ventilation associated works, Pickering Preliminary /Detailed Design Construction Total	Y1602	450,000 3,100,000	650,000										450,000 3,750,000 4,200,000	Cost sharing with York Region. Allowance provided which is subject to detailed design.
	York Region's Share Durham Region's Share Total		1,775,000 1,775,000 3,550,000	325,000 325,000 650,000											
187	Finch Ave. Elevated Water Storage Tank - Recoating Detailed Design Construction Total	D1919		120,000	500,000									120,000 500,000 620,000	Preventative maintenance work
188	Rosebank Rd. Water Pumping Station - Station upgrades Electrical System Study, Grounding Study, Replacement of the Motor Control Centre, Diesel transfer switch and Standby power Preliminary Works/Detailed Design Construction Total										100,000	150,000	2,000,000	250,000	Preventative maintenance work Emergency control and power supply systems required to operate systems during communications and electrical power failures.
189	Cherrywood Water Pumping Station - Station upgrades Electrical System Study, Grounding Study, Replacement of the Motor Control Centre, Diesel transfer switch and Standby power Preliminary Works/Detailed Design Construction Total								100,000	150,000	2,000,000				Preventative maintenance work Emergency control and power supply systems required to operate systems during communications and electrical power failures.
	WHITBY / OSHAWA / CLARINGTON (COURTICE) SYSTEM														
190	Thickson Rd. Water Pumping Station - replacement of the Motor Control Centre (MCC) Detailed Design Construction Total	D1922		50,000 200,000										50,000 200,000 250,000	The asset has reached the end of it's useful life and requires replacement.
191	Whitby Water Supply Plant - filter treatment process upgrades Detailed Design Construction Total	W0401	549,000				2,251,000		8,000,000						The Region will be upgrading the filters. Works to be completed in conjunction with the Plant No. 1 upgrades and rehabilitation project.
192	Grandview Water Pumping Station - Station upgrades Electrical System Study, Grounding Study, Replacement of the Motor Control Centre, Diesel transfer switch and Standby power Preliminary Works/Detailed Design Construction Total	D1809	100,000		150,000	2,000,000									Emergency control and power supply systems required to operate systems during communications and electrical power failures.
193	Oshawa Water Supply Plant - Valve Chamber Upgrades Detailed Design Construction Total	D1923		100,000		570,000								100,000 570,000 670,000	Valve replacement and interconnection capability.
194	Oshawa Water Supply Plant -Header & Backwash valve replacement and associated piping rehabilitation/replacement Detailed Design Construction Total	D1924		400,000	1,600,000									400,000 1,600,000 2,000,000	The backwash valves have reached the end of their useful and require replacement.
195	Oshawa Water Supply Plant - Replacement of the Motor Control Centre Phase 1 Phase 2	D1810	120,000									200,000	1,000,000		Phase 1 - low lift pump motor control centre Phase 2 - remaining motor control centres

		BUDGET	2019				Nino	Year Foreca	et					
ITEM No. PROJECT DESCRIPTION	Project No.	PRIOR TO	CAPITAL BUDGET	2020	2021	2022	2023	2024	2025	2026	2027	2028	TOTAL	REMARKS
196 Oshawa Water Supply Plant - Plant No. 1 Filter Rehabilitation, Oshawa	O1516	2013	BODGET	2020	2021	2022	2023	2024	2023	2020	2021	2020	TOTAL	Rehabiliation works required to provide safe and sustainable drinking water.
Detailed Design Construction Total		1,000,000 3,200,000	2,500,000											Phase 1: Filter Media & underdrain Removal - completed Phase 2: Plant No. 1 Filter Rehabilitation Works
197 Oshawa Water Supply Plant - upgrading the uninterrupted power supply (UPS) Detailed Design Construction Total	D1811	150,000 150,000		700,000										Emergency control and power supply systems required to operate systems during communications and electrical power failures.
198 Waverly Rd. Water Pumping Station - Station upgrades Electrical System Study, Grounding Study, Replacement of the Motor Control Centre, Diesel transfer switch and Standby power Preliminary Works/Detailed Design Construction Total	D1837	100,000		150,000	2,000,000									Preventative maintenance work Emergency control and power supply systems required to operate systems during communications and electrical power failures.
199 Hortop Reservoir - replacement of Fill and Check Valves at the reservoir Detailed Design Construction Total	D1925		30,000 120,000										30,000 120,000 150,000	
CLARINGTON (BOWMANVILLE) SYSTEM														
200 Bowmanville Water Supply Plant - Condition assessment and process study	D1926		300,000										300,000	Assess conditions at the Bowmanville Water Supply plant and develop a rehabilitation strategy.
201 Bowmanville Water Supply Plant - disinfection upgrades Detailed Design Construction Total	D1927		100,000	570,000									100,000 570,000 670,000	
202 Bowmanville Water Supply Plant -Header and pump replacement with associated piping rehabilitation/replacement Detailed Design Construction Total	D1928		90,000 360,000										90,000 360,000 450,000	
203 Bowmanville WSP - replacement of the standby power and upgrading the uninterrupted power supply (UPS) Detailed Design/UPS upgrades Construction Total	D1814	850,000		1,650,000									850,000 1,650,000 2,500,000	
204 Concession St. Water Pumping Station - Station upgrades Electrical System Study, Grounding Study, Replacement of the Motor Control Centre, Diesel transfer switch and Standby power Preliminary Works/Detailed Design Construction Total	D1816	100,000		150,000	2,000,000								250,000 2,000,000 2,250,000	
CLARINGTON (NEWCASTLE) SYSTEM														
205 Newtonville Water Pumping Station - Station upgrades Electrical System Study, Grounding Study, Replacement of the Motor Control Centre, Diesel transfer switch and Standby power Preliminary Works/Detailed Design Construction Total				100,000	150,000	2,000,000							250,000 2,000,000 2,250,000	
CLARINGTON (ORONO) SYSTEM														
206 Orono Water Supply System - Standpipe Water Storage Tank -recoating Detailed Design Construction Total	D1704	60,000	30,000 370,000										90,000 370,000 460,000)
Detailed Design		60,000												

REGION OF DURHAM, WORKS DEPARTMENT WATER SUPPLY SYSTEM

ITEN		Project	BUDGET PRIOR TO	2019 CAPITAL					Year Foreca						
	PROJECT DESCRIPTION	No.	2019	BUDGET	2020	2021	2022	2023	2024	2025	2026	2027	2028	TOTAL	REMARKS
207	Orono Water Supply System - upgrades Electrical System Study, Grounding Study, Replacement of the Motor Control Centre, Diesel transfer switch, Standby power and uninterrupted power supply (UPS) Preliminary Works/Detailed Design Construction Total					100,000	150,000	2,500,000						250,000 2,500,000 2,750,000	Emergency control and power supply systems required to operate systems during communications and electrical power failures.
208	Mill St. Water Pumping Station - Station upgrades Electrical System Study, Grounding Study, Replacement of the Motor Control Centre, Diesel transfer switch and Standby power Preliminary Works/Detailed Design Construction				100,000	150,000	2,000,000							250,000 2,000,000 2,250,000	Emergency control and power supply systems required to operate systems during communications and electrical power failures.
	SCUGOG (GREENBANK) SYSTEM														
209	Greenbank Water Supply System - upgrades to the uninterrupted power supply (UPS)				500,000									500,000	Emergency control and power supply systems required to operate systems during communications and electrical power failures.
	SCUGOG (PORT PERRY) SYSTEM														
210	Port Perry Groundwater Supply System Municipal Well No. 6 - Upgrades Electrical System Study, Grounding Study, Replacement of the Motor Control Centre, Diesel transfer switch and Standby power Preliminary Works/Detailed Design Construction Total	D1818	250,000		2,200,000									250,000 2,200,000 2,450,000	
	SCUGOG (BLACKSTOCK) SYSTEM														
211	Blackstock Water Supply System -Header replacement and associated piping rehabilitation/replacement Detailed Design Construction Total	D1929		20,000 80,000										20,000 80,000 100,000	
	BROCK (SUNDERLAND) SYSTEM														
212	Sunderland Standpipe Water Storage Tank - Recoating Detailed Design Construction Total	D1839	100,000			650,000								100,000 650,000 750,000	
	BROCK (BEAVERTON) SYSTEM														
213	Beaverton Water Supply Plant - upgrades Electrical System Study, Grounding Study, Replacement of the Motor Control Centre, Diesel transfer switch, Standby power and uninterrupted power supply (UPS) Preliminary Works/Detailed Design Construction Total	D1819	250,000		2,500,000									250,000 2,500,000 2,750,000	Emergency control and power supply systems required to operate systems during communications and electrical power failures.
214	Beaverton Water Supply Plant - Chlorine line replacement Detailed Design Construction Total	D1930		60,000 240,000										60,000 240,000 300,000	
215	REGION WIDE Automatic Bulk Water Dispensing System Detailed Design Construction Total	D1717	180,000 720,000	60,000 380,000	60,000 380,000	60,000 380,000	60,000 240,000	60,000 240,000						480,000	Required to provide a secure, efficient and accessible method of supplying bulk water to customers.
	Sub-Total Machinery and Equipment		11,429,000	6,260,000	11,310,000	8,060,000	6,701,000	2,800,000	8,100,000	150,000	2,100,000	350,000	3,000,000	60,260,000	

REGION OF DURHAM, WORKS DEPARTMENT WATER SUPPLY SYSTEM

	T	I	l	1	1								1		
ITEM		Project	BUDGET PRIOR TO	2019 CAPITAL		I		Nine	Year Forecas	st					
	PROJECT DESCRIPTION	No.	2019	BUDGET	2020	2021	2022	2023	2024	2025	2026	2027	2028	TOTAL	REMARKS
D 216	IT INFRASTRUCTURE Plant SCADA system projects, to link plants north and plants east to the Ajax Water Supply Plant SCADA system	D0502	21,480,000		5,000,000	3,000,000								29,480,000	Implementation of a single centralized SCADA system for all WSP's to improve operational efficiency and monitor MOECC compliance requirements.
	Sub-total IT Infrastructure		21,480,000	0	5,000,000	3,000,000	0	0	0	0	0	0	0	29,480,000	
Е	ALLOWANCES AND OTHER PROVISIONS														
217	Regional Water Supply Master Planning Study for the Regional Official Plan Review	D1421	900,000					800,000					800,000	2,500,000	Required to review and identify water supply infrastructure requirements to service new development as identified in the review of the Regional Official Plan.
218	Emergency Planning Updating Requirements	D1307	175,000		100,000									275,000	Allowance for updating required to ensure optimal performance during an emergency.
219	Asset Condition Assessments - Reports for the Vertical Assets	D1419	801,000		230,000	240,000	300,000	300,000	300,000	135,000	300,000	155,000	300,000	3,061,000	Provincial requirement to assess conditions of all assets and develop a rehabilitation strategy.
220	Asset Condition Assessment/ investigation on transmission pipe.	D1420	400,000	200,000	100,000	195,000	209,000	200,000	200,000	200,000	200,000	200,000	200,000	2,304,000	Allowance for assessments on large transmission pipes.
221	Master planning energy management				200,000				200,000				200,000	600,000	Study to identify a long term strategy for implementation of an efficient and effective energy policy.
222	Allowance for acquisition of easements	M1901		150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	1,500,000	Allowance for acquisition of easements for existing watermains.
223	Allowance for engineering studies	M1907		150,000	300,000	150,000	300,000	150,000	300,000	150,000	300,000	150,000	300,000	2,250,000	Allowance for miscellaneous engineering studies.
224	Allowance for CTC Source Water Protection Plan related to the Lake Ontario Collaborative	D1718	300,000		300,000	300,000	3,400,000		300,000		500,000		500,000	5,600,000	Required to implement the policies related to the approved CTC Source Protection Plan. Terms of reference and implementation plan under development.
225	Preliminary engineering	66143		100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	1,000,000	Allowance for preliminary engineering carried out in advance of budget provision.
226	Allowance for sundry extensions as per Council policy	M1908		15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000	150,000	Regional share for sundry extensions.
227	Allowance for unknown requirements	M1909		100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	1,000,000	Allowance for unanticipated works.
228	Allowance for land severance review and drawing requirements	M1962		100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	1,000,000	Allowance for works required to product drawings for the location of stubbed services in the field.
229	Allowance for Regional share for works in conjunction with residential subdivision development	M1910		1,460,000	1,460,000	1,460,000	1,460,000	1,460,000	1,460,000	1,460,000	1,460,000	1,460,000	1,460,000	14,600,000	Regional share for watermains related to existing, new residential and new non-residential development, in conjunction with new residential subdivisions.
230	Allowance for Regional share for works in conjunction with non-residential development	M1911		400,000	400,000	400,000	400,000	400,000	400,000	400,000	400,000	400,000	400,000	4,000,000	Allowance for possible Regional share in design and construction of watermains for non-residential development.
231	Well interference works	M1914		400,000	400,000	400,000	400,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	7,600,000	Allowance for construction of well interference works in accordance with Regional policy.
	Sub-total Allowances and Other Provisions		2,576,000	3,075,000	3,955,000	3,610,000	6,934,000	4,775,000	4,625,000	3,810,000	4,625,000	3,830,000	5,625,000	47,440,000	
	TOTAL GROSS EXPENDITURE		131,450,005	109,972,693	110,010,000	189,595,000	222,106,000	74,645,000	202,500,000	55,325,000	91,655,000	47,760,000	53,685,000	1,288,703,698	

TABLE OF CONTENTS

2019 BUSINESS PLANS & BUDGETS

WORKS – SANITARY SEWERAGE SYSTEM

NOTE: On this page, just click on the particular Section and you will be linked to the corresponding page

	Page Numbe
STRATEGIC PLANNING	218
PROGRAM SUMMARY	220
EXPLANATION OF PROGRAM CHANGES	223
PROGRAM DETAILS	
1. Cleaning, Repairs and Maintenance Holes	227
2. Sewer Connections	
3. Depot Operations	233
4. WPCPs and Pumping Stations	
5. Duffin Creek WPCP	241
a. Management Committee	244
b. Duffin Creek Plant	245
c. Duffin Creek Tech Support	250
d. Duffin Creek Administration	251
e. Duffin Creek Facility	252
g. Phosphorous Reduction Field Study (Durham Portion)	253
Regional Environmental Laboratory	254
7. Engineering and Staff Support	257
8. Facilities Management	264
9. Administration	268
10.TANGIBLE CAPITAL ASSETS PROGRAM SUMMARY	270
Tangible Capital Assets – New	271
2. Tangible Capital Assets – Replacement	

TABLE OF CONTENTS

2019 BUSINESS PLANS & BUDGETS

WORKS – SANITARY SEWERAGE SYSTEM (Continued)

NOTE: On this page, just click on the particular Section and you will be linked to the corresponding page

Page Number 3. Construction 275 a. 2019 Construction Program..... 276 b. 2020 Construction Program..... 279 c. 2021 Construction Program..... 282 d. 2022 Construction Program..... 284 e. 2023 Construction Program..... 286 f. 2024 Construction Program..... 288 g. 2025 Construction Program..... 290 h. 2026 Construction Program..... 292 i. 2027 Construction Program..... 294 j. 2028 Construction Program..... 296 k. 2019 Capital Budget Project Detail..... 298 I. 2019 Capital Budget and Nine Year Forecast 360



Works - Sanitary Sewerage System

Major Services & Activities

Sanitary Sewerage System Maintenance

- Maintain and operate the Region's Sewage Collection Systems to ensure safe and efficient treatment of effluent.
- Prevent public health hazards and inconvenience through uninterrupted services.
- Installation and servicing (cleaning and repairing) of sanitary sewer service connections and maintenance holes.
- Maintain all programs for compliance with Ministry of the Environment, Conservation and Parks Acts and Regulations.
- ◆ Enforcement of the Sewer-Use By-law 55-2013.

Water Pollution Control Plants -Treatment and Services

- Plan, design and construct sanitary sewerage infrastructure.
- Protect the water environment.
- Operate and maintain all water pollution control plants and pumping stations for the Region, and treatment of sanitary sewage ensuring effluent meets or exceeds all Ministry of the Environment, Conservation and Parks and regulatory discharge requirements.
- Operate and maintain the Regional Environmental Laboratory for the water and wastewater monitoring needs of the Regions of Durham and York, area municipalities and private clients.
- Operate and maintain the Duffin Creek WPCP for Durham and York Regions.

The following information highlights the Department's focus on the Durham Region Strategic Plan:

Strategic Goal C.2 - Protect, enhance and where appropriate restore significant water resources, agricultural land, natural heritage and environmentally sensitive areas.

Key Deliverables

Responsibility - Co-Lead

◆ Continue to protect the Region's drinking water supply (source water protection)

STRATEGIC PLANNING



2019 Business Plan

Works - Sanitary Sewerage System

Strategic Goal C.4 - Demonstrate leadership in sustainable asset management and environmentally friendly municipal practices.

Key Deliverables

Responsibility - Co-Lead

 Plan, forecast and manage provision, operation, maintenance and capital costs for existing and new infrastructure

Strategic Goal C.5 - Work more closely with local municipalities and other partners to manage growth through effective, progressive and integrated long-term planning.

Key Deliverables

Responsibility - Co-Lead

- Identify opportunities to improve the planning and approval process to promote alignment and integration with area municipalities
- Continue to offer planning support to local municipalities to ensure compliance with Regional and Provincial plans

Strate	gic Goals
Goal	Description Responsibility - Support
A.1	Propel the business and investment climate forward in Durham Region to enable more local employment.
B.3	Cultivate strong, safe and secure communities and healthy workplaces.
C.1	Invest in efforts to mitigate and adapt to climate change to build resiliency across the region.
C.5	Works more closely with local municipalities and other partners to manage growth through effective, progressive and integrated long-term planning.
D.1	Deliver Regional services in a financially prudent and sustainable manner.
D.2	Foster awareness of Regional programs and services.
D.3	Improve communication and collaboration across the Region and in particular with local municipalities.
D.4	Promote a culture of openness and encourage public engagement in governance and decision making.
D.5	Demonstrate accountability and transparency by measuring performance and reporting on results.
D.6	Invest in the organization by attracting and retaining a skilled and diverse workforce.
D.7	Focus resources on continuous improvement and innovation.



By Program		20	18		2019	
	(\$ 000L-)	Estimated	Approved	Base	Program	Proposed
	(\$,000's)	Actuals	Budget	Budget	Change	Budget
Exp	ense Programs	\$	\$	\$	\$	\$
OPE	RATIONS:					
1	Cleaning, Repairs and					
	Maintenance Holes	2,059	2,025	2,036	76	2,112
2	Sewer Connections	2,472	2,399	2,411	(48)	2,363
3	Depot Operations	2,870	3,016	3,122	55	3,177
	Subtotal	7,401	7,440	7,569	83	7,652
PLA	NTS:					
4	WPCPs and Pumping Stations	22,962	22,584	22,563	476	23,039
5	Duffin Creek WPCP					
	(a) Management Committee	2,830	3,094	2,904	-	2,904
	(b) Duffin Creek Plant	23,119	25,731	25,991	250	26,241
	(c) Duffin Creek Tech Support	273	269	280	(61)	219
	(d) Duffin Creek Administration	2,682	2,682	2,762	-	2,762
	(e) Duffin Creek Facility	2,013	1,819	1,592	3	1,595
	(f) York Contributions	(24,826)	(26,964)	(26,938)	(171)	(27,109)
	(g) Phosphorous Reduction					
	Field Study (Durham Portion)	39	39		-	-
	Total Duffin Creek WPCP	6,130	6,670	6,591	21	6,612
	Subtotal	29,092	29,254	29,154	497	29,651
CON	MMON SERVICES:					
6	Regional Environmental					
	Laboratory	(155)	-	-	-	-
7	Engineering and Staff Support	5,271	5,760	5,937	(106)	5,831
8	Facilities Management	6,676	6,805	6,843	227	7,070
9	Administration	304	307	319	(1)	318
	Headquarters Shared Cost	1,050	1,050	1,073	-	1,073
	Subtotal	13,146	13,922	14,172	120	14,292
	Total Operating Program					
	Expenses	49,639	50,616	50,895	700	51,595



By Program		20	18		2019	
	(¢ 000'a)	Estimated	Approved	Base	Program	Proposed
	(\$,000's)	Actuals	Budget	Budget	Change	Budget
10	Tangible Capital Assets:					_
1S	Duffin Creek WPCP - New	566	566	-	585	585
2S	- Replacement	1,313	1,313	895	-	895
3S	Environmental Lab - New	-	-	-	12	12
4S	- Replacement	480	480	160	-	160
5S	Facilities Management - New	523	523	-	110	110
6S	- Replacement	1,391	1,391	-	1,058	1,058
7S	Fleet/Equipment - New	191	191	-	570	570
8S	- Replacement	470	470	371	290	661
9S	Construction of Municipal					
	Services	19,959	19,959	19,959	1,625	21,584
	Tangible Capital Assets					_
	Subtotal	24,893	24,893	21,385	4,250	25,635
	gible Capital Assets Revenue & Duffin Creek WPCP		(, , , , , ,	/ >		(1.112)
11S	TCA Revenue from York Environmental Lab-TCA	(1,458)	(1,458)	(678)	(435)	(1,113)
	Revenue from York	(10)	(10)	(13)	(6)	(19)
12S	Environmental Lab-Recovery					
	Reserve/Reserve Fund	(460)	(460)	(135)	-	(135)
	Tangible Capital Assets					
	Revenue & Recoveries	(4.000)	(4.000)	(222)	(444)	(4.00=)
	Subtotal	(1,928)	(1,928)	(826)	(441)	(1,267)
Net Tangible Capital Assets		22,965	22,965	20,559	3,809	24,368
Net Program Expenses		72,604	73,581	71,454	4,509	75,963
				(\$2,127)		
Summary of Increase (Decrease)		se)	<u> </u>	-2.89%		\$2,382
,						3.24%



Works - Sanitary Sewerage System

Summary of Base Budget Changes

\$	Comments
385	Economic increases
80	Annualization (1.313 positions)
18	2019 Position upgrades (2.000 positions)
(31)	Remove one-time items
182	Inflation - Utilities
244	Inflationary adjustments
(6)	Inflationary adjustments
(38)	Remove one-time items (various)
(555)	Remove one-time items (various)
(2,406)	Remove one-time items (various)
(2,127)	
	385 80 18 (31) 182 244 (6) (38) (555) (2,406)



2019 Program Changes

Works - Sanitary Sewerage System

\$ 000's **Maintenance Operations Cleaning, Repairs and Maintenance Holes** Adjustments to reflect actual costs and forecasted requirements related to sewer rehabilitation and repairs (-\$114k), maintenance hole repairs (\$76k), cleaning by hydrojet (\$75k), cleaning by other 76 methods (\$37k) and various other related activities (\$2k) 76 **Sewer Connections** Decrease to reflect actual costs and forecasted requirements related to connection cleaning (-\$25k) and (48)connection repairs (-\$23k) (48)**Depot Operations** Increase in general complaint investigation based on actual costs and forecasted requirements 25 Increase in visual inspections of maintenance holes based on actual costs and forecasted requirements 8 Increase for major renovations, including; expansion of the brine storage facility at Oshawa/Whitby Depot 9 (\$3k) and construction of flood prevention controls for surface runoff at Sunderland Depot (\$6k) Adjustments to reflect actuals costs and forecasted requirements in various accounts related to various 13 **Depot Operations activities** 55 **Water Pollution Control Plants and Pumping Stations Newcastle WPCP** Increase in chemical costs due to year-round chlorination requirement 17 Increase in sludge disposal costs due to improved handling of biosolids 5 Major repairs and equipment, including; clarifier improvements (\$85k) and replacement of raw sludge 92 pumps (\$7k) Adjustments to reflect actual costs and forecasted requirements in various other accounts 5 119 **Courtice WPCP** Increase in sludge haulage and disposal costs due to flow diversion from Harmony Creek WPCP during 181 construction Increase in sludge haulage and disposal costs based on review of historical actuals and forecasted 208 requirements Increase in equipment maintenance repairs based on review of historical actuals and forecasted 20 requirements Major equipment for replacement of raw sludge pumps 15 Adjustments to reflect actual costs and forecasted requirements in various other accounts 428 **Harmony Creek WPCP** Decrease in sludge haulage (-\$91k) and disposal costs (-\$90k) due to reduction in (181)biosolids output during Phase 3 construction Decrease in various accounts based on review of historical actuals and forecasted requirements, including chemicals (-\$77k), fleet usage (-\$50k), equipment maintenance (184)repairs (-\$33k), and various other accounts (-\$24k) (365)



2019 Program Changes

Works - Sanitary Sewerage System

\$ 000's

	\$ 000 S
Vater Pollution Control Plants and Pumping Stations (continued)	
Corbett Creek WPCP	
Decrease in temporary staff costs due to review of requirements	(17)
Increase in sludge disposal costs due to maintenance issues with current digester	215 [°]
 Decrease in fleet maintenance and utilization costs based on review of historical actuals and forecasted requirements 	(36)
◆ Increase in major equipment maintenance for the repair of two aeration blowers	120
◆ Adjustments to various other accounts to reflect actual costs and forecasted requirements	(3)
<u> </u>	279
Uxbridge, Scugog, Brock WPCP	
• Increase in sludge disposal costs based on review of historical actuals and forecasted requirements	82
 Increase in annual lagoon maintenance costs Increase in fleet maintenance and utilization costs based on review of historical actuals and forecasted 	40
requirements	20
 Increase in hardware and software maintenance related to SCADA due to expansion of program to Plants North 	13
Adjustments to various accounts to reflect actual costs and forecasted requirements	6
· · · · · · · · · · · · · · · · · · ·	161
Port Darlington WPCP	·
 Adjustments due to reduced application of biosolids to land for sludge haulage costs (-\$189k) and increased costs for sludge disposal at Duffin Creek WPCP (\$110k) 	(79)
Decrease in chemical costs due to plant efficiencies	(26)
 Adjustments to various accounts to reflect actual costs and forecasted requirements 	(3)
	(108)
Pumping Stations	
 Adjustments to reflect actual costs and forecasted requirements in various accounts, including program materials and supplies (-\$81k), hardware and software maintenance related to SCADA (\$49k), and various other accounts (-\$6k) 	(38)
-	(38)
Total Water Pollution Control Plants and Pumping Stations	476
Total Water Foliation Control Flants and Fulliphing Stations	7/0



2019 Program Changes

	\$ 000's
Duffin Creek WPCP	
 Reallocation of resources to Engineering and Staff Support based on the nature of work performed (-0.330 FTE) 	(62)
Upgrade of an existing Maintenance Operator position to a Project Engineer	10
 Increase in program materials (\$115k) and equipment maintenance (\$228k) due to increase in number of buildings and equipment required to be maintained 	343
 Decrease in gapping due to the projected filling of existing vacancies in 2019 	179
 Increase in chemical costs due to higher cost of new chemical required to lower phosphorous levels in the lake 	389
 Increase in sewage dumping fees due to increased volume of haulers 	(175)
 Increase in purchased services for annual pump inspections for stage 1, 2 and 3 IPS and for stack testing in the incinerator 	220
 Decrease in waste disposal costs due to process improvements 	(72)
 Decrease in fleet maintenance and utilization costs based on review of historical actuals and forecasted requirements 	(35)
 Adjustments to various accounts to reflect actual costs and forecasted requirements 	14
Increase in sludge disposal recovery due to increased volumes from other WPCPs	(619)
 Increase in recovery from York Region due to increase in operating expenses 	(171) 21
Regional Environmental Laboratory	
 Proposed new position representing 1.000 FTE, to start July 1st, 2019: 	
 One (1) Laboratory Information Management System (LIMS) Administrator to manage the recently acquired LIMS software, which automates quality control of samples in the Lab. This position will 	
ensure that all regulations as directed by the Ministry of Health (MOH) and Ministry of the Environment, Conservation and Parks (MECP) continue to be met, thereby ensuring the ongoing	58
accreditation of the Lab (Annualized impact is \$115.7k) (1.000 FTE)	
 Increase in temporary staff due to increasing number of samples being received for analysis 	55
• Increase in technical materials and supplies due to increase in volume of samples	25
Increase in revenue from external customers due to enhanced testing requirements	(136)
 Adjustments to reflect actual costs and forecasted requirements in various accounts 	(2)



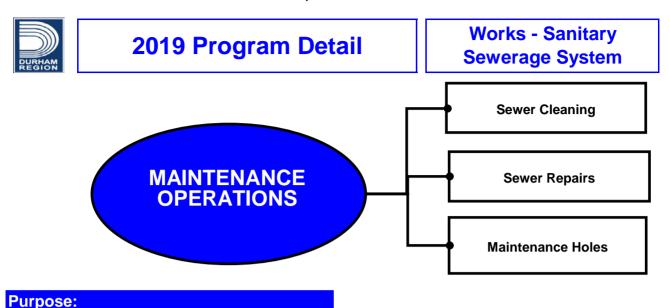
2019 Program Changes

Works - Sanitary Sewerage System

\$ 000's

Engineering and Staff Support	
Proposed new positions representing 0.514 FTEs, to start July 1st, 2019:	
 One (1) Senior Project Coordinator in Construction Management services to aid with design reviews of capital construction projects, review and prepare tenders, project management and quality control. 	
This position will be shared with General Tax and Water Supply (Annualized impact is \$29.7k)	15
(0.257 FTE)	
• One (1) Project Supervisor in Construction Management services to supervise capital construction for	
projects in the roads, water supply and sanitary sewerage portfolios. This position will be shared with	18
General Tax and Water Supply (Annualized impact is \$36.3k) (0.257 FTE)	
• Increase in recoveries from capital projects due to proposed new positions listed above	(33)
 Reallocation of resources from Duffin Creek Water Pollution Control Plant based on the nature of work performed (0.170 FTE) 	32
 Increase in temporary staff and overtime costs in Construction Management Services (\$14k) and Technical Support (\$15k) reflective of increased investments in infrastructure renewal 	29
• Increase in recoveries from capital projects due to above increase in staff resources	(4)
• Increase in memberships and dues based on review of historical actuals and forecasted requirements	31
Transfer of revenue from surcharge agreements from the Water Supply budget	(166)
• Increase in fleet maintenance and utilization costs based on review of historical actuals and forecasted	9
requirements Increase in miscellaneous program services related to development approvals, based on historical	
actuals and forecasted requirements. This increase is more than offset by subdivision inspection fees	235
collected	
• Increase in subdivision inspection fees collected based on historical actuals and forecasted requirements	(262)
 Adjustments to reflect actual costs and forecasted requirements in various accounts 	(10)
-	(106)
Facilities Management	
 Proposed new positions representing 0.772 FTEs, to start July 1, 2019: 	
 Two (2) Technical Assistants to provide support for the administration of corporate facility 	
maintenance contracts. Both of these positions are conversions of long-term temporary resources to	33
permanent full-time positions. These positions are shared with General Tax, Water Supply and Solid	00
Waste Management (Annualized impact is \$66.5k) (0.772 FTEs)	
 Decrease in temporary salary budget related to conversions of part-time positions to full-time, as listed above 	(33)
 One-time increase in plumbing inspections to complete cross connection surveys related to the Region's 	20
backflow prevention program; surveys must be completed every five years	38
Major repairs and renovations, including; paving the existing gravel driveway on the east side of the	
digester building at Courtice WPCP (\$31k), lighting retrofit at Uxbridge Brook WPCP (\$30k), physical	171
access security improvements and rekeying at various WPCPs (\$99k) and repair of the mezzanine structure at Scugog Depot (\$11k)	
Adjustments to reflect actual costs and forecasted requirements in various accounts, including; vehicle	
operations (\$42k), and various other accounts (-\$24k)	18
	227
Administration	
Adjustments to reflect actual costs and forecasted requirements in various accounts	(1)
	(1)
Tangible Capital Assets	
 Program changes include the acquisition of new assets and the replacement of assets related to depot operations, plant and facilities management, fleet, equipment and construction projects, including the 	2 000
construction of municipal services. Refer to capital schedules for detailed information	3,809
Total December Changes	4 500
Total Program Changes	4,509

PROGRAM 1 CLEANING, REPAIRS AND MAINTENANCE HOLES



- To maintain and operate the Region's Sanitary Sewerage Collection Systems in an efficient and cost effective manner for the Region's approximately 173,455 customers
- To prevent public health hazards and inconvenience through interruption of service

Description of Program Activities:

- The Region maintains and operates 2,092 km of gravity sanitary sewer and 63 km of forcemains
- 1,677 km of sanitary sewers up to 300 mm in size are cleaned by hydrojet once every 2 years
- 215 km of sanitary sewers from 350 mm to 600 mm in size are cleaned once every 4 years
- 141 km of sanitary sewers over 600 mm in size are cleaned as required
- There are 92 siphons in the Region which are cleaned once every year either by flushing or dragging operations
- Damaged sanitary sewers are repaired at spot locations as required
- Maintenance holes are budgeted to have major repairs or minor repairs made as required

Description of Program Resources:

 Resources delivering program services are shared with all activity based maintenance activities in the Water Supply, Sanitary Sewerage and General Tax operating budgets. Resource utilization is charged to the activity based programs through maintenance work orders

Performance Measurements

- Sanitary sewers up to 300 mm in size are cleaned by hydrojet once every 2 years
- Sanitary sewers from 350 mm to 600 mm in size are cleaned once every 4 years
- Sanitary sewers over 600 mm in size are cleaned as required
- Syphons cleaned once each year

PROGRAM 1 CLEANING, REPAIRS AND MAINTENANCE HOLES



2019 Program Detail

Works - Sanitary Sewerage System

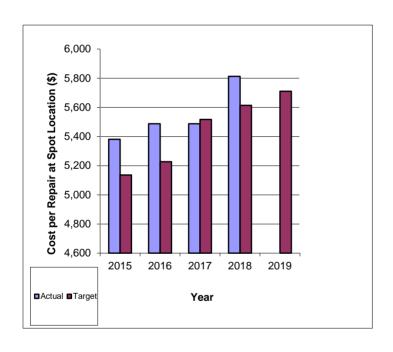
Units of Service:

- a) Cleaning by Hydrojet (km)
- b) Repairs at Spot Locations
- c) Major Maintenance Hole Repairs

Target	Proj Actual	Target
2018	2018	2019
840	852	935
24	20	24
489	559	517

Cleaning of sanitary sewers by hydrojet is accomplished by Regional forces and by contracted services. All problem areas are cleaned using Regional forces. Cleaning by hydrojet to meet service levels is accomplished through contracted services.

Efficiency:



Cost per Repair at Spot Location

Cost per unit includes all labour, materials and equipment utilized in the repair activities.

PROGRAM 1 CLEANING, REPAIRS AND MAINTENANCE HOLES



2019 Program Detail

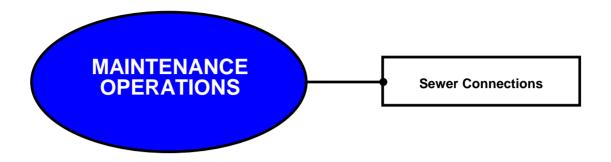
Detailed Cost of Program:	20	18		2019	
(\$,000's)	Estimated Actuals	Approved Budget	Base Budget	Program Change	Proposed Budget
-	710101010				
Cleaning by Hydrojet	677	668	669	75	744
Cleaning any Method Non-					
Programmed	332	291	292	37	329
Rehab - Repair - Contractor	119	250	250	(114)	136
Repairs at Spot Location	116	134	135	2	137
Major Maintenance Hole Repair	815	682	690	76	766
Net Program Expenses	2,059	2,025	2,036	76	2,112

PROGRAM 2 SEWER CONNECTIONS



2019 Program Detail

Works - Sanitary Sewerage System



Purpose:

- To maintain and operate the Region's Sanitary Sewerage Collection Systems in an efficient and cost effective manner for the Region's approximately 173,455 customers
- To prevent public health hazards and inconvenience through interruption of service

Description of Program Activities:

- Cleaning of sanitary sewer service connections serving residential and non-residential buildings
- New sanitary sewer service connections installed as required
- Sanitary sewer service connections repaired or replaced as required

Description of Program Resources:

 Resources delivering program services are shared with all activity based maintenance activities in the Water Supply, Sanitary Sewerage and General Tax operating budgets. Resource utilization is charged to the activity based programs through maintenance work orders



Works - Sanitary Sewerage System

Performance Measurements:

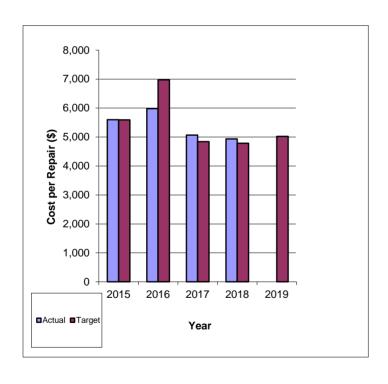
• Service connections are cleaned and repaired/replaced as stipulated in By-law #90-2003

Units of Service

- a) Unscheduled Cleaning of Sewer Connections
- b) Connection Repairs

Target 2018	Proj Actual 2018	Target 2019
1,089	976	1,055
419	431	397

Efficiency



Cost Per Connection Repair

Cost per unit includes all labour, materials and equipment utilized in the repair activities.

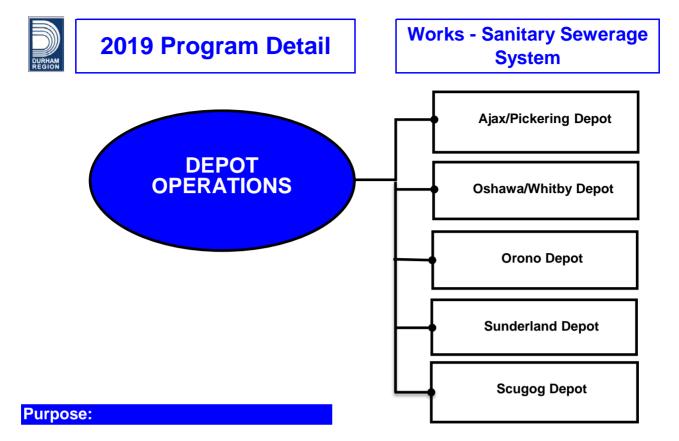
PROGRAM 2 SEWER CONNECTIONS



2019 Program Detail

Detailed Cost of Program:	20	18		2019	
(\$,000's)	Estimated	Approved	Base	Program	Proposed
(ψ,σσσ σ)	Actuals	Budget	Budget	Change	Budget
Connection Cleaning	343	394	396	(25)	371
Connection Repair	2,129	2,005	2,015	(23)	1,992
Net Program Expenses	2,472	2,399	2,411	(48)	2,363

PROGRAM 3 DEPOT OPERATIONS



 To provide leadership and direction to the Works depots, effectively monitoring and managing activities including sewer cleaning, sewer repairs, sewer connections, and maintenance hole repairs, ensuring compliance with approved budgets and policy guidelines

Description of Program Activities:

- To provide administrative support for the completion of maintenance activities (i.e. sewer cleaning, repairs, maintenance holes, sewer connections)
- Maintain proper inventory records

Description of Program Resources:

◆ 2019 Full Time Employees 7.980

◆ 2018 Full Time Employees 7.980 Restated



Detailed Cost of Program:	20	18		2019	
(\$ 000'a)	Estimated	Approved	Base	Program	Proposed
(\$,000's)	Actuals	Budget	Budget	Change	Budget
Operating Expenses					
Personnel Expenses	889	947	1,039	(12)	1,027
Payroll Maintenance					
Management - Charge	1,291	1,263	1,277	67	1,344
Payroll Maintenance					
Management - Recovery		(13)	(13)	10	(3)
Net Personnel Expenses	2,180	2,197	2,303	65	2,368
Personnel Related	137	182	182	(5)	177
Communications	85	78	78	6	84
Supplies	284	296	296	7	303
Materials & Services	60	112	112	(52)	60
Buildings & Grounds Operations	30	60	60	-	60
Equipment Maintenance &					
Repairs	1	1	1	-	1
Vehicle Operations	203	246	247	(24)	223
Professional Services	1	1	1	(1)	-
Leased Facilities Expenses	4	4	4	-	4
Minor Assets & Equipment	-	2	2	-	2
Major Repairs & Renovations	-	-	-	9	9
Contribution to Reserve &					
Reserve Funds		5	5	(5)	
Operating Expenses Subtotal	2,985	3,184	3,291	-	3,291
Transfers from Related Entities					
NextGen Charges	14	11	11	1	12
Transfers from Related Entities		···		•	
Subtotal	14	11	11	1	12
Inter-Departmental Transfers &					
Recoveries	(100)	(104)	(104)	(1)	(105)
Recovery from Fleet	(100)	(104)	(104)	(1)	(105)
Inter-Departmental Transfers & Recoveries Subtotal	(100)	(104)	(104)	(1)	(105)
1.000 TO: 100 Oubtotal	(100)	(104)	(104)	(1)	(100)
Gross Operating Expenses	2,899	3,091	3,198	-	3,198

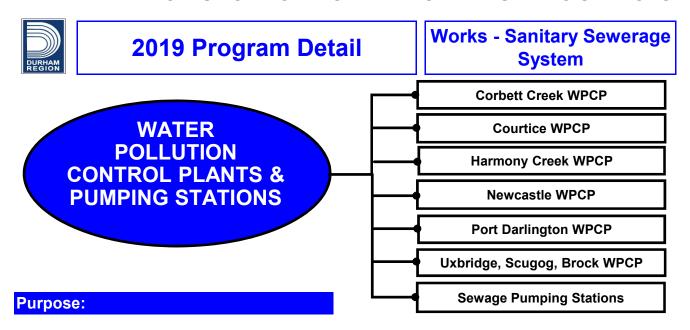


Detailed Cost of Program:	20	18		2019	
(\$,000's)	Estimated	Approved	Base	Program	Proposed
(φ,υυυ s)	Actuals	Budget	Budget	Change	Budget
Tangible Capital Assets					
New	121	121	-	494	494
Replacement	_	_	8	-	8
Total Tangible Capital Assets	121	121	8	494	502
Total Expenses	3,020	3,212	3,206	494	3,700
Revenues					
Fees & Service Charges	(20)	(69)	(70)	59	(11)
Sundry Revenue	(9)	(6)	(6)	(4)	(10)
Total Revenues	(29)	(75)	(76)	55	(21)
Net Program Expenses	2,991	3,137	3,130	549	3,679

^{*} Tangible Capital Assets are stated separately on the Program Summary

Net Program Expenses Per Above	3,679
Less: Tangible Capital Assets	(502)
Net Operating Program Expenses Per Program Summary	3,177

PROGRAM 4 WATER POLLUTION CONTROL PLANTS AND PUMPING STATIONS



- To treat sanitary sewage and ensure that it meets or exceeds all Ministry of Environment, Conservation and Parks (MECP) discharge requirements
- To operate and maintain the 51 sanitary sewage pumping stations that service the City of Pickering, Town of Ajax, Town of Whitby, the City of Oshawa, the Municipality of Clarington, and the Townships of Uxbridge, Scugog, and Brock
- To comply with all MECP Environmental Compliance Approvals as issued for each facility
- To maintain a safe work environment by strictly adhering to all Ministry of Labour and Regional Departmental and Corporate safety policies

Description of Program Activities:

- Operate and maintain the Water Pollution Control Plants and Pumping Stations to treat flows
- Collect and analyze samples
- Administer programs required within the MECP Environmental Compliance Approval
- Maintain a scheduled cleaning and maintenance program based on each pumping station's flow and needs
- Keep a record of flows and monitor future requirements
- Maintain and upgrade mechanical and electrical equipment as required
- Take samples for lab analysis for the purpose of sewer-use monitoring
- Implement new technology to increase reliability and ensure fail safe operation at all times and to ensure a continued cost effective operation

Description of Program Resources:

◆ 2019 Full Time Employees 56.750
 ◆ 2018 Full Time Employees 56.750

PROGRAM 4 WATER POLLUTION CONTROL PLANTS AND PUMPING STATIONS



2019 Program Detail

Works - Sanitary Sewerage System

Performance Measurements:

Water Pollution Control Plants

- Cost per megalitre of sanitary sewage treated
- Percentage of flow by-passing secondary treatment
- Number of emergency callouts

Pumping Stations

- Maintain a scheduled cleaning and maintenance program based on each station's flow and needs
- Keep a record of flows and monitor future requirements
- Maintain and upgrade mechanical and electrical equipment as required
- Take samples for lab analysis for the purpose of sewer use monitoring
- Implement new technology to increase reliability and ensure fail safe operation at all times and to ensure a continued cost effective operation

Units of Service

Water Pollution Control Plants	Target 2018	Proj Actual 2018	Target 2019
a) Sanitary Sewage Treated at all Plants (measured per megalitre)	48,500	45,300	48,500
b) Percentage of Flow By-passing Secondary Treatment	0	0.10%	0
c) Number of Emergency Callouts	330	430	330

Note: Projected actual in 2018 is high due to the commissioning of new plants

Pumping Stations

- a) Number of Emergency Callouts
- b) Number of Overflows

Target	Proj Actual	Target
2018	2018	2019
190	207	190
0	1	0

PROGRAM 4 WATER POLLUTION CONTROL PLANTS AND PUMPING STATIONS

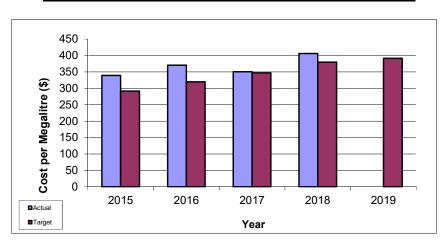


2019 Program Detail

Works - Sanitary Sewerage System

Efficiency:

Cost per Megalitre of Treated Sanitary Sewerage at WPCPs





Detailed Cost of Program:	20	18		2019	
(\$,000's)	Estimated	Approved	Base	Program	Proposed
(\$,000 \$)	Actuals	Budget	Budget	Change	Budget
Operating Expenses	'				
Personnel Expenses	6,937	7,020	7,120	(11)	7,109
Personnel Related	145	150	150	(9)	141
Communications	120	120	120	-	120
Supplies	1,178	1,114	1,114	(60)	1,054
Utilities	5,060	5,201	5,433	-	5,433
Chemicals	1,490	1,659	1,659	(132)	1,527
Computer Maintenance &					
Operations	70	72	72	69	141
Materials & Services	198	236	236	(14)	222
Equipment Maintenance & Repairs	689	852	852	27	879
Vehicle Operations	395	382	382		328
Professional Services	18	35	302	(54)	320
Contracted Services	2,649		2 620	(190)	2.450
Minor Assets & Equipment	•	2,639	2,639	(189)	2,450
Major Repairs & Renovations	35	33	-	-	-
• •	533	297	40.777	227	227
Operating Expenses Subtotal	19,517	19,810	19,777	(146)	19,631
Inter-Departmental Transfers & Recoveries					
Works - SCADA Group Charge Works - Regional Environmental	575	674	680	1	681
Lab Charge Works - Sludge Disposal	350	405	405	-	405
Charge Works - Biosolids Services	2,453	1,540	1,540	620	2,160
Charge Works - Ajax WSP - Labour	256	272	278	-	278
Charge	74	86	86	1	87
Recovery DRPS - Maple Grove Pumping Station	(5)	(6)	(6)	-	(6)
Inter-Departmental Transfers &					
Recoveries Subtotal	3,703	2,971	2,983	622	3,605
Gross Operating Expenses	23,220	22,781	22,760	476	23,236

PROGRAM 4 WPCPs AND PUMPING STATIONS



2019 Program Detail

Detailed Cost of Program:	20	18		2019	
(\$,000;s)	Estimated Actuals	Approved Budget	Base Budget	Program Change	Proposed Budget
	Actuals	Daaget	Duaget	Onunge	Buaget
Tangible Capital Assets					
New	42	42	-	-	-
Replacement	269	269	191	291	482
Total Tangible Capital Assets	311	311	191	291	482
Total Expenses	23,531	23,092	22,951	767	23,718
Revenues					
Fees & Service Charges	(236)	(178)	(178)	-	(178)
Rents	(4)	(4)	(4)	-	(4)
Sundry Revenue	(18)	(15)	(15)	-	(15)
Total Revenues	(258)	(197)	(197)	-	(197)
Net Program Expenses	23,273	22,895	22,754	767	23,521

^{*} Tangible Capital Assets are stated separately on the Program Summary

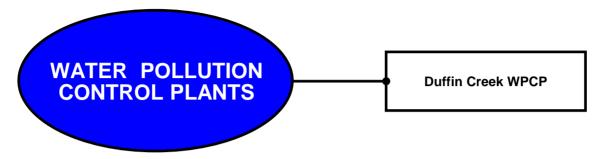
Net Program Expenses Per Above	23,521
Less: Tangible Capital Assets	(482)
Net Operating Program Expenses Per Program Summary	23,039

PROGRAM 5 DUFFIN CREEK WPCP



2019 Program Detail

Works - Sanitary Sewerage System



Purpose:

 To provide safe and cost effective wastewater treatment for customers in Durham Region (Ajax/Pickering) and customers in York Region which meets or exceeds all Ministry of Environment, Conservation and Parks (MECP) discharge requirements

Description of Program Activities:

- ◆ To operate and maintain the Duffin Creek WPCP for Durham and York Regions
- The program involves the cost efficient, safe and environmentally responsible operation and maintenance of one of Ontario's largest water pollution control plants
- Administer programs required within the MECP Certificate of Approval / Environmental Compliance Approval
- ◆ To provide training and a safe work environment for staff

Description of Program Resources:

2019 Full Time Employees 81.5302018 Full Time Employees 81.860

Reallocation of resources to Engineering and Staff Support (-0.330 FTE)



Works - Sanitary Sewerage System

Performance Measurements:

- ◆ Cost per megalitre of sanitary sewage treated
- Number of emergency callouts
- Number of days annually, during which the quality of a measured effluent parameter was superior to the stated objective as identified in the MECP Certificate of Approval for this facility
- Number of days annually, during which the quality of a measured effluent parameter was superior to the stated compliance limit as identified in the MECP Certificate of Approval for this facility
- Cost of operation of the facility

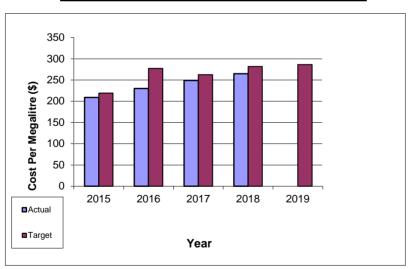
Units of Service

- a) Sanitary Sewage Treated at the Plant (measured per megalitre)
- b) Number of Emergency Callouts

Target 2018	Proj Actual 2018	Target 2019
23,500	23,000	23,000
150	125	150

Efficiency:

Cost per Megalitre of Treated Sanitary Sewerage



PROGRAM 5 SUMMARY DUFFIN CREEK WPCP



2019 Business Plan

By Program	20	18		2019	
(\$,000's)	Estimated	Approved	Base	Program	Proposed
	Actuals	Budget	Budget	Change	Budget
Duffin Creek WPCP					
(a) Management Committee	2,830	3,094	2,904	-	2,904
(b) Duffin Creek Plant	23,119	25,731	25,991	250	26,241
(c) Duffin Creek Tech Support	273	269	280	(61)	219
(d) Duffin Creek Administration	2,682	2,682	2,762	-	2,762
(e) Duffin Creek Facility	2,013	1,819	1,592	3	1,595
(f) York Contributions	(24,826)	(26,964)	(26,938)	(171)	(27,109)
(g) Phosphorous Reduction					
Field Study (Durham Portion)	39	39		-	
Total Duffin Creek WPCP	6,130	6,670	6,591	21	6,612

PROGRAM 5A DUFFIN CREEK MANAGEMENT COMMITTEE



2019 Program Detail

Detailed Cost of Program:	20	18		2019	
(\$,000's)	Estimated Actuals	Approved Budget	Base Budget	Program Change	Proposed Budget
Operating Expenses					
Personnel Expenses	47	43	43	-	43
Personnel Related	3	2	2	-	2
Supplies	_	-	1	-	1
Professional Services	13	150	150	-	150
Financial Expenses	296	297	306	-	306
Property Taxes	2,493	2,620	2,425	_	2,425
Gross Operating Expenses	2,852	3,112	2,927	-	2,927
Revenues					
Rents	(22)	(18)	(23)	-	(23)
Revenue from York	(1,889)	(2,045)	(1,912)	_	(1,912)
Total Revenues	(1,911)	(2,063)	(1,935)	-	(1,935)
Net Program Expenses	941	1,049	992	-	992
Net Program Expenses Per <i>A</i> Add: Revenue from York	Above				992 1,912
Net Operating Program Expe	nses Per Progr	am Summary			2,904



Detailed Cost of Program:	20	18		2019	
(\$ 000'a)	Estimated	Approved	Base	Program	Proposed
(\$,000's)	Actuals	Budget	Budget	Change	Budget
Operating Expenses					
Personnel Expenses	8,547	9,054	9,272	192	9,464
Personnel Related	119	174	174	(24)	150
Communications	55	67	67	-	67
Supplies	1,307	1,321	1,320	120	1,440
Utilities	7,856	8,749	8,501	-	8,501
Chemicals	4,876	3,626	3,560	389	3,949
Materials & Services	1,897	2,397	2,419	148	2,567
Equipment Maintenance &					
Repairs	1,080	1,280	1,279	228	1,507
Vehicle Operations	41	110	110	(35)	75
Professional Services	255	378	378	-	378
Financial Expenses	364	364	376	-	376
Property Taxes	17	18	17	-	17
Major Repairs & Renovations	-	-	250	25	275
Contribution to Reserve &					
Reserve Funds	400	400	400	-	400
Operating Expenses Subtotal	26,814	27,938	28,123	1,043	29,166
Inter-Departmental Transfers & Recoveries Works - SCADA Group Charge	608	615	620	1	621
Works - Regional Environmental	000	0.0	020		02.
Lab Charge Works - Facilities Management	281	400	400	-	400
Charge Recovery - Works - Sludge	15	20	20	-	20
Disposal	(1,860)	(1,541)	(1,540)	(619)	(2,159)
Inter-Departmental Transfers &					
Recoveries Subtotal	(956)	(506)	(500)	(618)	(1,118)
Gross Operating Expenses	25,858	27,432	27,623	425	28,048



Detailed Cost of Program:	20	18		2019	
(\$,000;s)	Estimated Actuals	Approved Budget	Base Budget	Program Change	Proposed Budget
Tangible Capital Assets					
New	415	415	-	585	585
Replacement	700	700	895	-	895
TCA Financing from York	(852)	(852)	(678)	(435)	(1,113)
Total Tangible Capital Assets	263	263	217	150	367
Total Expenses	26,121	27,695	27,840	575	28,415
Revenues					
Fees & Service Charges	(2,029)	(1,625)	(1,625)	(175)	(1,800)
Sundry Revenue	(80)	(7)	(7)	-	(7)
Phosphorous Reduction Field	` ,	` ,	` ,		. ,
Study Recovery	(630)	(69)	-	-	-
Revenue from York	(18,906)	(21,049)	(21,267)	(217)	(21,484)
Total Revenues	(21,645)	(22,750)	(22,899)	(392)	(23,291)
Net Program Expenses	4,476	4,945	4,941	183	5,124

^{*} Tangible Capital Assets are stated separately on the Program Summary

Net Program Expenses Per Above	5,124
Less: Tangible Capital Assets	(367)
Add: Revenue from York	21,484
Net Operating Program Expenses Per Program Summary	26,241



Detailed Cost of Program:	20	18		2019	
(\$,000's)	Estimated	Approved	Base	Program	Proposed
(\$,000 \$)	Actuals	Budget	Budget	Change	Budget
Operating Expenses					
Personnel Expenses	8,485	8,972	9,193	192	9,385
Personnel Related	119	174	174	(24)	150
Communications	55	67	67	-	67
Supplies	1,252	1,301	1,300	120	1,420
Utilities	7,424	8,191	8,057	-	8,057
Chemicals	4,876	3,626	3,560	389	3,949
Materials & Services	1,864	2,257	2,279	113	2,392
Equipment Maintenance &					
Repairs	899	1,195	1,194	188	1,382
Vehicle Operations	41	110	110	(35)	75
Professional Services	255	378	378	-	378
Financial Expenses	364	364	376	-	376
Major Repairs & Renovations	-	-	100	25	125
Contribution to Reserve &					
Reserve Funds	400	400	400	-	400
Operating Expenses Subtotal	26,034	27,035	27,188	968	28,156
Inter-Departmental Transfers &					
Recoveries					
Works - SCADA Group Charge	608	615	620	1	621
Works - Regional Environmental	004	400	400		400
Lab Charge Recovery - Works - Sludge	281	400	400	-	400
Disposal	(1,860)	(1,541)	(1,540)	(619)	(2,159)
Inter-Departmental Transfers &		, , ,		,	, , ,
Recoveries Subtotal	(971)	(526)	(520)	(618)	(1,138)
Gross Operating Expenses	25,063	26,509	26,668	350	27,018
Townible Comited Assets					
Tangible Capital Assets New	44.5	445		505	505
	415	415	-	585	585
Replacement TCA Financing from York	700 (852)	700 (852)	895 (678)	(435)	895 (1,113)
Total Tangible Capital Assets	263	263	217	(433 <u>)</u> 1 50	367
Total Taligible Capital Addets		203		150	301
Total Expenses	25,326	26,772	26,885	500	27,385

PROGRAM 5B1 DUFFIN CREEK PLANT - EXCLUDING IPS



2019 Program Detail

Detailed Cost of Program:	20	18	2019			
(\$,000's)	Estimated Actuals	Approved Budget	Base Budget	Program Change	Proposed Budget	
Revenues						
Fees & Service Charges	(2,029)	(1,625)	(1,625)	(175)	(1,800)	
Sundry Revenue	(80)	(7)	(7)	-	(7)	
Phosphorous Reduction Field	,	` ,	()		,	
Study Recovery	(630)	(69)	-	-	-	
Revenue from York	(18,111)	(20,126)	(20,312)	(142)	(20,454)	
Total Revenues	(20,850)	(21,827)	(21,944)	(317)	(22,261)	
Net Program Expenses	4,476	4,945	4,941	183	5,124	

PROGRAM 5B2 DUFFIN CREEK PLANT - INFLUENT PUMPING STATION



2019 Program Detail

Detailed Cost of Program:	20	18		2019	
(\$,000's)	Estimated Actuals	Approved Budget	Base Budget	Program Change	Proposed Budget
Operating Expenses	Notadio	Daaget	Daaget	Onunge	Daaget
Personnel Expenses	62	81	79	-	79
Supplies	55	20	20	-	20
Utilities	432	559	444	-	444
Materials & Services	33	140	140	35	175
Equipment Maintenance &					
Repairs	181	85	85	40	125
Property Taxes	17	18	17	-	17
Major Repairs & Renovations	_	-	150	-	150
Operating Expenses Subtotal	780	903	935	75	1,010
Inter-Departmental Transfers & Recoveries Works - Facilities Management	4-	20			
Charge	15	20	20		20
Inter-Departmental Transfers & Recoveries Subtotal	15	20	20		20
Total Expenses	795	923	955	75	1,030
Revenues					
Revenue from York	(795)	(923)	(955)	(75)	(1,030)
Total Revenues	(795)	(923)	(955)	(75)	(1,030)
Net Program Expenses		-		-	_

PROGRAM 5C DUFFIN CREEK TECH SUPPORT



2019 Program Detail

Detailed Cost of Program:	20	18		2019	
(\$,000's)	Estimated	Approved	Base	Program	Proposed
(\$,000 \$)	Actuals	Budget	Budget	Change	Budget
Operating Expenses					
Personnel Expenses	270	267	278	(62)	216
Personnel Related	3	2	2	1	3
Gross Operating Expenses	273	269	280	(61)	219
Revenues					
Revenue from York	(221)	(219)	(227)	49	(178)
Total Revenues	(221)	(219)	(227)	49	(178)
Net Program Expenses	52	50	53	(12)	41
Net Program Expenses Per	Above				41
Add: Revenue from York					178
Net Operating Program Exp	enses Per Progr	am Summary			219

PROGRAM 5D DUFFIN CREEK ADMINISTRATION



2019 Program Detail

Detailed Cost of Program:	20	18		2019	
(\$,000;s)	Estimated Actuals	Approved Budget	Base Budget	Program Change	Proposed Budget
Inter-Departmental Transfers & Recoveries Works - General Administration					
Charge	2,682	2,682	2,762	-	2,762
Inter-Departmental Transfers & Recoveries Subtotal	2,682	2,682	2,762	-	2,762
Gross Operating Expenses	2,682	2,682	2,762	-	2,762
Revenues Revenue from York	(2,176)	(2,176)	(2,241)	_	(2,241)
Total Revenues	(2,176)	(2,176)	(2,241)	-	(2,241)
Net Program Expenses	506	506	521	-	521
Net Program Expenses Per A	bove				521
Add: Revenue from York Net Operating Program Expe	nses Per Progr	am Summary			2,241 2,762

PROGRAM 5E DUFFIN CREEK FACILITY



2019 Program Detail

Detailed Cost of Program:	20	18		2019	
(\$,000's)	Estimated	Approved	Base	Program	Proposed
(\$,000 \$)	Actuals	Budget	Budget	Change	Budget
Operating Expenses					
Supplies	23	15	15	-	15
Utilities	37	-	-	-	-
Materials & Services	35	23	23	-	23
Buildings & Grounds Operations	907	799	806	3	809
Equipment Maintenance &					
Repairs	131	36	36	-	36
Contracted Services	360	377	422	-	422
Major Repairs & Renovations	236	279	_	_	_
Operating Expenses Subtotal	1,729	1,529	1,302	3	1,305
Inter-Departmental Transfers & Recoveries Works - Facilities Management Charge	284	290	290	-	290
Inter-Departmental Transfers &					
Recoveries Subtotal	284	290	290	-	290
Gross Operating Expenses	2,013	1,819	1,592	3	1,595
Tangible Capital Assets					
New	152	152	-	-	-
Replacement	613	613	-	_	-
TCA Financing from York	(606)	(606)		-	
Total Tangible Capital Assets	159	159		-	
Total Expenses	2,172	1,978	1,592	3	1,595
Revenues					
Revenue from York	(1,634)	(1,475)	(1,291)	(3)	(1,294)
Total Revenues	(1,634)	(1,475)	(1,291)	(3)	(1,294)
Net Program Expenses	538	503	301	-	301

^{*} Tangible Capital Assets are stated separately on the Program Summary

301
1,294
1,595

PROGRAM 5G PHOSPHOROUS REDUCTION FIELD STUDY (DURHAM PORTION)



2019 Program Detail

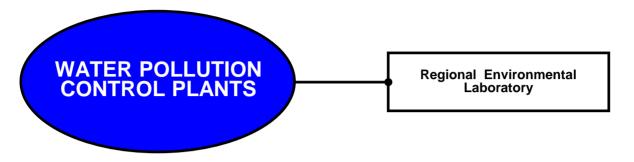
Detailed Cost of Program:	20	18	2019		
(\$,000's)	Estimated	Estimated Approved		Program	Proposed
(ψ,000 3)	Actuals Budget		Budget	Change	Budget
Operating Expenses					
Personnel Expenses	12	12	-	-	-
Chemicals	3	3	-	-	-
Materials & Services	10	10	-	-	-
Professional Services	14	14	-	-	-
Net Program Expenses	39	39	-	-	-

PROGRAM 6 REGIONAL ENVIRONMENTAL LABORATORY



2019 Program Detail

Works - Sanitary Sewerage System



Purpose:

To provide environmental analysis for water and wastewater systems

Description of Program Activities:

- To operate and maintain the Regional Environmental Laboratory for the water and wastewater monitoring needs of the Regions of Durham and York, area municipalities and private clients
- Administer programs required within the Ministry of the Environment, Conservation and Parks (MECP)
 Certificates of Approval for wastewater and drinking water licenses
- Plan for changes to environmental regulations that maintain and improve the quality of the Region's water supply and sanitary sewerage systems through ongoing skills development and process monitoring

Description of Program Resources:

2019 Full Time Employees 26.3402018 Full Time Employees 25.340

One (1) Laboratory Information Management System (LIMS) Administrator to manage the recently acquired LIMS software, which automates quality control of samples in the Lab. This position will ensure that all regulations as directed by the Ministry of Health (MOH) and MECP continue to be met, thereby ensuring the ongoing accreditation of the Lab (1.000 FTE)

Performance Measurements:

- Compliance with ISO 17025 standard and accreditation criteria through audits by the Canadian Association for Laboratory Accreditation (CALA). The Regional Environmental Laboratory is fully accredited by CALA and licensed by the MECP for drinking water testing
- Quality Assurance/Quality Control (QA/QC) program has been established to ensure quality of data
- ◆ Approximately 70,000 samples for 250,000 tests are analyzed annually

PROGRAM 6 REGIONAL ENVIRONMENTAL LABORATORY



2019 Program Detail

Detailed Cost of Program:	20	18		2019	
(# 000la)	Estimated	Restated	Base	Program	Proposed
(\$,000's)	Actuals	Budget	Budget	Change	Budget
Operating Expenses					
Personnel Expenses	2,667	2,788	2,812	115	2,927
Personnel Related	36	58	58	(16)	42
Communications	-	1	-	-	-
Supplies	536	506	506	26	532
Utilities	9	11	10	-	10
Chemicals	27	35	35	5	40
Computer Maintenance &					
Operations	88	55	55	-	55
Materials & Services	88	106	106	2	108
Buildings & Grounds Operations	35	18	18	-	18
Equipment Maintenance &					
Repairs	127	127	127	(2)	125
Vehicle Operations	15	19	19	(6)	13
Professional Services	20	19	19	(9)	10
Contracted Services	11	12	12	-	12
Financial Expenses	3	2	2	1	3
Contribution to Reserve &					
Reserve Funds	125	125	125	-	125
Operating Expenses Subtotal	3,787	3,882	3,904	116	4,020
Inter-Departmental Transfers & Recoveries Works - General Administration					
Charge Works - Facilities Management	143	143	143	-	143
Charge Recovery - Works - Regional	18	30	30	-	30
Environmental Lab Service	(1,569)	(1,642)	(1,642)	20	(1,622)
Inter-Departmental Transfers & Recoveries Subtotal	(1,408)	(1,469)	(1,469)	20	(1,449)
NCCOVELIES CUDICIAL	(1,400)	(1,403)	(1,403)	20	(1,443)
Gross Operating Expenses	2,379	2,413	2,435	136	2,571

PROGRAM 6 REGIONAL ENVIRONMENTAL LABORATORY



2019 Program Detail

Detailed Cost of Program:	20	18			
(\$,000's)	Estimated Restated		Base	Program	Proposed
(ψ,000 3)	Actuals	Budget	Budget	Change	Budget
Tangible Capital Assets					
New	-	-	-	12	12
Replacement	480	480	160	-	160
TCA Financing from York	(10)	(10)	(13)	(6)	(19)
Contribution from Reserve /					
Reserve Fund	(460)	(460)	(135)	-	(135)
Total Tangible Capital Assets	10	10	12	6	18
Total Expenses	2,389	2,423	2,447	142	2,589
Revenues					
Sundry Revenue	(854)	(825)	(825)	(75)	(900)
Revenue from Regional					
Environmental Lab Operations	(1,680)	(1,588)	(1,610)	(61)	(1,671)
Total Revenues	(2,534)	(2,413)	(2,435)	(136)	(2,571)
Net Program Expenses	(145)	10	12	6	18

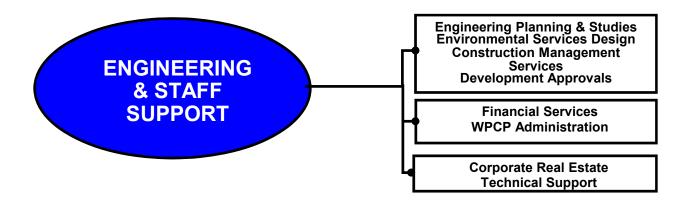
^{*} Tangible Capital Assets are stated separately on the Program Summary

Net Program Expenses Per Above	18
Less: Tangible Capital Assets	(18)
Net Operating Program Expenses Per Program Summary	



2019 Program Detail

Works - Sanitary Sewerage System



Purpose:

Represents the portions of various divisions of the Works Department operation that are attributable to the Sanitary Sewerage System including:

Engineering Planning and Studies

 To provide overall leadership and guidance to the various Departments of the Region of Durham which affect long-range planning of the Municipal Water Supply and Distribution Systems and Municipal Wastewater Collection and Treatment Systems; to service existing customers and future customers forecast under the anticipated growth recognized in the Durham Region Official Plan

Environmental Services Design

 To plan, design and initiate construction of sanitary sewerage infrastructure to provide service for existing and new customers, in compliance with all applicable legislation and regulations. Sanitary sewerage infrastructure includes water pollution control plants, pumping stations and sanitary sewers and appurtenances

Construction Management Services

To plan, design and construct Regional infrastructure including all roads, sanitary and storm sewers and associated services, watermains and associated services, bridges, culverts, water supply plants and associated wells, pumping stations and modifications, water pollution control plants and associated pumping stations and modifications, all as budgeted for in the current year's business plan including all similar construction necessitated by emergencies

Development Approvals

 To assist and facilitate well planned industrial, commercial and residential development proposals within Durham Region by providing cost effective municipal water, sanitary sewerage and Regional road services, while protecting the interests of the Region and the public

Financial Services

• To provide overall leadership and direction to the various divisions of the Works Department in effectively monitoring and managing expenditures to ensure compliance with approved budgets and policy guidelines

Water Pollution Control Plant Administration

• To provide management of the Plant Operations Division including: the co-ordination and monitoring of expenditures, dealing with personnel and administrative issues and planning for the long term operational needs of the division in accordance with policies, guidelines and legislation



2019 Program Detail

Works - Sanitary Sewerage System

Purpose: (continued)

Corporate Real Estate

 To administer and manage the real estate function for the Region including the rental of properties and the purchase of land to facilitate construction of municipal services

Technical Support

- A technical working group directing and supporting the following programs:
 - Sewer-Use By-Law Enforcement
 - Water/Wastewater Treatment Operations
 - Maintenance Operations (including landfill monitoring)
 - Water Energy Efficiency Programs
 - Data System Management
 - Source Water Protection

Description of Program Activities:

The duties and services provided are required to comply with all applicable legislation and represent those areas of the Works Department which relate directly to the provision and management of the sanitary sewerage infrastructure. The activities include: engineering planning and studies, detailed design, construction and asset management and ongoing post commissioning support

Engineering Planning and Studies

- Develop and implement a comprehensive servicing strategy for the water supply and sanitary sewerage systems throughout the Region through the completion of Official Plan Servicing Studies and providing input into the Development Charges Studies
- Coordinate the use and protection of our valuable groundwater resources through development of wellhead protection areas, review of land-uses within these areas, and liaison with neighbouring municipalities on groundwater management practices
- Complete Environmental Assessments, as required, for water supply and sanitary sewerage capital projects prior to Capital Projects proceeding to detailed design and construction
- Provide technical review of applications for new development and comment on availability of water supply and sanitary sewerage services, oversizing, and ensure that the Region's standards are being met
- Act as Durham Region representative on various internal and external Committees related to water supply and sanitary sewerage servicing

Environmental Services Design

Plan and implement the rehabilitation/replacement of existing infrastructure in conjunction with Regional and Area Municipality Road programs and independent of road programs. Conduct Asset Management studies to prioritize deficiencies and optimize use of financing for rehabilitation and replacement of existing sanitary sewerage infrastructure. Design and initiate construction of sanitary sewerage infrastructure to service existing and new development and in response to new regulations

Construction Management Services

- To provide the administrative services which calculate the budgets for infrastructure projects, develop and award the tenders and oversee the construction projects
- To provide the contract administrative services required to complete the construction activities including the processing and executing of all required project documentation, bonding and insurance, and progress payments
- Fulfilling contract requirements such as issuing substantial and final completion certificates, maintaining statutory, deficiency, maintenance and finishing holdbacks and final contract releases



2019 Program Detail

Works - Sanitary Sewerage System

Description of Program Activities: (continued)

Construction Management Services (continued)

- To provide required quality control and quality assurance for construction projects, including topographic surveying and layout, sewer and water infrastructure testing (SWAT), construction inspection, commissioning services, as constructed measurements and maintaining all as constructed drawings, testing of construction materials and providing geotechnical investigations and associated services
- To provide asset management services including the management and monitoring of the Region's infrastructure assets

Development Approvals

- Review and process development applications, including land severances, with minimum delay, ensuring that they meet Regional guidelines and standards and services are sized to meet long range Regional servicing objectives
- Negotiate and prepare draft servicing, subdivision or front ending agreements that are balanced and fair to ensure no adverse financial impact on the Region
- Assess feasibility, request for funding, coordinate collection charges, issue connection applications and payment agreements and initiate the passage of by-laws for Regional residents who request sewer and/or water service
- Co-ordinate the Development Charge collection process with local municipalities and the Finance
 Department to ensure timely issuance of building permits and adequate cash flow from development for
 the construction of Regional growth related infrastructure
- Control development to balance available capacities or identify required improvements to accommodate the development by coordinating comments and discussing issues with Local Area Municipalities, other Divisions and Departments

Financial Services

- Coordinate the preparation of the Works Department Annual Operating and Capital Budgets
- Manage and execute transactional items to recover costs from internal programs and divisions as well as outside agencies, developers and other area municipalities related to current and capital programs
- Liaison with the Finance Department and other senior levels of government regarding matters of budget management and policy related to funding and expenditures
- Ensure Works staff meet deadlines set by Regional Council and the Finance Department
- Provide clerical and administrative support related to committee reports and official correspondence
- Provide mail and reception services for the Works Department at Regional Headquarters
- Maintain proper inventory of office materials and supplies for staff use

Water Pollution Control Plants Administration

- Assist in the preparation of the Plant Operations budget
- Monitor and approve expenditures in accordance with approved budgets, policies and guidelines
- Manage divisional administrative needs in accordance with agreements, policies, guidelines and legislative requirements
- Develop policies, methods and guidelines for the efficient and effective operation of the Region's Water Pollution Control Plant facilities
- Liaise with government, public and private agencies



2019 Program Detail

Works - Sanitary Sewerage System

Description of Program Activities: (continued)

Corporate Real Estate

- Negotiate property agreements for the acquisition of lands and property rights necessary for implementation of Regional programs including the construction of road, sanitary sewerage and water supply projects
- Co-ordinate the expropriation process where necessary
- Locate and negotiate lease agreements for facilities required by various Regional Departments and coordinate leasehold improvements to the facilities in conjunction with the client and with our Facilities Management Division
- Manage the rental of Region owned properties, including the collection of rent and the disposal of properties no longer required by the Region
- Compile and maintain records on all Region owned property including limited interest such as sanitary sewerage and water supply easements, leases, licenses, permission to enter, pipe crossings and encroachments
- Co-ordinate, plan and schedule the re-registration of easements as directed by Provincial legislation
- Provide title information and cost estimates related to land and leasing, to other Divisions and Departments, as required

Technical Support

- A technical working group directing and supporting the following programs:
- Sewer-Use By-Law Enforcement:

Enforcement of the Sewer-Use By-law 55-2013, as amended, to protect the infrastructure and the treatment facilities, to maintain compliance with regulatory requirements through monitoring, investigation, compliance programs and surcharge agreements and to maintain public/staff safety

Water/Wastewater Treatment Operations:

Provide technical support in areas of treatment operations and design, monitoring and reporting for compliance requirements, response and investigation to consumer concerns and enquiries, training of staff, response to adverse water quality issues and related regulatory notifications

Maintenance Operations:

Provide technical support in areas of maintenance operations, including contract administration of maintenance and rehabilitation programs for watermains, sanitary/storm sewers, maintaining CCTV program, budget preparation, review of new infrastructure to meet Regional standards and regulatory requirements

Water Energy Efficiency Programs:

The Water Energy Efficiency Program focuses on education of the public and outreach through newsletters, presentations, schools and the Central Lake Ontario Conservation Authority's (CLOCA) Children's Watershed Festival. This program also undertakes innovative water efficiency field studies through partnerships with area municipalities

The Energy Management program assists plant operation in energy control, and demand reduction projects, conduct energy audits for major energy using Regional Facilities through power monitoring and energy use reduction projects



2019 Program Detail

Works - Sanitary Sewerage System

Description of Program Activities: (continued)

Technical Support (continued)

Data System Management (GIS Group):

The Data System Management (DSM) program maintains the linear infrastructure data of the existing Water Supply, Sanitary Sewerage and Storm Sewer System using leading edge Geographical Information System (GIS) technology and provides services to inside and outside users for all cartographic or inventory needs. DSM develops and maintains applications for convenient data access to infrastructure data

Description of Program Resources:

2019 Full Time Employees 65.258
 2018 Full Time Employees 64.574

One (1) Senior Project Coordinator in Construction Management Services to aid with design reviews of capital construction projects, review and prepare tenders, project management and quality control. This position will be shared with General Tax and Water Supply (0.257 FTE)

One (1) Project Supervisor in Construction Management Services to supervise capital construction for projects in the roads, water supply and sanitary sewerage portfolios. This position will be shared with General Tax and Water Supply (0.257 FTE)

Reallocation of resources from Duffin Creek Water Pollution Control Plant based on the nature of work performed (0.170 FTE)

Performance Measurements:

- Resources to provide staff for administration/engineering support. Also includes general office expenditures such as telephone costs, office supplies and operating costs
- Resource Management through budgeting and forecasting future needs
- Quality control through Construction Inspection and Contract Administration
- Coordination of all related activities including safety, real estate and data management
- ◆ Maintenance and replacement of Information Technology assets
- Management of software licenses and upgrades



2019 Program Detail

Detailed Cost of Program:	20	18		2019	
(\$ 000la)	Estimated	Approved	Base	Program	Proposed
(\$,000's)	Actuals Budget		Budget	Change	Budget
Operating Expenses					
Personnel Expenses	6,970	7,582	7,789	113	7,902
Payroll Maintenance					
Management - Recovery	(2,733)	(2,977)	(3,046)	(37)	(3,083)
Net Personnel Expenses	4,237	4,605	4,743	76	4,819
Personnel Related	222	267	267	17	284
Communications	71	82	82	12	94
Supplies	61	73	73	1	74
Computer Maintenance &					
Operations	108	129	128	2	130
Materials & Services	525	308	308	232	540
Equipment Maintenance &					
Repairs	204	205	205	1	206
Vehicle Operations	27	24	24	9	33
Professional Services	324	332	368	(5)	363
Bad Debt Expenses	-	2	1	(1)	-
Financial Expenses	46	46	48	-	48
Minor Assets & Equipment	3	6	-	4	4
Contribution to Reserve &					
Reserve Funds	-	2	2	(2)	-
Operating Expenses Subtotal	5,828	6,081	6,249	346	6,595
Inter-Departmental Transfers & Recoveries Corporate Communications					
Charge	146	146	160	2	162
Corporate IT Charge Corporate HR Charge	152 75	152 75	152 75	-	152 75
Works - Regional Environmental	75	73	73		75
Lab Charge	153	151	151	(16)	135
Recovery - Works - General Tax Recovery - Regional	(16)	(15)	(15)	-	(15)
Environmental Lab Recovery - Works - Biosolids	(57)	(57)	(57)	-	(57)
Services	(259)	(272)	(278)	-	(278)
Inter-Departmental Transfers & Recoveries Subtotal	194	180	188	(14)	174
Vecaselles anniolal	134	100	100	(14)	1/4
Gross Operating Expenses	6,022	6,261	6,437	332	6,769



2019 Program Detail

Detailed Cost of Program:	20	18	2019			
(\$,000's)	Estimated	Approved	Base	Program	Proposed	
(\$,0003)	Actuals	Budget	Budget	Change	Budget	
Tangible Capital Assets						
New	28	28	-	76	76	
Replacement	201	201 201 17	1 201 171	71 -	-	171
Total Tangible Capital Assets	229	229	171	76	247	
Total Expenses	6,251	6,490	6,608	408	7,016	
Revenues						
Fees & Service Charges	(495)	(237)	(236)	(262)	(498)	
Sale of Publications	(14)	(10)	(10)	-	(10)	
Sundry Revenue	(242)	(254)	(254)	(176)	(430)	
Total Revenues	(751)	(501)	(500)	(438)	(938)	
Net Program Expenses	5,500	5,989	6,108	(30)	6,078	

^{*} Tangible Capital Assets are stated separately on the Program Summary

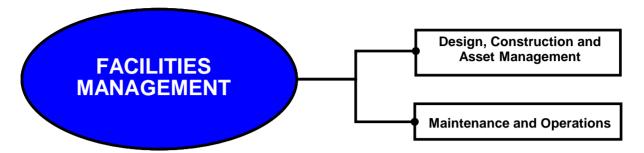
Net Program Expenses Per Above	6,078
Less: Tangible Capital Assets	(247)
Net Operating Program Expenses Per Program Summary	5,831

PROGRAM 8 FACILITIES MANAGEMENT



2019 Program Detail

Works - Sanitary Sewerage System



Purpose:

- ◆ Provide overall lifecycle management for Regional facilities including:
 - Detailed design and construction of new facilities and leasehold improvements
 - Lifecycle maintenance planning and replacement strategies
 - Ongoing and preventative maintenance and overall operation of Regional facilities, properties and grounds through Regional and contracted forces
 - Centralized security services

Description of Program Activities:

The Region has 215 facilities with an estimated total area of 432,849 square metres (4.7 million square feet), which generate a significant number of repair and maintenance requests over the course of a year. Major Regional facilities with complex heating, ventilation and air conditioning systems and a large number of occupants create a unique and challenging environment for facility related work

Design, Construction and Asset Management

- The Design, Construction and Asset Management unit provides Project management services for all facility capital construction and maintenance projects undertaken by the Region, including those delivered for Social Housing, Long-Term Care and Durham Regional Police Service. The Design, Construction and Asset Management unit is responsible for managing all facets of facility construction projects from their inception through to completion
- Office design and staff relocation are constant demands on any organization. The Design, Construction
 and Asset Management unit provides expertise to plan, supervise and implement these changes in a timely
 and professional manner with minimal effect on staff and the delivery of their programs
- As facilities age, a greater amount of time and resources is required to maintain them in an acceptable, reliable operating condition, and retain the inherent asset value. The Design, Construction and Asset Management unit is responsible for the Region wide condition and inspection program, which identifies and prioritizes the work required on Regional facilities, providing a life cycle management approach to prioritize state of good repair investments
- Services provided: Functional Review/Scope of Work determination; Budget estimates; Consultant selection; Council approvals as required; Design review oversight and management; Quotation and tenders; Construction management; Move/relocation management; Commissioning of facility; Warranty management; Project closeout; Post occupancy review; Leasehold renovations or office design and relocation services; Computer Assisted Drafting and Design (CAD) services; Long and short term accommodation studies; Maintain databases; Accommodation planning; Implementation of interior renovations; Furniture management

PROGRAM 8 FACILITIES MANAGEMENT



2019 Program Detail

Works - Sanitary Sewerage System

Description of Program Activities (continued):

Maintenance and Operations

- Water Supply and Water Pollution Control Plants and Pumping Stations, Traffic, Maintenance and Transit Depots, Solid Waste/Recycling locations, Childcare Centres, Paramedic Stations and leased facilities require support, each with special facility maintenance and property needs based on the clientele and use
- All Regional facilities require service contracts to complement the daily operation of the facility so client programs may be delivered effectively, such as boiler/heating/air systems, elevators, backflow prevention, fire and life safety, ground maintenance and custodial/environmental services
- ◆ Services provided: Planned preventative maintenance; Contract administration; Occupant support; 24/7 Emergency response; Custodial services
- In addition to the Region's 215 facilities, the Facilities Management division also looks after the security of the Regional Administration Headquarters building, including access control, security patrol and guard services, and CCTV installation, operation and maintenance
- Services provided: Security access control; Parking management; Response to Emergency Alarm System; Key control administration; Photo I.D. cards; 24/7 response to Security Systems Alarms

Description of Program Resources:

2019 Full Time Employees 23.9842018 Full Time Employees 23.212

Two (2) Technical Assistants to provide support for the administration of corporate facility maintenance contracts. Both of these positions are conversions of long-term temporary resources to permanent full-time positions. These positions are shared with General Tax, Water Supply and Solid Waste Management (0.772 FTEs)

Performance Measurements:

- Compliance with all building code standards
- Monitoring of costs
- Investigation and resolution of all requests/complaints



Detailed Cost of Program:	20	18	2019				
(\$,000's)	Estimated	Approved	Base	Program	Proposed		
,	Actuals	Budget	Budget	Change	Budget		
Operating Expenses							
Personnel Expenses	2,434	2,561	2,645	-	2,645		
Payroll Maintenance							
Management - Recovery	(689)	(775)	(793)	-	(793)		
Net Payroll Expenses	1,745	1,786	1,852	-	1,852		
Personnel Related	63	73	73	-	73		
Communications	38	24	24	1	25		
Supplies	60	43	43	-	43		
Utilities	58	62	59	-	59		
Computer Maintenance &							
Operations	7	16	16	-	16		
Materials & Services	56	58	58	-	58		
Buildings & Grounds Operations	1,189	1,310	1,538	17	1,555		
Equipment Maintenance &							
Repairs	80	69	70	-	70		
Vehicle Operations	50 58		58	42	100		
Professional Services	41	46	15	-	15		
Contracted Services	106	122	115	(6)	109		
Financial Expenses	923	923	956	2	958		
Property Taxes	1,614	1,538	1,513	-	1,513		
Major Repairs & Renovations	197	224		171	171		
Operating Expenses Subtotal	6,227	6,352	6,390	227	6,617		
Inter-Departmental Transfers &							
Recoveries Works - General Tax Charge	23	23	23	-	23		
Works - Facilities Management Charge	431	435	435	-	435		
Inter-Departmental Transfers & Recoveries Subtotal	454	458	458	-	458		
Gross Operating Expenses	6,681	6,810	6,848	227	7,075		
Tangible Capital Assets							
New	523	523	-	110	110		
Replacement	1,391	1,391		1,058	1,058		
Total Tangible Capital Assets	1,914	1,914	-	1,168	1,168		
Total Expenses	8,595	8,724	6,848	1,395	8,243		

PROGRAM 8 FACILITIES MANAGEMENT



2019 Program Detail

Works - Sanitary Sewerage System

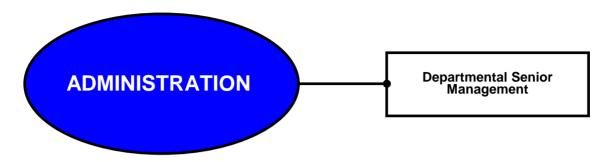
Detailed Cost of Program:	20	18	2019		
(\$,000's)	Estimated Approved Actuals Budget		Base Budget	Program Change	Proposed Budget
Revenues Rents	(5)	(5)	(5)	_	(5)
Total Revenues	(5)	(5)	(5)		(5)
Net Program Expenses	8,590	8,719	6,843	1,395	8,238

^{*} Tangible Capital Assets are stated separately on the Program Summary

Net Program Expenses Per Above8,238Less: Tangible Capital Assets(1,168)Net Operating Program Expenses Per Program Summary7,070



Works - Sanitary Sewerage System



Purpose:

- Provide overall direction and strategic planning for the Works Department with respect to Planning,
 Design, Construction, Operation and Maintenance of the Region's Sanitary Sewerage System
- To ensure that all legislated requirements are adhered to and all operations remain in compliance with regulatory bodies

Description of Program Activities:

- Advise the Works Committee, Senior Management and Regional Council on all Works Department related matters
- Manage the operations of the Works Department through its divisions: Construction Management Services, Compliance, Development Approvals, Engineering Planning and Studies, Environmental Services Design, Facilities Management, Financial Services, Maintenance Operations, Plants Operations, Transportation Design, Transportation Infrastructure, Traffic Engineering and Operations, Corporate Real Estate and Solid Waste Management
- Represent the Region's interests with other groups, including Provincial Ministries, other Regions and interest groups
- Provide administrative support to the general operations and special activities of the Works Department
- Coordination of Works Committee reports for presentation to Regional Council related to the Sanitary Sewerage System

Description of Program Resources:

2019 Full Time Employees 1.6002018 Full Time Employees 1.600

PROGRAM 9 ADMINISTRATION



2019 Program Detail

Detailed Cost of Program:	2018 2019			2019		
(\$,000's)	Estimated Approved		Base	Program	Proposed	
(\$\psi,0000)	Actuals	Budget	Budget	Change	Budget	
Operating Expenses						
Personnel Expenses	296	296	308	-	308	
Personnel Related	8	11	11	(1)	10	
Net Program Expenses	304	307	319	(1)	318	

PROGRAM 10 TANGIBLE CAPITAL ASSETS PROGRAM SUMMARY



2019 Program Detail

By Program	20	18				
(\$,000's)	Estimated	Approved	Base	Program	Proposed	
(\$,000 \$)	Actuals	Budget	Budget	Change	Budget	
Tangible Capital Assets:					_	
1S Duffin Creek WPCP - New	566	566	-	585	585	
2S - Replacement	1,313	1,313	895	-	895	
3S Environmental Lab - New	-	-	-	12	12	
4S - Replacement	480	480	160	-	160	
5S Facilities Management - Nev	v 523	523	-	110	110	
6S - Replacement	1,391	1,391	-	1,058	1,058	
7S Fleet/Equipment - New	191	191	-	570	570	
8S - Replacement	470	470	371	290	661	
9S Construction of Municipal						
Services	19,959	19,959	19,959	1,625	21,584	
Tangible Capital Assets						
Subtotal	24,893	24,893	21,385	4,250	25,635	
Tangible Capital Assets Revenu	e & Recoveries:					
10S Duffin Creek WPCP						
TCA Revenue from York	(1,458)	(1,458)	(678)	(435)	(1,113)	
11S Environmental Lab - TCA	(, ,	(, ,	,	,	(, ,	
Revenue from York	(10)	(10)	(13)	(6)	(19)	
12S Environmental Lab - Recove	` ,	` ,	(()	()	
Reserve/Reserve Fund	(460)	(460)	(135)	_	(135)	
Tangible Capital Assets		` ,				
Revenue & Recoveries						
Subtotal	(1,928)	(1,928)	(826)	(441)	(1,267)	
Net Tangible Capital Assets						
Program Expenses	22,965	22,965	20,559	3,809	24,368	
		7.2.2		-,	,_ ,_	
			(\$2,406)			
Summary of Increase (Dec	rease)	<u> </u>	-10.48%		\$1,403	
•	•				6.11%	



Works - Sanitary Sewerage

Program Detail Page	Location	Item Description	Item #	Qty	Unit Cost	Gross Total Cost	Sewer Total	Other Financing	Net Sewer
03. Depot Operations	Ajax Depot	3 Ton Crew Cab Dump Box Truck	(blank)	2	\$ 150,000	\$300,000	\$150,000	\$0	\$150,000
		Tandem Combination Dump Truck/Snow Plow	(blank)	1	\$ 360,000	\$360,000	\$120,000	\$0	\$120,000
	Orono Depot	Audio Visual Equipment	(blank)	1	\$ 10,500	\$10,500	\$3,500	\$0	\$3,500
		Road Edge Widener	(blank)	1	\$ 58,000	\$58,000	\$19,334	\$0	\$19,334
		Skid Steer	(blank)	1	\$ 87,000	\$87,000	\$29,000	\$0	\$29,000
		Tandem Combination Dump Truck/Snow Plow	(blank)	1	\$ 360,000	\$360,000	\$120,000	\$0	\$120,000
	Oshawa/Whitby								
	Depot	Data Tablets with vehicle mount & software	(blank)	5	\$ 5,500	\$27,500	\$9,166	\$0	\$9,166
		Traffic Control Sign Boards	(blank)	2	\$ 10,000	\$20,000	\$6,667	\$0	\$6,667
	Scugog Depot	Trailer Mounted Brine Emulsion Storage Tank	(blank)	1	\$ 54,000	\$54,000	\$18,000	\$0	\$18,000
		Wood / Brush Chipper	(blank)	1	\$ 45,000	\$45,000	\$15,000	\$0	\$15,000
	Sunderland								
	Depot	Trench Box Top Extension	(blank)	1	\$ 10,500	\$10,500	\$3,500	\$0	\$3,500
	Duffin Creek								
05. B. Duffin Creek - Plant	WPCP	Centrifuge Major Overhaul	(blank)	1	\$ 75,000	\$75,000	\$75,000	(\$54,953)	\$20,048
		De-superheater for Hot Water Boiler	(blank)	1	\$ 50,000	\$50,000	\$50,000	(\$36,635)	\$13,365
		E.Res Implementation	(blank)	1	\$ 135,000	\$135,000	\$135,000	(\$104,517)	\$30,483
		Monitors and tablets for Data Management							
		Systems	(blank)	1	\$ 30,000	\$30,000	\$30,000	(\$23,226)	\$6,774
		OIT (Operator Interface Terminal)							
		monitors/screens for Hot Water Boiler	(blank)	1	\$ 45,000	\$45,000	\$45,000	(\$32,972)	\$12,029
		Spare equipment required for #3 and #4 reactors	(blank)	1	\$ 250,000	\$250,000	\$250,000	(\$183,175)	\$66,825
06. Regional Environmental	Environmental								
Laboratory	Lab	Analytical Balance	(blank)	1	\$ 7,000	\$7,000	\$7,000	(\$3,500)	\$3,500
		Power Desktop Computer with 4 monitors	(blank)	1	\$ 2,951	\$2,951	\$2,951	(\$1,476)	\$1,476
		Workstation Furniture	(blank)	1	\$ 2,000	\$2,000	\$2,000	(\$1,000)	\$1,000
07. Engineering and Staff Support	Construction	Laptop Computer	(blank)	1	\$ 2,442	\$2,442	\$814	\$0	\$814
err Engineening and Stan Support	Water Pollution	Zaptop Computer	(Drainiy	<u> </u>	 	Ψ2, : : 2	Ψ0	ψö	46 11
	Control Plants	SCADA Servers	(blank)	1	\$ 75,000	\$75,000	\$75,000	\$0	\$75,000
	Corbett Creek	00/10/1 00/10/0	(Diamy	'	\$ 75,500	Ψ10,000	Ψ, 0,000	ΨΟ	ψ, 3,000
08. Facilities Management	WPCP	Plant Entrance Enhancement	(blank)	1	\$ 110,000	\$110,000	\$110,000	\$0	\$110,000
Grand Total	111 01	Trance Emignochion	(blaility		ψ 110,000	\$2,116,893	\$1,276,932		\$835,480

Tangible Capital Asset Program Summary

1S	Duffin	Creek	WPCP	-	New

3S Environmental Lab - New

5S Facilities Management - New

7S Fleet/Equipment - New

585,000 11,951 110,000 569,981 1,276,932



Works - Sanitary Sewerage

Program Detail Page	Location	Item Description	Item#	Qty	Unit Cost	Gross Total Cost	Sewer Total	Other Financing	Net Sewer
03. Depot Operations	Orono Depot	Data Recorders	(blank)	1	\$ 12,000	\$12,000	\$4,000	\$0	\$4,000
	Oshawa/Whitby								
	Depot	Large Meter Tester	(blank)	1	\$ 12,000	\$12,000	\$4,000	\$0	\$4,000
	Corbett Creek								
04. WPCPs and Pumping Stations	WPCP	Office Furniture	(blank)	1	\$ 4,000	\$4,000	\$4,000	\$0	\$4,000
		Raw Sludge Pumps	(blank)	1	\$ 27,000	\$27,000	\$27,000	\$0	\$27,000
	Courtice WPCP	Digester Mechanical Rebuild	(blank)	1	\$ 70,000	\$70,000	\$70,000	\$0	\$70,000
		Flights and Chains	(blank)	1	\$ 60,000	\$60,000	\$60,000	\$0	\$60,000
		Generator Programmable Logic Controller	(blank)	1	\$ 32,500	\$32,500	\$32,500	\$0	\$32,500
		Office Furniture	(blank)	1	\$ 4,000	\$4,000	\$4,000	\$0	\$4,000
		Replace Actuators	(blank)	6	\$ 8,000	\$48,000	\$48,000	\$0	\$48,000
		Replace Sump Pump	(blank)	1	\$ 15,000	\$15,000	\$15,000	\$0	\$15,000
		Scum Pump	(blank)	1	\$ 30,000	\$30,000	\$30,000	\$0	\$30,000
	Harmony Creek								
	WPCP	Raw Sludge Pumps	(blank)	2	\$ 25,000	\$50,000	\$50,000	\$0	\$50,000
	WPCP Pumping Station - Bayview SPS	Transfer Switch & Electrical Replacements	(blank)	1	\$ 33,000	\$33,000	\$33,000	\$0	\$33,000
	WPCP Pumping Station - Conlin Rd SPS	Pump Replacement	(blank)	1	\$ 18,500	\$18,500	\$18,500	\$0	\$18,500
	WPCP Pumping Station - Finch SPS	Pump Replacement	(blank)	1	\$ 30,000	\$30,000	\$30,000	\$0	\$30,000
	WPCP Pumping Station - Simcoe North SPS	Pump Replacement	(blank)	1	\$ 60,000	\$60,000	\$60,000	\$0	\$60,000
	Duffin Creek								
05. B. Duffin Creek - Plant	WPCP	Ash Overflow Pump	(blank)	1	\$ 45,000	\$45,000	\$45,000	(\$32,972)	\$12,029
		Human Machine Interface Upgrades	(blank)	1	\$ 33,000	\$33,000	\$33,000	(\$25,549)	\$7,451
		Monitoring Software Upgrades	(blank)	1	\$ 22,000	\$22,000	\$22,000	(\$17,032)	\$4,968
		Networking Equipment	(blank)	1	\$ 40,000	\$40,000	\$40,000	(\$30,968)	\$9,032
		Programmable Logic Controller Upgrades	(blank)	1	\$ 80,000	\$80,000	\$80,000	(\$61,936)	\$18,064
		Reactor #1 and #2 Repairs	(blank)	1	\$ 250,000	\$250,000	\$250,000	(\$183,175)	\$66,825
I		SCADA Server Security	(blank)	1	\$ 25,000	\$25,000	\$25,000	(\$19,355)	\$5,645



Works - Sanitary Sewerage

Program Detail Page	Location	Item Description	Item #	Qty	Unit Cost	Gross Total Cost	Sewer Total	Other Financing	Net Sewer
05. B. Duffin Creek - Plant	Duffin Creek	SCADA Servers	(blank)	1	\$ 80,000	\$80,000	\$80,000	(\$61,936)	\$18,064
		Schwing Pump Conveyor Replacement	(blank)	1	\$ 75,000	\$75,000	\$75,000	(\$54,953)	\$20,048
		Stage 1 and 2 Phone/Paging System Update	(blank)	1	\$ 45,000	\$45,000	\$45,000	(\$34,839)	\$10,161
		Storage Upgrade	(blank)	1	\$ 200,000	\$200,000	\$200,000	(\$154,840)	\$45,160
06. Regional Environmental	Environmental								
Laboratory	Lab	Centrifuge	(blank)	1	\$ 30,000	\$30,000	\$30,000	(\$30,000)	\$0
		Computer Hardware	(blank)	1	\$ 10,000	\$10,000	\$10,000	(\$5,000)	\$5,000
		Incubators	(blank)	2	\$ 20,000	\$40,000	\$40,000	(\$40,000)	\$0
		Lab Media Refrigerator	(blank)	1	\$ 15,000	\$15,000	\$15,000	(\$7,500)	\$7,500
		Media preparation equipment for microbiology	(blank)	1	\$ 65,000	\$65,000	\$65,000	(\$65,000)	\$0
07. Engineering and Staff Support	Construction	Nuclear Densometer	(blank)	1	\$ 10,000	\$10,000	\$3,334	\$0	\$3,334
or. Engineering and Stair Support	Constituction	Office Furniture	(blank)	1	\$ 2,000	\$2,000	\$666	\$0	\$666
	Data System	Office I difficult	(DIATIK)	<u>'</u>	Ψ 2,000	Ψ2,000	φοσο	ΨΟ	\$000
	Management	GIS Hardware (Monitors, backup devices and other)	(blank)	1	\$ 10,000	\$10,000	\$5,000	\$0	\$5,000
	Engineering Planning and Studies	Workstation Furniture	(blank)	1	\$ 2,000	\$2,000	\$1,000	\$0	\$1,000
	Environmental		, ,			. ,	. ,		. , ,
		Workstation Furniture	(blank)	2	\$ 500	\$1,000	\$500	\$0	\$500
	Financial		(4.12.11)		,	41,000	7000	•	7555
	Services	Desktop Computer & Monitor Refresh	(blank)	100	\$ 967	\$96,672	\$40,119	\$0	\$40,119
		Laptop Computer & Monitor Refresh	(blank)	33	\$ 1,781	\$58,767	\$19,589	\$0	\$19,589
		Power Desktop Computer & Monitor Refresh	(blank)	24	\$ 2,188	\$52,508	\$1,458	\$0	\$1,458
		Power Laptop Computer & Monitor Refresh	(blank)	37	\$ 2,697	\$99,776	\$12,135	\$0	\$12,135
	Technical Support	Remotely Operated Vehicle	(blank)	1	\$ 25,000	\$25,000	\$12,500	\$0	\$12,500
		Remotery Operated Venicle	(DIATIK)	'	\$ 25,000	\$25,000	\$12,500	Φ0	\$12,500
	Water Pollution Control Plants	SCADA	(blank)	1	\$ 75,000	\$75,000	\$75,000	\$0	\$75,000
	Corbett Creek		(Diamity		10,000	ψ. ο,οοο	ψ. ο,οοο	Ψ.	\$1.0,000
08. Facilities Management	WPCP	Network Upgrades - Voice Over Internet Protocol	(blank)	1	\$ 165,000	\$165,000	\$165,000	\$0	\$165,000
		Repair Wall & Floor cracks in Administration							
		Building-Const.	(blank)	1	\$ 150,000	\$150,000	\$150,000	\$0	\$150,000
	Courtice WPCP	Backflow Preventer	(blank)	1	\$ 80,000	\$80,000	\$80,000	\$0	\$80,000
		Network Upgrades - Voice Over Internet Protocol	(blank)	1	\$ 135,000	\$135,000	\$135,000	\$0	\$135,000
	Lake Simcoe		(Diamy	<u> </u>	ψ 133,330	ψ100,000	ψ100,000	ΨΟ	ψ.55,550
	WPCP	Network Upgrades - Voice Over Internet Protocol	(blank)	1	\$ 65,000	\$65,000	\$65,000	\$0	\$65,000



Works - Sanitary Sewerage

Program Detail Page	Location	Item Description	Item #	Qty	Unit Cost	Gross Total Cost	Sewer Total	Other Financing	Net Sewer
	Newcastle								
08. Facilities Management	WPCP	Network Upgrades - Voice Over Internet Protocol	(blank)	1	\$ 90,000	\$90,000	\$90,000	\$0	\$90,000
		Water Fixture Replacement	(blank)	1	\$ 5,500	\$5,500	\$5,500	\$0	\$5,500
	Port Darlington								
	WPCP	Network Upgrades - Voice Over Internet Protocol	(blank)	1	\$ 120,000	\$120,000	\$120,000	\$0	\$120,000
		Repair roof leak in boiler room and compressor							
		room stairway	(blank)	1	\$ 187,000	\$187,000	\$187,000	\$0	\$187,000
	Uxbridge Brook								
	WPCP	Network Upgrades - Voice Over Internet Protocol	(blank)	1	\$ 60,000	\$60,000	\$60,000	\$0	\$60,000
Grand Total						\$3,051,223	\$2,773,801	(\$825,054)	\$1,948,747

Tangible Capital Asset Program Summary

	2,773,001
	2,773,801
8S Fleet/Equipment - Replacement	661,301
6S Facilities Management - Replacement	1,057,500
4S Environmental Lab - Replacement	160,000
2S Duffin Creek WPCP - Replacement	895,000

PROGRAM 9S TCA - CONSTRUCTION



2019 Program Detail

Detailed Cost of Program:	20	18		2019	9		
(\$,000's)	Estimated Actuals	Approved Budget	Base Budget	Program Change	Proposed Budget		
Tangible Capital Assets		_			_		
Capital Fund Contribution	19,959	19,959	19,959	1,625	21,584		
Total Tangible Capital Assets	19,959	19,959	19,959	1,625	21,584		

2019 Construction Program - Sanitary Sewerag	е										
							Cost I	Expenditure Attri	bution		
		EA				User Revenue		(\$ 000's)			Asset
	DC	Land		Grant/		Total	Commercial	Residential			Management
Project Description	Item No.	Design Const.	Gross Cost A	Subsidy/ Other B	Benefit to Existing C	User Revenue D	Development Charges E	Development Charges F	Institutional Charges G	Industrial Charges H	Reserve Fund
A LINEAR INFRASTRUCTURE					·					- ''	
Regional Road Program											
1 R.R.14 (Liberty St.) from Baseline Rd. to King St., Bowmanville		D	350	0.000	350.000	350.000	0.000	0.000	0.000	0.000	0.000
2 R.R. 46 (Brock St)/ Victoria St. Intersection works, Whitby		D,C	110	0.000	110.000	110.000	0.000	0.000	0.000	0.000	0.000
9 Hwy 12 (Brock St) from Manning Rd. to Rossland Rd., Whitby		D,C	320	0.000	320.000	320.000	0.000	0.000	0.000	0.000	0.000
Sub-total			780	0.000	780.000	780.000	0.000	0.000	0.000	0.000	0.000
Area Municipality Road Programs											
11A City of Pickering Road Program		D,C	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
11B Town of Ajax Road Program		D,C	850	0.000	650.000	650.000	9.200	147.600	0.600	42.600	0.000
11C Town of Whitby Road Program 11D City of Oshawa Road Program		D,C D,C	1,260	0.000	1,260.000 0.000	1,260.000 0.000	0.000	0.000	0.000	0.000	0.000
11E Municipality of Clarington Road Program		D,C	1,200	0.000	1,200.000	1,200.000	0.000	0.000	0.000	0.000	0.000
11F Township of Scugog Road Program		D,C	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
11G Township of Uxbridge Road Program		D,C	200	0.000	200.000	200.000	0.000	0.000	0.000	0.000	0.000
11H Township of Brock Road Program		D,C	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
11i Allowance for unknown requirements in conjunction		D,C	200	0.000	200.000	200.000	0.000	0.000	0.000	0.000	0.000
with area municipality road programs											
Sub-total MTO & GO Transit projects			3,710	0.000	3,510.000	3,510.000	9.200	147.600	0.600	42.600	0.000
13 Sewer replacement at Simcoe St./Albert St. & Hwy 401, Oshawa		D	70	0.000	70.000	70.000	0.000	0.000	0.000	0.000	0.000
Sub-total			70	0.000	70.000	70.000	0.000	0.000	0.000	0.000	0.000
Betterments/Replacements											
14 Works independent of road programs in various locations		D,C	696	0.000	696.100	696.100	0.000	0.000	0.000	0.000	0.000
15 Rehabilitation of existing sanitary sewers in various locations		D,C	300	0.000	0.000	0.000	0.000	0.000	0.000	0.000	300.000
16 YDSS – Rehabilitation of the trunk sanitary sewer		D,C	10,000	9,000.000	1,000.000	1,000.000	0.000	0.000	0.000	0.000	0.000
17 Replacement/improvements to CDC on Valley Farm Rd., Pickering 18 Rehab sewer on Kingston Rd from Delta Blvd. to Merritton Dr., Pickering		D,C D,C	1,000 370	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1,000.000 370.000
19 Replacement of sewer on Zator Ave from Bem Ave to Krosno Blvd, Pickering		D,C	1,000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1,000.000
20 Replacement of sewer on Miriam Rd from Zator Av S/L to N/L, Pickering		D,C	600	0.000	0.000	0.000	0.000	0.000	0.000	0.000	600.000
22 Southwood Park Area System Improvements and investigation works		D,C	1,200	0.000	1,200.000	1,200.000	0.000	0.000	0.000	0.000	0.000
23 Hunt St/ Kings Cres and Harwood Ave sewer diversion, Ajax		D,C	265	0.000	0.000	0.000	12.190	195.570	0.795	56.445	0.000
24 Replacement of sewer on Euclid St from Dundas St. to N of John St., Whitby		С	70	0.000	0.000	0.000	0.000	0.000	0.000	0.000	70.000
30 Replacement of sewer on Olive Ave fr Simcoe St to Drew St, Oshawa		D	240	0.000	240.000	240.000	0.000	0.000	0.000	0.000	0.000
31 Replacement of sewer on Centre St from King St to Athol St, Oshawa		С	1,385	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1,385.000
33 Replacement of sewer on Bloor St from Ortoro Ave to Wilson Rd, Oshawa 34 Replacement of sewer on Mechanic St from Victoria Dr to Church St. Uxbridge		D,C	1,100	0.000	1,100.000	1,100.000	0.000	0.000	0.000	0.000	0.000
34 Replacement of sewer on Mechanic St from Victoria Dr to Church St, Uxbridge 35 Valve replacement on forcemain outside the Water St SSPS,Scugog		D,C D.C	170 200	0.000	0.000	0.000	0.000	0.000	0.000	0.000	170.000 200.000
Sub-total		D,C	18,596	0.000.000	4,236.100	4,236.100	12.190	195.570	0.795	56.445	5,095.000
System Expansion											
* 38 Central Duffin Collector TSS from 4th Concession to Taunton Rd., Pickering	2	D,C	1,860		310.620	310.620		0.000	0.000	0.000	0.000
* 39 Central Duffin Collector TSS from Taunton Rd to Employment lands, Pickering	3	D,C	9,900		3,405.600	3,405.600		0.000	0.000	0.000	0.000
* 40 Sanitary Sewer on future street fr Dersan St. to Zents Dr., Pickering		D,C	725	0.000	0.000	0.000	33.350	535.050		154.425	0.000
* 42 Twinning of existing 450 mm on easement to Southwood SSPS, Ajax * 66 Courtice Trunk Sanitary Sewer Phase 3, Courtice	240	D	150		0.000	0.000	6.900	110.700		31.950	0.000
 * 66 Courtice Trunk Sanitary Sewer Phase 3, Courtice * 70 Baseline Rd. TSS from Simpson Ave to Bennett Rd., Bowmanville Phase 1 	210 302	D,C	25,900 3,000	0.000	0.000	0.000	1,191.400 138.000	19,114.200 2,214.000	77.700 9.000	5,516.700 639.000	0.000
* 75 Foster Creek Trunk Sanitary sewer, Newcastle	302	C C	1,200		0.000	0.000	55.200			255.600	0.000
Sub-total	511		42,735			3,716.220				6,597.675	0.000

								Cost E	expenditure Attri (\$ 000's)	bution		
			EA				User Revenue		,, , , , ,			Asset
	Project Description	DC Item No.	Land Design Const.	Gross Cost A	Grant/ Subsidy/ Other B	Benefit to Existing C	Total User Revenue D	Commercial Development Charges E	Residential Development Charges F	Institutional Charges G	Industrial Charges H	Management Reserve Fund I
В	BUILDINGS											
* 80	Duffin Creek WPCP - condition assessment, Pickering		D	600	461.400	0.000	0.000	0.000	0.000	0.000	0.000	138.60
* 81			С	13,000	9,196.200	0.000	0.000	395.200	2,470.000	103.246	835.354	0.00
* 82	7 9 1 9		С	4,000	3,900.000	100.000	100.000	0.000	0.000	0.000	0.000	0.00
* 85	7 9 1 9		С	600	0.000	600.000	600.000	0.000	0.000	0.000	0.000	0.00
* 86	, , ,	201	D,C	2,000	0.000	0.000	0.000	166.000	1,054.000	10.000	770.000	0.00
* 87			D	500	0.000	500.000	500.000	0.000	0.000	0.000	0.000	0.00
90		000	С	230	0.000	230.000	230.000	0.000	0.000	0.000	0.000	0.00
99 10	1 7 3	308	C D	1,214 60	0.000	0.000 60.000	0.000	100.519 0.000	639.778 0.000	6.313 0.000	467.390 0.000	0.00
103		500	D,C	2,500	0.000	0.000	0.000	207.000	1,317.500	13.000	962.500	0.00
	Water St. SSPS - upgrades	401	D,C	1,667	0.000	0.000	0.000	26.009	418.485	1.667	120.710	1,100.40
100	Sub-total	401	D,C	26.371	13,557.600	1.490.000	1.490.000	894.729	5.899.763	134.226	3.155.954	1,100.40
C * 11	MACHINERY AND EQUIPMENT 7 Duffin Creek WPCP - replacement of Reactor 1 & 2, Pickering		D	6,000	4,428.000	1,572.000	1,572.000	0.000	0.000	0.000	0.000	0.00
* 118	, , ,	704	C	650	325.000	0.000	0.000	14.950	239.850	0.975	69.225	0.00
	Duffin Creek WPCP - Phosphorous implementation plan	704	D	1,550	1,240.000	310.000	310.000	0.000	0.000	0.000	0.000	0.00
	Bayly St SSPS - Bar Screen Replacement		D,C	1,000	0.000	1,000.000	1,000.000	0.000	0.000	0.000	0.000	0.00
	Courtice WPCP - digester rehabililitation works, Clarington		D,C	1,700	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1,700.00
* 126			D,C	150	0.000	150.000	150.000	0.000	0.000	0.000	0.000	0.00
D	Sub-total IT INFRASTRUCTURE			11,050	5,993.000	3,032.000	3,032.000	14.950	239.850	0.975	69.225	1,700.00
E	Sub-total ALLOWANCES AND OTHER PROVISIONS			0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00
133	Asset Condition Assessment/Investigation TSS Systems	-	D	200	0.000	0.000	0.000	0.000	0.000	0.000	0.000	200.00
	5 Allowance for acquisition of easements	1	L	150	0.000	150.000	150.000	0.000	0.000	0.000	0.000	0.00
	Allowance for engineering studies		D	250	0.000	250.000	250.000	0.000	0.000	0.000	0.000	0.00
138			D	100	0.000	100.000	100.000	0.000	0.000	0.000	0.000	0.00
	Allowance for sundry extensions as per council policy		D,C	15	0.000	15.000	15.000	0.000	0.000	0.000	0.000	0.00
140	Allowance for unknown requirements		D,C	100	0.000	100.000	100.000	0.000	0.000	0.000	0.000	0.00
141	Allowance for land severance review and drawing requirements		D,C	100	0.000	100.000	100.000	0.000	0.000	0.000	0.000	0.00
	Allowance for Regional share for works in conjunction with residential subdivision development	707	D,C	1,460	0.000	0.000	0.000	67.160	1,077.480	4.380	310.980	0.00
143	non-residential development	705	, -	400	0.000	0.000	0.000	18.400	295.200	1.200	85.200	0.00
144	Allowance for intensification	-	D,C	350	0.000	0.000	0.000	16.100 101.660	258.300 1.630.980	1.050	74.550 470.730	200.00
	Sub-total Total Cost Attribution			3,125 106,437	0.000 36,594.380	715.000 17,549.320	715.000	2,457.579	30,973.313	6.630 236.151	10,392.629	8,234.00

2019 Construction Program - Sanitary Sewerage	9										
					Cost Expenditure Attribution (\$ 000's)						
		EA		Ī		User Revenue		Ì			Asset
Project Description	DC Item No.	Land Design Const.	Gross Cost A	Grant/ Subsidy/ Other B	Benefit to Existing C	Total User Revenue D	Commercial Development Charges E	Residential Development Charges F	Institutional Charges G	Industrial Charges H	Management Reserve Fund I
DC Revenue Shortfall to be financed from User Revenue				0.000	0.000	21,583.701	0.000	0.000	158.451	3,875.929	0.000
Institutional Charges and Industrial Charges											
Debentures Financing											
Courtice Trunk Sanitary Sewer Phase 3, Courtice Item No. 63				0.000	0.000	0.000	1,191.400	19,114.200	77.700	5,516.700	0.000
Other Financing - Regional Municipality of York:											
YDSS – Rehabilitation of the trunk sanitary sewer Item No. 16				9,000.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Duffin Creek WPCP - condition assessment, Pickering Item No. 80				461.400	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Duffin Creek WPCP - Stage III Solids expansion, Pickering Item No. 81				8,060.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Duffin Creek WPCP - replacement of Reactor 1 & 2, Pickering				4,428.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Regional Environmental Laboratory Upgrades, Pickering				325.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Duffin Creek WPCP - Phosphorous implementation plan				1,240.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Subtotal:				23,514.400	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Other Financing - Other Developer											
Central Duffin Collector TSS from 4th Concession to Taunton Rd., Pickering Item No. 38				1.549.380	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Central Duffin Collector TSS from Taunton Rd to Employment lands, Pickering Item No. 3	9			6,494.400	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Duffin Creek WPCP - Stage III Solids expansion, Pickering Item No. 81				1,136.200	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Seaton - Sanitary Sewage Pumping Station 4 and forcemains Item No. 82				3,900.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Subtotal:				13,079.980	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Total financing (including available Development Charge financing)				36,594.380		21,583.701	1,266,179	11.859.113	0.000	1.000.000	8,234.000
Total illiancing (illicidum) available Development Charge illiancing)				30,334.300		21,503.701	1,200.179	11,059.113	0.000	1,000.000	0,234.000

^{*} Indicates Capital project requires prior and/or future funding commitments. Refer to Construction of Municipal Services detail sheet.

								Expenditure Attr (\$ 000's)	ribution		
	D O	EA		0		User Rever		Danislandial			Asset Management
Project Description	DC Item No.	Land Design Const.	Gross Cost A	Grant/ Subsidy/ Other B	Benefit to Existing C	Total User Revenue D	Commercial Development Charges E	Residential Development Charges F	Institutional Charges G	Industrial Charges H	Reserve Fund
LINEAR INFRASTRUCTURE											
Regional Road Program											
6 R.R.57 (Bowmanville Ave.) from Baseline Rd to Nash Rd., Bowmanville	306	С	2,300	0.000	0.000	0.000	105.800	1,697.400	6.900	489.900	0.00
Sub-total		_	2,300	0.000	0.000	0.000	105.800	1,697.400	6.900	489.900	0.00
Area Municipality Road Programs											
11A City of Pickering Road Program		D,C	235	0.000	235.000	235.000	0.000	0.000	0.000	0.000	0.00
11B Town of Ajax Road Program		D,C	385	0.000	385.000	385.000	0.000	0.000	0.000	0.000	0.00
11C Town of Whitby Road Program		D,C	600	0.000	600.000	600.000	0.000	0.000	0.000	0.000	0.00
11D City of Oshawa Road Program		D,C	1,100	0.000	1,100.000	1,100.000	0.000	0.000	0.000	0.000	0.00
11E Municipality of Clarington Road Program 11F Township of Scugog Road Program		D,C D,C	300 75	0.000	300.000 75.000	300.000 75.000	0.000 0.000	0.000	0.000	0.000	0.00
11G Township of Uxbridge Road Program		D,C	340	0.000	340.000	340.000	0.000	0.000	0.000	0.000	0.00
11H Township of Brock Road Program		D,C	120	0.000	120.000	120.000	0.000	0.000	0.000	0.000	0.00
11i Allowance for unknown requirements in conjunction		D,C	200	0.000	200.000	200.000	0.000	0.000	0.000	0.000	0.00
with area municipality road programs		,									
Sub-total MTO & GO Transit projects			3,355	0.000	3,355.000	3,355.000	0.000	0.000	0.000	0.000	0.00
12 Allowance for unknown requirements		D,C	100	0.000	100.000	100.000	0.000	0.000	0.000	0.000	0.00
13 Sewer replacement at Simcoe St./Albert St. & Hwy 401, Oshawa		С	300	0.000	300.000	300.000	0.000	0.000	0.000	0.000	0.00
Sub-total Betterments/Replacements			400	0.000	400.000	400.000	0.000	0.000	0.000	0.000	0.00
14 Works independent of road programs in various locations		D,C	650	0.000	650.000	650.000	0.000	0.000	0.000	0.000	0.00
15 Rehabilitation of existing sanitary sewers in various locations		D,C	300	0.000	0.000	0.000	0.000	0.000	0.000	0.000	300.00
16 YDSS – Rehabilitation of the trunk sanitary sewer		D,C	66,600	61,938.000	4,662.000	4,662.000	0.000	0.000	0.000	0.000	0.00
21 Replacement of sewer on Krosno Blvd fr Modlin Rd to Alyssum St, Pickering 29 Replacement of sewer on Highland Rd from Gliddon Ave to Athol St, Oshawa		D C	100 50	0.000	0.000	0.000	0.000 0.000	0.000	0.000	0.000	100.00 50.00
30 Replacement of sewer on Olive Ave fr Simcoe St to Drew St, Oshawa		C	1,030	0.000	1,030.000	1,030.000	0.000	0.000	0.000	0.000	0.00
37 Allowance for construction of services in unserviced areas		C	200	0.000	200.000	200.000	0.000	0.000	0.000	0.000	0.00
Sub-total			68,930	61,938.000	6,542.000	6,542.000	0.000	0.000	0.000	0.000	450.00
System Expansion											
42 Twinning of sanitary sewer on easement fr Southwood PS to 500 m N, Ajax		С	1,250	0.000	0.000	0.000	57.500	922.500	3.750		0.00
47 Brooklin TSS on easement from Anderson to Thickson SSPS, W	226	D	880	0.000	0.000	0.000		649.440			
54 Thickson Rd. sub-TSS from Glengowan St. to Conlin Rd., Whitby 56 Conlin Rd. W TSS on W/O Boundary to Conlin SSPS, Whitby	233 219	D D	400 800	0.000	0.000	0.000	18.400 36.800	295.200 590.400	1.200 2.400		0.00
58 Twinning of NW branch of Harmony Creek trunk sewer, Oshawa	219	С	2,050	0.000	2,050.000	2,050.000	0.000	0.000	0.000		0.00
62 Conlin Rd. FM from Ritson Rd. to Harmony Rd., Oshawa	221	D	800	0.000	0.000	0.000		590.400	2.400		0.00
63 Harmony Rd. Sub Trunk Conlin Rd. to 1500 m Northerly, Oshawa	225	D	420	0.000	0.000	0.000	19.320	309.960	1.260		0.00
64 North Oshawa Creek West Branch TSS SSPS to Britannia, Oshawa	216	EA	500	0.000	0.000	0.000	23.000	369.000	1.500		0.00
							00.000	222 222			
65 North Oshawa Creek West Branch TSS hydro corridor to Columbus, Oshawa	217	EA	500	0.000	0.000	0.000	23.000	369.000	1.500		0.00
	217 209 302	EA C D	3,700 200	0.000 0.000 0.000	0.000 0.000 0.000	0.000 0.000 0.000	170.200	2,730.600 147.600	1.500 11.100 0.600	788.100	0.00 0.00 0.00

2020 Construction Frogram - Camitary Gewera	<u>g</u> c						Cost	Expenditure Attr	ibution		
Project Description	DC Item No.	EA Land Design Const.	Gross Cost	Grant/ Subsidy/ Other	Benefit to Existing	User Rever Total User Revenue	Commercial Development Charges	Residential Development Charges	Institutional Charges	Industrial Charges	Asset Management Reserve Fund
* 76 Foster Creek Trunk Sanitary sewer, Newcastle	312	D	500	0.000		0.000	23.000	369.000	1.500		0.000
* 77 Wilmot Trunk Sewer Rudell Rd. to King Ave. Newcastle	313	С	2,900	0.000		0.000	133.400	2,140.200	8.700		0.000
* 78 Wilmot Trunk Sewer on King Ave. to Hwy 115/35, Newcastle	314	D	300	0.000	0.000	0.000	13.800	221.400	0.900		0.000
Sub-total			16,900	0.000	2,050.000	2,050.000		10,959.300	44.550		0.000
B BUILDINGS			ŕ		ŕ	ŕ		,		,	
* 84 Carruthers SSPS pump and Standby power, Ajax	101	С	1,700	0.000	0.000	0.000	78.200	1,254.600	5.100	362.100	0.000
* 86 Corbett Creek WPCP - works to rectify existing deficiences, Whitby	201	С	5,500	0.000	0.000	0.000	456.500	2,898.500	27.500	2,117.500	0.000
* 89 Proposed Thickson Rd SSPS and FM, Whitby - Diversion Strategy	203	D	1,500	0.000	0.000	0.000	69.000	1,107.000	4.500	319.500	0.000
* 91 Harmony Creek WPCP - Demolition Plant No. 1		С	2,100	0.000	2,100.000	2,100.000	0.000	0.000	0.000	0.000	0.000
93 Proposed Conlin Rd. SSPS - expansion, Oshawa	207	D	1,000	0.000	0.000	0.000	46.000	738.000	3.000	213.000	0.000
* 95 Simcoe St. SSPS - replacement of building and FM, Oshawa	204	С	4,600	0.000	243.800	243.800	200.790	3,215.400	12.558	927.452	0.000
99 Newcastle WPCP - Capacity Re-rating from 4 MLD to 7 MLD	308	С	4,900	0.000		0.000	405.720	2,582.300	25.480		0.000
101 Decommission Rudell Rd., Newcastle		C	540	0.000		540.000	0.000	0.000	0.000		0.000
103 Uxbridge WPCP - Optimization Study, upgrades and rehabilitation		C	1,800	0.000		1,800.000	0.000	0.000	0.000		0.000
105 Water St. SSPS - upgrades	401	C	5,430	0.000	,	0.000	84.713	1,363.005	5.430	393.154	3,583.998
107 Sunderland WPCP - Lagoon System	600	D	500	0.000		250.000	20.700	131.750	1.300		0.000
109 Cannington WPCP - Lagoon System	601	D	500	0.000		250.000	20.700	131.750	1.300		0.000
Sub-total			30,070	0.000		5,183.800		13,422.305	86.168		3,583.998
C MACHINERY AND EQUIPMENT			47.000	40.540.000	4.454.000	4.454.000	0.000	0.000	0.000	0.000	0.000
* 116 Duffin Creek WPCP - Digest mixing improvements & MCC		С	17,000					0.000	0.000		0.000
* 117 Duffin Creek WPCP - replacement of Reactor 1 & 2, Pickering		С	10,000	7,380.000				0.000	0.000		0.000
* 119 Duffin Creek WPCP - Phosphorous implementation plan		С	3,450	2,760.000		690.000		0.000	0.000		0.000
* 120 Duffin Creek WPCP - remedial works & improvements		D	1,500	1,200.000		300.000		0.000	0.000		0.000
* 121 Bayly St SSPS - MCC review and upgrades		С	1,400	0.000		1,400.000		0.000	0.000	0.000	0.000
* 122 Cloveridge SSPS - Bar Screen Replacement & MCC review and upgrades		D	500	0.000		500.000	0.000	0.000	0.000		0.000
* 123 Madawaska Pumping Station - stand by power, Oshawa		С	1,200	0.000		1,200.000		0.000	0.000		0.000
* 127 Port Darlington WPCP- Major Maintenance Replacement work		D,C	3,700	0.000		0.000		0.000	0.000		3,700.000
Sub-total D IT INFRASTRUCTURE			38,750	23,886.000	11,164.000	11,164.000	0.000	0.000	0.000	0.000	3,700.000
Sub-total E ALLOWANCES AND OTHER PROVISIONS			0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
130 Inflow/infiltration studies in various locations		D,C	500	0.000	500.000	500.000	0.000	0.000	0.000	0.000	0.000
131 Emergency Planning updating	+	D,C	100	0.000		100.000	0.000	0.000	0.000		0.000
132 Asset Condition Assessments - Report	+	D	300	0.000		0.000		0.000	0.000		300.000
132 Asset Condition Assessment/Investigation TSS Systems	1	D	200	0.000				0.000	0.000		200.000
	+			0.000		200.000			0.000		
134 Master planning energy management 135 Allowance for acquisition of easements	+	D,C	200 150	0.000				0.000			0.000
_	+					150.000			0.000		0.000
136 Allowance for engineering studies	1	D	150	0.000		150.000		0.000	0.000		0.000
138 Preliminary Engineering	1	D	100	0.000		100.000		0.000	0.000		0.000
139 Allowance for sundry extensions as per council policy		D,C	15	0.000		15.000		0.000	0.000		0.000
140 Allowance for unknown requirements	1	D,C	100	0.000		100.000		0.000	0.000		0.000
141 Allowance for land severance review and drawing requirements	1	D,C	100	0.000		100.000		0.000	0.000		0.000
142 Allowance for Regional share for works in conjunction with residential subdivision development	707	D,C	1,460	0.000	0.000	0.000	67.160	1,077.480	4.380	310.980	0.000

2020 Construction Program - Sanitary Sewerage	2020 Construction Program - Sanitary Sewerage														
					Cost Expenditure Attribution (\$ 000's)										
		EA		0		User Rever		B. Charles			Asset				
Project Description	DC Item	Land Design	Gross	Grant/ Subsidy/	Benefit to	Total User	Commercial Development	Residential Development	Institutional	Industrial	Management Reserve				
1 1 3 jost 2 3 3 0 1 p 1 0 1 1	No.	Const.	Cost	Other	Existing	Revenue	Charges	Charges	Charges	Charges	Fund				
143 Allowance for Regional share for works in conjunction with non-residential development	705	D,C	400	0.000	0.000	0.000	18.400	295.200	1.200	85.200	0.000				
144 Allowance for intensification		D,C	350	0.000	0.000	0.000	16.100	258.300	1.050	74.550	0.000				
Sub-total			4,125	0.000	1,415.000	1,415.000	101.660	1,630.980	6.630	470.730	500.000				
Total Cost Attribution			164,830	85,824.000	30,109.800	30,109.800	2,272.883	27,709.985	144.248	10,535.386	8,233.998				

^{*} Indicates Capital project requires prior and/or future funding commitments. Refer to Construction of Municipal Services detail sheet.

N	
œ	
282	

2021 Construction Program - Sanitary Sewera	age												
					Cost Expenditure Attribution (\$ 000's)								
Project Description	DC Item No.	EA Land Design Const.	Gross Cost A	Grant/ Subsidy/ Other B	Benefit to Existing C	User Rever Total User Revenue D	Commercial Development Charges E	Residential Development Charges	Institutional Charges G	Industrial Charges H	Asset Management Reserve Fund		
A LINEAR INFRASTRUCTURE							_	•		- ''	•		
Regional Road Program													
4 R.R.43 (Cochrane St.) from Ferguson St to Bonacord Ave, Whitby		С	640	0.000	640.000	640.000	0.000	0.000	0.000	0.000	0.00		
* 5 R.R.53 (Stevenson Rd.) from Bond St. to Rossland Rd., Oshawa		D	275	0.000	275.000	275.000	0.000	0.000	0.000	0.000	0.00		
6 R.R.57 (Bowmanville Ave.) from Baseline Rd to Nash Rd., Bowmanville	307	С	450	0.000	0.000	0.000	20.700	332.100	1.350	95.850	0.000		
* 7 R.R.59 (Gibb St.) from Stevenson Rd. to Simcoe St., Oshawa		С	220	0.000	220.000	220.000	0.000	0.000	0.000	0.000	0.00		
10 Allowance for sanitary sewers in conjuction with Regional Roads		D,C	500	0.000	500.000	500.000	0.000	0.000	0.000	0.000	0.00		
Sub-total Area Municipality Road Programs			2,085	0.000	1,635.000	1,635.000	20.700	332.100	1.350	95.850	0.00		
11A City of Pickering Road Program		D,C	235	0.000	235.000	235.000	0.000	0.000	0.000	0.000	0.000		
11B Town of Ajax Road Program		D,C	365	0.000	365.000	365.000	0.000	0.000	0.000	0.000	0.000		
11C Town of Whitby Road Program		D,C	600	0.000	600.000	600.000	0.000	0.000	0.000	0.000	0.00		
11D City of Oshawa Road Program		D,C	1,100	0.000	1,100.000	1,100.000	0.000	0.000	0.000	0.000	0.000		
11E Municipality of Clarington Road Program		D,C	300	0.000	300.000	300.000	0.000	0.000	0.000	0.000	0.000		
11F Township of Scugog Road Program		D,C	75	0.000	75.000	75.000	0.000	0.000	0.000	0.000	0.000		
11G Township of Uxbridge Road Program		D,C	340	0.000	340.000	340.000	0.000	0.000	0.000	0.000	0.000		
11H Township of Brock Road Program		D,C	120	0.000	120.000	120.000	0.000	0.000	0.000	0.000	0.000		
Allowance for unknown requirements in conjunction with area municipality road programs		D,C	200	0.000	200.000	200.000	0.000	0.000			0.000		
Sub-total MTO & GO Transit projects			3,335	0.000	3,335.000	3,335.000	0.000	0.000	0.000	0.000	0.000		
* 12 Allowance for unknown requirements		D,C	100	0.000	100.000	100.000	0.000	0.000	0.000	0.000	0.000		
Sub-total Betterments/Replacements			100	0.000	100.000	100.000	0.000	0.000	0.000	0.000	0.000		
14 Works independent of road programs in various locations	-	D,C	650	0.000	650.000	650.000	0.000	0.000	0.000	0.000	0.000		
15 Rehabilitation of existing sanitary sewers in various locations		D,C	500	0.000	0.000	0.000	0.000	0.000			500.00		
21 Replacement of ss on Krosno Blvd from Modlin Rd to Alyssum St, Pickering		С	780	0.000	0.000	0.000	0.000	0.000	0.000	0.000	780.000		
32 Replacement of sewer on RR 22 from Cubert St to Oxford St, Oshawa		D,C	360	0.000	0.000	0.000	0.000	0.000	0.000	0.000	360.000		
36 Replacement of sanitary sewers in various locations		D,C	1,894	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1,894.00		
37 Allowance for construction of services in unserviced areas		С	200	0.000	200.000	200.000	0.000	0.000	0.000	0.000	0.000		
Sub-total System Expansion			4,384	0.000	850.000	850.000	0.000	0.000	0.000	0.000	3,534.00		
* 41 Duffin Creek - YDSS primary trunk sanitary sewer twinning, Pickering	104	EA	6,000	4,800.000	0.000	0.000	55.200	885.600	3.600	255.600	0.00		
* 48 West Brooklin TSS from Cochrane to East Highway 12, Whitby	227	D	1,200	0.000	0.000	0.000	55.200	885.600	3.600	255.600	0.000		
* 49 Southwest Brooklin TSS from Cochrane to Highway 12, Whitby	228	D	400	0.000	0.000	0.000	18.400	295.200	1.200	85.200	0.00		
* 62 Conlin Rd. FM from Ritson Rd. to Harmony Rd., Oshawa	221	С	7,200	0.000	0.000	0.000	331.200	5,313.600			0.00		
* 63 Harmony Rd. Sub Trunk Conlin Rd. to 1500 m Northerly, Oshawa	225	С	3,800	0.000	0.000	0.000	174.800	2,804.400			0.00		
* 66 Courtice Sanitary Trunk Sanitary Sewer Phase 4, Courtice	211	D,C	43,400	0.000	0.000	0.000	1,996.400	32,029.200	130.200	9,244.200	0.00		
* 69 Southeast Courtice Sub-Trunk Sanitary Sewer, Courtice	234	D	550	0.000	0.000	0.000	25.300	405.900	1.650		0.000		
* 76 Foster Creek Trunk Sanitary Sewer, Newcastle	312	D	2,000	0.000	0.000	0.000	92.000	1,476.000			0.000		
* 78 Wilmot Trunk Sanitary Sewer on King Ave to Hwy 115/35, Newcastle	314	С	1,100	0.000	0.000	0.000	50.600	811.800	3.300	234.300	0.000		

							Cost	Expenditure Attr	ibution		
								(\$ 000's)			_
Project Description	DC Item No.	EA Land Design Const.	Gross Cost	Grant/ Subsidy/ Other	Benefit to Existing	User Rever Total User Revenue	Commercial Development Charges	Residential Development Charges	Institutional Charges	Industrial Charges	Asset Management Reserve Fund
	NO.	Const.	A	B	C	D	E	F	G	H	I
Sub-total			65,650	4,800.000	0.000		2,799.100	44,907.300	182.550		0.000
B BUILDINGS											
* 87 Corbett Creek WPCP - New Headworks Building		С	4,900	0.000	4,900.000	4,900.000	0.000	0.000	0.000	0.000	0.000
* 97 Proposed Baseline Rd SSPS, Courtice	208	EA	500	0.000	0.000	0.000	23.000	369.000	1.500	106.500	0.000
102 Decommission Sunset SSPS , Newcastle		D,C	600	0.000	600.000	600.000	0.000	0.000	0.000	0.000	0.000
* 114 Septage receiving station, Region Wide		D	250	0.000	250.000	250.000	0.000	0.000	0.000	0.000	0.000
Sub-total C MACHINERY AND EQUIPMENT			6,250	0.000	5,750.000	5,750.000	23.000	369.000	1.500	106.500	0.000
* 117 Duffin Creek WPCP - replacement of Reactor 1 & 2, Pickering		С	00.700	21,918.600	7,781.400	7,781.400	0.000	0.000	0.000	0.000	0.000
* 120 Duffin Creek WPCP - replacement of Reactor 1 & 2, Pickering * 120 Duffin Creek WPCP - remedial works & improvements		C	13,000		2,600.000	,	0.000	0.000	0.000	0.000	0.000
* 122 Cloveridge SSPS - Bar Screen Replacement & MCC review		C	2,100	0.000			0.000	0.000	0.000	0.000	0.000
* 124 Courtice WPCP - Plant upgrades		D	350	0.000	350.000		0.000	0.000	0.000	0.000	0.000
* 127 Port Darlington WPCP- Major Maintenance Replacement work		C	4.200	0.000	0.000		0.000	0.000	0.000	0.000	4,200.000
Sub-total			49,350				0.000	0.000	0.000	0.000	4,200.000
D IT INFRASTRUCTURE											
Sub-total											
E ALLOWANCES AND OTHER PROVISIONS											
130 Inflow/infiltration studies in various locations		D,C	500	0.000	500.000	500.000	0.000	0.000	0.000	0.000	0.000
132 Asset Condition Assessments - Report		D	300	0.000	0.000	0.000	0.000	0.000	0.000	0.000	300.000
133 Asset Condition Assessment/Investigation TSS Systems		D	200	0.000	0.000	0.000	0.000	0.000	0.000	0.000	200.000
135 Allowance for acquisition of easements		L	150	0.000	150.000	150.000	0.000	0.000	0.000	0.000	0.000
136 Allowance for engineering studies		D D	150	0.000	150.000	150.000	0.000	0.000	0.000	0.000	0.000
138 Preliminary Engineering		D.C	100 15	0.000	100.000 15.000	100.000 15.000	0.000	0.000	0.000	0.000	0.000
139 Allowance for sundry extensions as per council policy 140 Allowance for unknown requirements		D,C	100	0.000	100.000	100.000	0.000	0.000	0.000	0.000	0.000
141 Allowance for land severance review and drawing requirements		D,C	100	0.000	100.000	100.000	0.000	0.000	0.000	0.000	0.000
142 Allowance for Regional share for works in conjunction with residential subdivision development	707	D,C	1,460	0.000	0.000	0.000	67.160	1,077.480	4.380	310.980	0.000
143 Allowance for Regional share for works in conjunction with non-residential development	705	D,C	400	0.000	0.000		18.400	295.200	1.200	85.200	0.000
144 Allowance for intensification		D,C	350	0.000	0.000	0.000	16.100	258.300	1.050	74.550	0.000
Sub-total			3,825	0.000	1,115.000	1,115.000	101.660	1,630.980	6.630	470.730	500.000
Total Cost Attribution			134,979	37,118.600	25,616.400	25,616.400	2,944.460	47,239.380	192.030	13,634.130	8,234.000

^{*} Indicates Capital project requires prior and/or future funding commitments. Refer to Construction of Municipal Services detail sheet.

79 Duffin Creek WPCP - New or expanded outfall

2022 Construction Program - Sanitary Sewerage **Cost Expenditure Attribution** (\$ 000's) EΑ User Revenue Asset DC Land Grant/ Total Commercial Residential Management Development **Project Description** Item Design Gross Subsidy/ Benefit to User Development Institutional Industrial Reserve No. Const. Cost Other **Existing** Revenue Charges Charges Charges Charges Fund Α С D G н LINEAR INFRASTRUCTURE Regional Road Program 1 R.R.14 (Liberty St.) from Baseline Rd. to King St., Bowmanville 1.400.000 1,400,000 0.000 0.000 0.000 0.000 С 1.400 0.000 0.000 8 R.R. 59 (Gibb St.)/ Olive Ave. interconnection, Oshawa D 100 0.000 100.000 100.000 0.000 0.000 0.000 0.000 0.000 D.C 500 0.000 0.000 0.000 0.000 10 Allowance for sanitary sewers in conjuction with Regional Roads 500.000 500.000 0.000 0.000 Sub-total 2,000 0.000 2,000.000 2,000.000 0.000 0.000 0.000 0.000 0.000 **Area Municipality Road Programs** 11A City of Pickering Road Program D,C 235 0.000 235.000 235.000 0.000 0.000 0.000 0.000 0.000 11B Town of Aiax Road Program D.C 365 0.000 365,000 365.000 0.000 0.000 0.000 0.000 0.000 11C Town of Whitby Road Program D,C 600 0.000 600.000 600.000 0.000 0.000 0.000 11D City of Oshawa Road Program 0.000 1,100.000 1.100.000 0.000 0.000 0.000 D,C 1.100 0.000 0.000 11E Municipality of Clarington Road Program 0.000 300.000 D,C 300 300.000 0.000 0.000 0.000 0.000 0.000 11F Township of Scugog Road Program D.C 75 0.000 75.000 75.000 0.000 0.000 0.000 0.000 0.000 11G Township of Uxbridge Road Program 340 0.000 340.000 340.000 0.000 0.000 0.000 D,C 0.000 0.000 11H Township of Brock Road Program D.C 120 0.000 120,000 120,000 0.000 0.000 0.000 0.000 0.000 200 0.000 200.000 200.000 0.000 0.000 0.000 11i Allowance for unknown requirements in conjunction D,C 0.000 0.000 with area municipality road programs 3.335.000 3.335.000 Sub-total 3.335 0.000 0.000 0.000 0.000 0.000 0.000 MTO & GO Transit projects D.C 12 Allowance for unknown requirements 100 0.000 100.000 100.000 0.000 0.000 0.000 0.000 0.000 Sub-total 100 0.000 100.000 100.000 0.000 0.000 0.000 0.000 0.000 Betterments/Replacements 14 Works independent of road programs in various locations D,C 650 0.000 650.000 650.000 0.000 0.000 0.000 0.000 0.000 15 Rehabilitation of existing sanitary sewers in various locations 0.000 D.C 500 0.000 0.000 0.000 0.000 0.000 0.000 500.000 36 Replacement of sanitary sewers in various locations D,C 6,234 0.000 0.000 0.000 0.000 0.000 6,234.000 0.000 0.000 37 Allowance for construction of services in unserviced areas 0.000 200.000 200.000 0.000 0.000 0.000 С 200 0.000 0.000 Sub-total 7,584 0.000 850.000 850.000 0.000 0.000 0.000 0.000 6,734.000 System Expansion 43 Church St. from Hydro Right of Way to Taunton Rd., Ajax 200 0.000 0.000 0.000 9.200 147.600 0.600 42.600 109 D 0.000 46 West Whitby sub trunk on Dundas St. fr Coronation Rd to Halls Rd. 222 D 500 0.000 50.000 50.000 20.750 332,000 1.300 95.950 0.000 47 Brooklin TSS on easement from Anderson to Thickson SSPS, W 226 3,520 0.000 0.000 0.000 161.920 2,597.760 10.560 749.760 0.000 С 56 Conlin Rd. W TSS on W/O Boundary to Conlin SSPS, Whitby 219 С 5,800 0.000 0.000 0.000 266.800 4,280.400 17,400 1,235.400 0.000 59 North Oshawa Creek (East Branch) TSS, Oshawa 220 900 0.000 0.000 0.000 41.400 664.200 2.700 191.700 0.000 D 64 North Oshawa Creek West Branch TSS fr Conlin SSPS to Britannia, Oshawa 216 D 500 0.000 0.000 0.000 23.000 369.000 1.500 106.500 0.000 217 1,500 0.000 0.000 69.000 1.107.000 4.500 319.500 0.000 65 North Oshawa Creek West Branch TSS hydro corridor to Columbus, Oshawa D 0.000 809.400 70 Baseline Rd. TSS from Simpson Ave to Bennett Rd., Bowmanville 302 С 3,800 0.000 0.000 0.000 174.800 2,804.400 11.400 0.000 72 Port Darlington Rd, TSS from Baseline Rd, to easement, Bowmanville 305 С 7.100 0.000 0.000 0.000 326,600 5.239.800 21.300 1.512.300 0.000 50.000 17,542.160 71.260 0.000 Sub-total 23,820 0.000 50.000 1,093.470 5,063.110 BUILDINGS

100

240.000

203,712.000 28,128.000 28,128.000

676.800

4.300.800

43.200

3.139.200

0.000

2022 Construction Program - Sanitary Sewerage

					Cost Expenditure Attribution (\$ 000's)							
		EA				User Reven	nue	,			Asset	
	DC	Land		Grant/		Total	Commercial	Residential			Management	
Project Description	Item	Design	Gross	Subsidy/	Benefit to	User	Development	Development	Institutional	Industrial	Reserve	
	No.	Const.	Cost	Other	Existing	Revenue	Charges	Charges	Charges	Charges	Fund	
93 Conlin Rd. SSPS - expansion, Oshawa	207	С	66,000	0.000	0.000	0.000	3,036.000	48,708.000	198.000		0.000	
* 97 Proposed Baseline Rd SSPS, Courtice	208	D	400	0.000	0.000	0.000	18.400	295.200	1.200	85.200	0.000	
107 Sunderland WPCP - Lagoon System	600	С	9,000	0.000	4,500.000	4,500.000	372.600	2,371.500	23.400	1,732.500	0.000	
109 Cannington WPCP - Lagoon System	601	С	9,000	0.000	4,500.000	4,500.000	372.600	2,371.500	23.400	1,732.500	0.000	
* 114 Septage receiving station, Region Wide		С	1,500	0.000	1,500.000	1,500.000	0.000	0.000	0.000	0.000	0.000	
Sub-total Sub-total			325,900	203,712.000	38,628.000	38,628.000	4,476.400	58,047.000	289.200	20,747.400	0.000	
C MACHINERY AND EQUIPMENT												
* 117 Duffin Creek WPCP - replacement of Reactor 1&2, Pickering		С	40,300	29,741.400	10,558.600	10,558.600	0.000	0.000	0.000	0.000	0.000	
* 125 Courtice WPCP - Plant upgrades		D	500	0.000	500.000	500.000	0.000	0.000	0.000	0.000	0.000	
Sub-total			40,800	29,741.400		11,058.600	0.000	0.000	0.000	0.000	0.000	
D IT INFRASTRUCTURE												
128 SCADA System Master Plan for Sanitary Sewage Pumping Stations		D	1,000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1,000.000	
Sub-total E ALLOWANCES AND OTHER PROVISIONS			1,000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1,000.000	
130 Inflow/infiltration studies in various locations		D,C	500	0.000	500.000	500.000	0.000	0.000	0.000	0.000	0.000	
132 Asset Condition Assessments - Report		D	300	0.000	0.000	0.000	0.000	0.000	0.000	0.000	300.000	
133 Asset Condition Assessment/Investigation TSS Systems		D	200	0.000	0.000	0.000	0.000	0.000	0.000	0.000	200.000	
135 Allowance for acquisition of easements		L	150	0.000	150.000	150.000	0.000	0.000	0.000	0.000	0.000	
136 Allowance for engineering studies		D	150	0.000	150.000	150.000	0.000	0.000	0.000	0.000	0.000	
138 Preliminary Engineering		D	100	0.000	100.000	100.000	0.000	0.000	0.000	0.000	0.000	
139 Allowance for sundry extensions as per council policy		D,C	15	0.000	15.000	15.000	0.000	0.000	0.000	0.000	0.000	
140 Allowance for unknown requirements		D,C	100	0.000	100.000	100.000	0.000	0.000	0.000	0.000	0.000	
141 Allowance for land severance review and drawing requirements		D,C	100	0.000	100.000	100.000	0.000	0.000	0.000	0.000	0.000	
142 Allowance for Regional share for works in conjunction with residential subdivision development	707	D,C	1,460	0.000	0.000	0.000	67.160	1,077.480	4.380	310.980	0.000	
143 Allowance for Regional share for works in conjunction with non-residential development	705	D,C	400	0.000	0.000	0.000	18.400	295.200	1.200	85.200	0.000	
144 Allowance for intensification		D,C	350	0.000	0.000	0.000	16.100	258.300	1.050	74.550	0.000	
Sub-total		·	3,825	0.000	1,115.000	1,115.000	101.660	1,630.980	6.630	470.730	500.000	
Total Cost Attribution			408,364	233,453.400	57,136.600	57,136.600	5,671.530	77,220.140	367.090	26,281.240	8,234.000	

^{*} Indicates Capital project requires prior and/or future funding commitments. Refer to Construction of Municipal Services detail sheet.

Regional Road Program										Expenditure Attr	ribution		
Regional Road Program		,	Item	Land Design	Cost	Subsidy/ Other	Existing	Total User Revenue	Commercial Development Charges	Development Charges	Charges	Charges	Management Reserve
10 Allowance for samilarly sewers in conjuction with Regional Roads D.C. 2,000 0.000 2,000,000 2,000,000 0.000	Α	LINEAR INFRASTRUCTURE											
Sub-total		Regional Road Program											
11A City of Pickering Road Program	10	Allowance for sanitary sewers in conjuction with Regional Roads		D,C						0.000		0.000	0.000
118 Towner I Ajas Road Program					2,000	0.000	·	,	0.000	0.000	0.000	0.000	0.000
11 Town of Whitely Road Program		, , ,		, -									
11 City of Delawar Road Program				, -									
11				-,-									
11F Township of Scugge Road Program			+				,						
111 Township of Ubridge Road Program				, -									
11 Allowance for unknown requirements in conjunction with area municipality road programs D.C. 200 0.000 200.000 200.000 200.000 0.0						0.000	340.000						
Sub-total Sub-													
Sub-total Sub-total Sub-total Sub-total Sub-total D.C. 100 0.000 100.000 100.000 0.000	11i			D,C	200	0.000	200.000	200.000	0.000	0.000	0.000	0.000	0.000
* 12 Allowance for unknown requirements		, , , ,			E 220	0.000	2.070.000	2.070.000	100 100	1 724 200	7.050	500 550	0.000
Sub-total Sub-total Diction Continue					3,320	0.000	2,970.000	2,970.000	100.100	1,704.000	7.000	300.330	0.000
Betterments/Replacements	* 12	,		D,C									
15 Rehabilitation of existing sanitary sewers in various locations D.C 500 0.000 0		Betterments/Replacements											
27 Replacement of sewer on Walnut St from Euclid St to Kent St, Whitby D,C 180 0.000													
36 Replacement of sanitary sewers in various locations D,C 5,654 0.000 0.0				, -									
37 Allowance for construction of services in unserviced areas C 200 0.000 200.000 200.000 0.00													
Sub-total System Expansion T,184				, -									
* 41 Duffin Creek - YDSS primary trunk sewer twinning, Pickering 104 D 15,000 12,000.000 0.000 138.000 2,214.000 9.000 639.000 0.000 0.000 136.620 2,191.860 8.910 632.610 0.000 0.000 0.000 0.000 136.620 0.000 0										0.000		0.000	
43 Church St. from Hydro Right of Way to Taunton Rd., Ajax 109 C 2,970 0.000 0.000 0.000 136.620 2,191.860 8.910 632.610 0.000 * 46 West Whitby sub trunk on Dundas St. fr Coronation Rd to Halls Rd., Whitby 222 C 3,000 0.000 300.000 300.000 124.500 1,992.000 7.800 575.700 0.000 * 48 West Brooklin TSS from Cochrane to east highway 12, Whitby 227 C 7,000 0.000 0.000 0.000 322.000 5,166.000 21.000 1,491.000 0.000 * 49 Southwest Brooklin TSS from Cochrane to highway 12, Whitby 228 C 3,800 0.000 0.000 0.000 174.800 2,804.400 11.400 809.400 0.000 * 54 Thickson Rd. sub-TSS from Glengowan St. to Conlin Rd., Whitby 233 C 2,700 0.000 0.000 0.000 124.200 1,992.600 8.100 575.100 0.000 * 59 North Oshawa Creek (East Branch) TSS, Oshawa 220 C 3,500 0.000 0.000 0.000 161.000 2,583.000 10.500 745.500 0.000 * 66 Courtice TSS - Phase 5, Courtice 212 C 14,800 0.000 0.000 0.000 188.600 3,025.800 12.300 873.300 0.000 * 69 Southeast Courtice sub-Trunk Sanitary Sewer, Courtice 234 C 4,100 0.000 0.000 0.000 188.600 3,025.800 12.300 873.300 0.000 * Bull DINGS		•											
* 46 West Whitby sub trunk on Dundas St. fr Coronation Rd to Halls Rd., Whitby 222 C 3,000 0.000 300.000 300.000 124.500 1,992.000 7.800 575.700 0.000 * 48 West Brooklin TSS from Cochrane to east highway 12, Whitby 227 C 7,000 0.000 0.000 0.000 322.000 5,166.000 21.000 1,491.000 0.000 * 49 Southwest Brooklin TSS from Cochrane to highway 12, Whitby 228 C 3,800 0.000 0.000 0.000 174.800 2,804.400 11.400 809.400 0.000 * 54 Thickson Rd. sub-TSS from Glengowan St. to Conlin Rd., Whitby 233 C 2,700 0.000 0.000 0.000 124.200 1,992.600 8.100 575.100 0.000 * 59 North Oshawa Creek (East Branch) TSS, Oshawa 220 C 3,500 0.000 0.000 0.000 161.000 2,583.000 10.500 745.500 0.000 * 66 Courtice TSS - Phase 5, Courtice 212 C 14,800 0.000 0.000 0.000 188.600 3,022.400 44.400 3,152.400 0.000 * 69 Southeast Courtice sub-Trunk Sanitary Sewer, Courtice 234 C 4,100 0.000 0.000 0.000 188.600 3,025.800 12.300 873.300 0.000 * BUILDINGS			_										
* 48 West Brooklin TSS from Cochrane to east highway 12, Whitby 227 C 7,000 0.000 0.000 0.000 0.000 5,166.000 21.000 1,491.000 0.000 * 49 Southwest Brooklin TSS from Cochrane to highway 12, Whitby 228 C 3,800 0.000 0.000 0.000 174.800 2,804.400 11.400 809.400 0.000 * 54 Thickson Rd. sub-TSS from Glengowan St. to Conlin Rd., Whitby 233 C 2,700 0.000 0.000 0.000 124.200 1,992.600 8.100 575.100 0.000 * 59 North Oshawa Creek (East Branch) TSS, Oshawa 220 C 3,500 0.000 0.000 0.000 161.000 2,583.000 10.500 745.500 0.000 * 66 Courtice TSS - Phase 5, Courtice 212 C 14,800 0.000 0.000 0.000 0.000 188.600 10,922.400 44.400 3,152.400 0.000 * 69 Southeast Courtice sub-Trunk Sanitary Sewer, Courtice 234 C 4,100 0.000 0.000 0.000 188.600 3,025.800 12.300 873.300 0.000 Sub-total 56,870 12,000.000 300.000 300.000 2,050.520 32,892.060 133.410 9,494.010 0.000 B BUILDINGS			_										
* 49 Southwest Brooklin TSS from Cochrane to highway 12, Whitby 228 C 3,800 0.000 0.000 0.000 174.800 2,804.400 11.400 809.400 0.000 * 54 Thickson Rd. sub-TSS from Glengowan St. to Conlin Rd., Whitby 233 C 2,700 0.000 0.000 0.000 124.200 1,992.600 8.100 575.100 0.000 * 59 North Oshawa Creek (East Branch) TSS, Oshawa 220 C 3,500 0.000 0.000 0.000 161.000 2,583.000 10.500 745.500 0.000 * 66 Courtice TSS - Phase 5, Courtice 212 C 14,800 0.000 0.000 0.000 0.000 188.600 10,922.400 44.400 3,152.400 0.000 * 69 Southeast Courtice sub-Trunk Sanitary Sewer, Courtice 234 C 4,100 0.000 0.000 0.000 188.600 3,025.800 12.300 873.300 0.000 Sub-total 56,870 12,000.000 300.000 300.000 2,050.520 32,892.060 133.410 9,494.010 0.000 B BUILDINGS													
* 54 Thickson Rd. sub-TSS from Glengowan St. to Conlin Rd., Whitby 233 C 2,700 0.000 0.000 0.000 124.200 1,992.600 8.100 575.100 0.000 * 59 North Oshawa Creek (East Branch) TSS, Oshawa 220 C 3,500 0.000 0.000 0.000 161.000 2,583.000 10.500 745.500 0.000 * 66 Courtice TSS - Phase 5, Courtice 212 C 14,800 0.000 0.000 0.000 680.800 10,922.400 44.400 3,152.400 0.000 * 69 Southeast Courtice sub-Trunk Sanitary Sewer, Courtice 234 C 4,100 0.000 0.000 0.000 188.600 3,025.800 12.300 873.300 0.000 Sub-total 56,870 12,000.000 300.000 300.000 2,050.520 32,892.060 133.410 9,494.010 0.000 B BUILDINGS					,								
* 59 North Oshawa Creek (East Branch) TSS, Oshawa 220 C 3,500 0.000 0.000 0.000 161.000 2,583.000 10.500 745.500 0.000 * 66 Courtice TSS - Phase 5, Courtice 212 C 14,800 0.000 0.000 0.000 680.800 10,922.400 44.400 3,152.400 0.000 * 69 Southeast Courtice sub-Trunk Sanitary Sewer, Courtice 234 C 4,100 0.000 0.000 0.000 188.600 3,025.800 12.300 873.300 0.000 Sub-total 56,870 12,000.000 300.000 300.000 2,050.520 32,892.060 133.410 9,494.010 0.000 B BUILDINGS													
* 69 Southeast Courtice sub-Trunk Sanitary Sewer, Courtice 234 C 4,100 0.000 0.000 0.000 188.600 3,025.800 12.300 873.300 0.000 Sub-total 56,870 12,000.000 300.000 300.000 2,050.520 32,892.060 133.410 9,494.010 0.000 B BUILDINGS	* 59	North Oshawa Creek (East Branch) TSS, Oshawa	_		3,500	0.000		0.000		2,583.000		745.500	0.000
Sub-total 56,870 12,000.000 300.000 2,050.520 32,892.060 133.410 9,494.010 0.000 B BUILDINGS			_										
B BUILDINGS	* 69	, , , , , , , , , , , , , , , , , , ,	234	С									
* 89 Proposed Thickson Rd SSPS and FM, Whitby - Diversion Strategy 203 C 24,000 0.000 0.000 1,104.000 17,712.000 72.000 5,112.000 0.000	В				56,870	12,000.000	300.000	300.000	2,050.520	32,892.060	133.410	9,494.010	0.000
	* 89	Proposed Thickson Rd SSPS and FM, Whitby - Diversion Strategy	203	С	24,000	0.000	0.000	0.000	1,104.000	17,712.000	72.000	5,112.000	0.000

2023 Construction Program - Sanitary Sewerage

						Cost Expenditure Attribution (\$ 000's)								
			EA				User Rever	nue	,			Asset		
		DC	Land		Grant/		Total	Commercial	Residential			Management		
	Project Description	Item	Design	Gross	Subsidy/	Benefit to	User	Development	Development	Institutional	Industrial	Reserve		
		No.	Const.	Cost	Other	Existing	Revenue	Charges	Charges	Charges	Charges	Fund		
				Α	В	С	D	E	F	G	Н	I		
* 97	Proposed Baseline Rd SSPS, Courtice	208	С	3,250	0.000		0.000	149.500	2,398.500	9.750		0.000		
* 104	Uxbridge WPCP - rehabilitation works		D	400	0.000		0.000	0.000	0.000	0.000		400.000		
	Sub-total			27,650	0.000	0.000	0.000	1,253.500	20,110.500	81.750	5,804.250	400.000		
С	MACHINERY AND EQUIPMENT													
* 117	Duffin Creek WPCP - replacement of Reactor 1&2, Pickering		С	29,700	21,918.600	7,781.400	7,781.400	0.000	0.000	0.000	0.000	0.000		
	Sub-total						7,781.400	0.000	0.000	0.000	0.000	0.000		
D	IT INFRASTRUCTURE			·	·	,	,							
128	SCADA System Master Plan for Sanitary Sewage Pumping Stations		D	1,000	0.000		0.000	0.000	0.000	0.000		1,000.000		
	Sub-total			1,000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1,000.000		
E	ALLOWANCES AND OTHER PROVISIONS													
129	3 3 7	700	, -	800	0.000		0.000	36.800	590.400	2.400		0.000		
130			D,C	500	0.000		500.000	0.000	0.000	0.000		0.000		
	Asset Condition Assessments - Report		D	300	0.000		0.000	0.000	0.000	0.000		300.000		
133			D	200	0.000		0.000	0.000	0.000	0.000		200.000		
135			L	150	0.000		150.000	0.000	0.000	0.000		0.000		
	Allowance for engineering studies		D	150	0.000		150.000	0.000	0.000	0.000		0.000		
137			D	250	0.000		250.000	0.000	0.000	0.000		0.000		
	Preliminary Engineering		D	100	0.000		100.000	0.000	0.000	0.000		0.000		
139			D,C	15	0.000		15.000	0.000	0.000	0.000		0.000		
140			D,C	100	0.000		100.000	0.000	0.000	0.000		0.000		
141	Allowance for land severance review and drawing requirements		D,C	100	0.000		100.000	0.000	0.000	0.000		0.000		
	Allowance for Regional share for works in conjunction with residential subdivision development	707	D,C	1,460	0.000		0.000	67.160	1,077.480	4.380		0.000		
143	Allowance for Regional share for works in conjunction with	705	D,C	400	0.000	0.000	0.000	18.400	295.200	1.200	85.200	0.000		
<u> </u>	non-residential development	 	D.0	0.50	0.000	0.000	0.000	40.400	050 000	4.050	74.550	0.000		
144	Allowance for intensification	1	D,C	350	0.000	0.000	0.000	16.100	258.300	1.050	74.550	0.000		
	Sub-total			4,875	0.000	1,365.000	1,365.000	138.460	2,221.380	9.030	641.130	500.000		
	Total Cost Attribution			134,699	33,918.600	15,366.400	15,366.400	3,550.580	56,958.240	231.240	16,439.940	8,234.000		

^{*} Indicates Capital project requires prior and/or future funding commitments. Refer to Construction of Municipal Services detail sheet.

					Cost Expenditure Attribution (\$ 000's)							
Project Description	DC Item No.	EA Land Design Const.	Gross Cost	Grant/ Subsidy/ Other	Benefit to Existing	User Rever Total User Revenue	Commercial Development Charges	Residential Development Charges	Institutional Charges	Industrial Charges	Asset Management Reserve Fund	
A LINEAR INFRASTRUCTURE			Α	В	С	D	E	F	G	Н	I	
Regional Road Program												
3 R.R. 36 (Hopkins St) from Consumers Dr to Dundas St, Whitby		D	215	0.000	215.000	215.000	0.000	0.000	0.000	0.000	0.00	
8 R.R. 59 (Gibb St.)/ Olive Ave. interconnection, Oshawa		С	225	0.000	225.000	225.000	0.000	0.000	0.000	0.000	0.00	
10 Allowance for Sanitary sewers in conjuction with Regional Roads		D,C	1,600	0.000	1,600.000	1,600.000	0.000	0.000	0.000	0.000	0.00	
Sub-total Area Municipality Road Programs			2,040	0.000	2,040.000	2,040.000	0.000	0.000	0.000	0.000	0.00	
				0.000	205.000	225 222	0.000		2.222	0.000		
11A City of Pickering Road Program		D,C	235 365	0.000	235.000	235.000 365.000		0.000	0.000	0.000	0.00	
11B Town of Ajax Road Program 11C Town of Whitby Road Program		D,C D,C	600	0.000	365.000 600.000	600.000	0.000 0.000	0.000	0.000	0.000	0.00	
11D City of Oshawa Road Program		D,C	1,100	0.000	1,100.000	1,100.000	0.000	0.000	0.000	0.000	0.00	
11E Municipality of Clarington Road Program		D,C	300	0.000	300.000	300.000		0.000	0.000	0.000	0.00	
11F Township of Scugog Road Program		D,C	75		75.000	75.000	0.000	0.000	0.000	0.000	0.00	
11G Township of Uxbridge Road Program		D,C	340	0.000	340.000	340.000	0.000	0.000	0.000	0.000	0.00	
11H Township of Brock Road Program		D,C	120	0.000	120.000	120.000		0.000	0.000	0.000	0.00	
11i Allowance for unknown requirements in conjunction		D,C	200	0.000	200.000	200.000	0.000	0.000	0.000	0.000	0.00	
with area municipality road programs Sub-total			3,335	0.000	3,335.000	3,335.000	0.000	0.000	0.000	0.000	0.00	
MTO & GO Transit projects												
12 Allowance for unknown requirements		D,C	100	0.000	100.000	100.000	0.000	0.000	0.000	0.000	0.00	
Sub-total		,	100	0.000	100.000	100.000	0.000	0.000	0.000	0.000	0.00	
Betterments/Replacements												
14 Works independent of road programs in various locations		D,C	650	0.000	650.000	650.000	0.000	0.000	0.000	0.000	0.00	
15 Rehabilitation of existing sanitary sewers in various locations		D,C	500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	500.00	
26 Replacement of sanitary sewer on Maria St. fr Annes St to Frances St, Whitby		D,C	600	0.000	0.000	0.000	0.000	0.000	0.000	0.000	600.00	
28 Replacement of sewer on Simcoe St from Quebec St to Gibb St, Oshawa 36 Replacement of sanitary sewers in various locations		D,C D,C	150 6,345	0.000	0.000	0.000	0.000 0.000	0.000	0.000	0.000	150.00 6,345.40	
37 Allowance for construction of services in unserviced areas		C C	200	0.000	200.000	200.000	0.000	0.000	0.000	0.000	0.00	
Sub-total		U	8,445	0.000	850.000	850.000	0.000	0.000	0.000	0.000	7,595.40	
System Expansion												
64 North Oshawa Creek West Branch TSS fr Conlin SSPS to Britannia, Oshawa	216	С	3,850	0.000	0.000	0.000	177.100	2,841.300	11.550	820.050	0.00	
65 North Oshawa Creek West Branch TSS hydro corridor to Columbus, Oshawa	217	С	13,800						41.400		0.00	
67 Courtice TSS - Phase 6, Courtice Sub-total	213	С	14,500 32,150	0.000	0.000	0.000		10,701.000 23,726.700	43.500 96.450		0.00	
BUILDINGS			,,,,,,	21230	2.230		, 2.2.00	-,-=	531.00			
80 Duffin Creek WPCP - condition assessment, Pickering		D	600	461.400	0.000	0.000	0.000	0.000	0.000	0.000	138.60	
94 Harbour Rd. S SSPS and forcemain replacement, Oshawa	205		250	0.000	0.000			184.500	0.750	53.250	0.00	
115 Water Pollution Control Plant Assessments		D,C	5,000	0.000				0.000	0.000	0.000	0.00	
Sub-total			5,850	461.400	5,000.000	5,000.000	11.500	184.500	0.750	53.250	138.60	

ı	•	۰	,
(7	Ć	
	7		

2024 Construction Program - Sanitary Sewe	erage										
							Cost	Expenditure Attr	ibution		
		EA				User Reven	iue				Asset
Project Description	DC Item No.	Land Design Const.	Gross Cost A	Grant/ Subsidy/ Other B	Benefit to Existing C	Total User Revenue D	Commercial Development Charges E	Residential Development Charges F	Institutional Charges G	Industrial Charges H	Management Reserve Fund I
C MACHINERY AND EQUIPMENT											
* 125 Courtice WPCP - Plant upgrades		D,C	4,000	0.000	4,000.000	,	0.000	0.000	0.000	0.000	0.000
Sub-total			4,000	0.000	4,000.000	4,000.000	0.000	0.000	0.000	0.000	0.000
D IT INFRASTRUCTURE											
Sub-total			0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
E ALLOWANCES AND OTHER PROVISIONS											
130 Inflow/infiltration studies in various locations		D,C	500	0.000	500.000	500.000	0.000	0.000	0.000	0.000	0.000
132 Asset Condition Assessments - Report		D	300	0.000	0.000	0.000	0.000	0.000	0.000	0.000	300.000
133 Asset Condition Assessment/Investigation TSS Systems		D	200	0.000	0.000	0.000	0.000	0.000	0.000	0.000	200.000
135 Allowance for acquisition of easements		L	150	0.000	150.000	150.000	0.000	0.000	0.000	0.000	0.000
136 Allowance for engineering studies		D	150	0.000	150.000	150.000	0.000	0.000	0.000	0.000	0.000
138 Preliminary Engineering		D	100	0.000	100.000	100.000	0.000	0.000	0.000	0.000	0.000
139 Allowance for sundry extensions as per council policy		D,C	15	0.000	15.000	15.000	0.000	0.000	0.000	0.000	0.000
140 Allowance for unknown requirements		D,C	100	0.000	100.000	100.000	0.000	0.000	0.000	0.000	0.000
141 Allowance for land severance review and drawing requirements		D,C	100	0.000	100.000	100.000	0.000	0.000	0.000	0.000	0.000
142 Allowance for Regional share for works in conjunction with residential subdivision development	707	D,C	1,460	0.000	0.000	0.000	67.160	1,077.480	4.380	310.980	0.000
143 Allowance for Regional share for works in conjunction with non-residential development	705	D,C	400	0.000	0.000	0.000	18.400	295.200	1.200	85.200	0.000
144 Allowance for intensification		D,C	350	0.000	0.000	0.000	16.100	258.300	1.050	74.550	0.000
Sub-total			3,825	0.000	1,115.000	1,115.000	101.660	1,630.980	6.630	470.730	500.000
Total Cost Attribution			59,745	461.400	16,440.000	16,440.000	1,592.060	25,542.180	103.830	7,371.930	8,234.000

^{*} Indicates Capital project requires prior and/or future funding commitments. Refer to Construction of Municipal Services detail sheet.

					ı						
								- "			
							Cost	Expenditure Attr	ibution		
		EA				User Reven		(\$ 000's)			Asset
	DC	Land		Grant/		Total	Commercial	Residential			Management
Project Description	Item	Design	Gross	Subsidy/	Benefit to	User	Development	Development	Institutional	Industrial	Reserve
1 Tojout Boodinphon	No.	Const.	Cost	Other	Existing	Revenue	Charges	Charges	Charges	Charges	Fund
	1		Α	В	С	D	E	F	G	Н	I
A LINEAR INFRASTRUCTURE											
Regional Road Program											
* 5 R.R.53 (Stevenson Rd.) from Bond St. to Rossland Rd., Oshawa		С	1,105	0.000	1,105.000	1,105.000	0.000	0.000	0.000	0.000	0.000
10 Allowance for Sanitary sewers in conjuction with Regional Roads		D,C	1,000	0.000	1,000.000	1,000.000	0.000	0.000	0.000	0.000	0.000
Sub-total Sub-total			2,105	0.000	2,105.000	2,105.000	0.000	0.000	0.000	0.000	0.000
Area Municipality Road Programs											
11A City of Pickering Road Program	1	D,C	235	0.000	235.000	235.000	0.000	0.000	0.000	0.000	0.000
11B Town of Ajax Road Program		D,C	365	0.000	365.000	365.000	0.000	0.000	0.000	0.000	0.000
11C Town of Whitby Road Program		D,C	600	0.000	600.000	600.000	0.000	0.000	0.000	0.000	0.000
11D City of Oshawa Road Program		D,C	1,100	0.000	1,100.000	1,100.000	0.000	0.000	0.000	0.000	0.000
11E Municipality of Clarington Road Program		D,C	300	0.000	300.000	300.000	0.000	0.000	0.000	0.000	0.000
11F Township of Scugog Road Program		D,C	75	0.000	75.000	75.000	0.000	0.000	0.000	0.000	0.000
11G Township of Uxbridge Road Program		D,C	340	0.000	340.000	340.000	0.000	0.000	0.000	0.000	0.000
Titt Township of Brock Road Flogram		D,C D.C	120	0.000	120.000	120.000 200.000	0.000	0.000	0.000	0.000	0.000
Allowance for unknown requirements in conjunction with area municipality road programs		D,C	200	0.000	200.000	200.000	0.000	0.000	0.000	0.000	0.000
Sub-total			3,335	0.000	3,335.000	3,335.000	0.000	0.000	0.000	0.000	0.000
oub-total			0,000	0.000	0,000.000	0,000.000	0.000	0.000	0.000	0.000	0.000
MTO & GO Transit projects											
* 12 Allowance for unknown requirements		D,C	100	0.000	100.000	100.000	0.000	0.000	0.000	0.000	0.000
Sub-total			100	0.000	100.000	100.000	0.000	0.000	0.000	0.000	0.000
Betterments/Replacements											
14 Works independent of road programs in various locations		D,C	650	0.000	650.000	650.000	0.000	0.000	0.000	0.000	0.000
15 Rehabilitation of existing sanitary sewers in various locations		D,C	500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	500.000
36 Replacement of sanitary sewers in various locations		D,C	6,234	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6,234.000
37 Allowance for construction of services in unserviced areas		С	200	0.000	200.000	200.000	0.000	0.000	0.000	0.000	0.000
Sub-total Sub-total			7,584	0.000	850.000	850.000	0.000	0.000	0.000	0.000	6,734.000
System Expansion											
System Expansion											
* 41 Duffin Creek - YDSS primary trunk sewer twinning, Pickering	104	С	218,600	174,880.000	0.000	0.000	2,011.120	32,265.360	131.160	9,312.360	0.000
 45 Corbett TSS on easement from Wentworth to Corbett WPCP, W 	224	EA	500	0.000	0.000	0.000	23.000	369.000	1.500	106.500	0.000
* 48 West Brooklin TSS from Cochrane to east highway 12, Whitby	227	С	6,700	0.000	0.000	0.000	308.200	4,944.600	20.100	1,427.100	0.000
* 55 Ash Trunk Sanitary Sewer, Whitby	223	EA	1,000	0.000	0.000	0.000	46.000	738.000	3.000	213.000	0.000
* 74 Soper Creek TSS fr Mearns Ave to Concession Rd 3, Bowmanville Sub-total	304	D	200 227,000	0.000	0.000	0.000	9.200 2,397.520	147.600 38,464.560	0.600 156.360	42.600 11.101.560	0.000
Sub-total			227,000	174,000.000	0.000	0.000	2,397.320	36,404.300	150.500	11,101.500	0.000
B BUILDINGS											
* 83 Proposed Pickering SSPS and forcemain, Pickering	102		500	0.000	0.000	0.000	23.000		1.500	106.500	0.000
* 88 Corbett Creek WPCP - expansion from 84 MLD to 109 MLD	200	EA	500	0.000	475.000	475.000	2.100	13.000	0.150	9.750	0.000
* 104 Uxbridge WPCP - Rehabilitation works, Uxbridge		С	1,000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1,000.000
* 106 Port Perry Industrial Area SSPS and FM, Scugog	402	D	2,100	0.000	548.100	548.100	71.555	1,145.340	4.472	330.533	0.000

		EA				User Reven		Expenditure Attr (\$ 000's)	ibution		Asset
Project Description	DC Item No.	Land Design Const.	Gross Cost A	Grant/ Subsidy/ Other B	Benefit to Existing C	Total User Revenue D	Commercial Development Charges E	Residential Development Charges F	Institutional Charges G	Industrial Charges H	Management Reserve Fund I
 113 Beaverton Employment lands SSPS, Brock 	603	EA	500	0.000	50.000	50.000	37.500	237.000	2.500	173.000	0.000
* 115 Water Pollution Control Plant Assessments		D,C	5,000	0.000	5,000.000	5,000.000	0.000	0.000	0.000	0.000	0.000
Sub-total			9,600	0.000	6,073.100	6,073.100	134.155	1,764.340	8.622	619.783	1,000.000
C MACHINERY AND EQUIPMENT											
 * 117 Duffin Creek WPCP - replacement of Reactor 1&2, Pickering 		С	40,300	29,741.400		10,558.600	0.000	0.000	0.000	0.000	0.000
Sub-total Sub-total			40,300	29,741.400	10,558.600	10,558.600	0.000	0.000	0.000	0.000	0.000
D IT INFRASTRUCTURE											
Sub-total			0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
E ALLOWANCES AND OTHER PROVISIONS											
130 Inflow/infiltration studies in various locations		D,C	500	0.000	500.000	500.000	0.000	0.000	0.000	0.000	0.000
132 Asset Condition Assessments - Report		D	300	0.000	0.000	0.000	0.000	0.000	0.000	0.000	300.000
133 Asset Condition Assessment/Investigation TSS Systems		D	200	0.000	0.000		0.000	0.000	0.000	0.000	200.000
134 Master planning energy management		D,C	200	0.000	200.000		0.000	0.000	0.000	0.000	0.000
135 Allowance for acquisition of easements		L	150	0.000	150.000	150.000	0.000	0.000	0.000	0.000	0.000
136 Allowance for engineering studies		D	150	0.000	150.000	150.000	0.000	0.000	0.000	0.000	0.000
138 Preliminary Engineering		D	100	0.000	100.000		0.000	0.000	0.000	0.000	0.000
139 Allowance for sundry extensions as per council policy		D,C	15	0.000	15.000	15.000	0.000	0.000	0.000	0.000	0.000
140 Allowance for unknown requirements		D,C	100	0.000	100.000	100.000	0.000	0.000	0.000	0.000	0.000
141 Allowance for land severance review and drawing requirements		D,C	100	0.000	100.000	100.000	0.000	0.000	0.000	0.000	0.000
142 Allowance for Regional share for works in conjunction with residential subdivision development	707	D,C	1,460	0.000	0.000	0.000	67.160	1,077.480	4.380	310.980	0.000
143 Allowance for Regional share for works in conjunction with non-residential development	705	D,C	400	0.000	0.000	0.000	18.400	295.200	1.200	85.200	0.000
144 Allowance for intensification		D,C	350	0.000	0.000	0.000	16.100	258.300	1.050	74.550	0.000
Sub-total		_	4,025	0.000	1,315.000	1,315.000	101.660	1,630.980	6.630	470.730	500.000
Total Cost Attribution			294,049	204,621.400	24,336.700	24,336.700	2,633.335	41,859.880	171.612	12,192.073	8,234.000

^{*} Indicates Capital project requires prior and/or future funding commitments. Refer to Construction of Municipal Services detail sheet.

							Cost	Expenditure Attı (\$ 000's)	ribution		
Project Description	DC Item No.	EA Land Design Const.	Gross Cost A	Grant/ Subsidy/ Other B	Benefit to Existing C	User Rever Total User Revenue D	Commercial Development Charges E	Residential Development Charges F	Institutional Charges G	Industrial Charges H	Asset Management Reserve Fund I
A LINEAR INFRASTRUCTURE											
Regional Road Program											
6 R.R.57 (Bowmanville Ave.) from Baseline Rd to Nash Rd., Bowmanville		С	1,200	0.000	0.000	0.000					0.000
10 Allowance for sanitary sewers in conjuction with Regional Roads		D,C	800	0.000	800.000	800.000	0.000	0.000			0.000
Sub-total Area Municipality Road Programs			2,000	0.000	800.000	800.000	69.600	891.600	9.600	229.200	0.000
11A City of Pickering Road Program		D,C	235	0.000	235.000	235.000	0.000	0.000	0.000	0.000	0.000
11B Town of Ajax Road Program		D,C	365	0.000	365.000	365.000		0.000	0.000		0.000
11C Town of Whitby Road Program		D,C	600	0.000	600.000	600.000		0.000			0.000
11D City of Oshawa Road Program		D,C	1,100	0.000	1,100.000	1,100.000		0.000	0.000	0.000	0.000
11E Municipality of Clarington Road Program		D,C	300	0.000	300.000	300.000		0.000		0.000	0.000
11F Township of Scugog Road Program		D,C	75		75.000	75.000		0.000	0.000	0.000	0.000
11G Township of Uxbridge Road Program		D,C	340	0.000	340.000	340.000		0.000		0.000	0.000
11H Township of Brock Road Program	-	D,C	120	0.000	120.000	120.000		0.000	0.000	0.000	0.000
11i Allowance for unknown requirements in conjunction with area municipality road programs		D,C	200	0.000	200.000	200.000	0.000	0.000	0.000	0.000	0.000
Sub-total			3,335	0.000	3,335.000	3,335.000	0.000	0.000	0.000	0.000	0.000
MTO & GO Transit projects											
* 12 Allowance for unknown requirements		D,C	100	0.000	100.000	100.000		0.000			0.000
Sub-total Betterments/Replacements			100	0.000	100.000	100.000		0.000	0.000		0.000
14 Works independent of road programs in various locations		D,C	650	0.000	650.000	650.000		0.000			0.000
15 Rehabilitation of existing sanitary sewers in various locations		D,C	500	0.000	0.000	0.000		0.000			500.000
36 Replacement of sanitary sewers in various locations		D,C	7,234	0.000	0.000	0.000		0.000			7,234.000
37 Allowance for construction of services in unserviced areas Sub-total		С	200 8,584	0.000	200.000 850.000	200.000 850.000		0.000 0.000	0.000	0.000	7,734.000
System Expansion											
* 57 Farewell Creek TSS on easement west of Grandview St., Oshawa	214	D	500	0.000	0.000	0.000		369.000			0.000
* 60 North Oshawa Creek (east branch) TSS, Oshawa	218	EA	500	0.000	0.000	0.000		369.000			0.000
* 61 Twinning of Oshawa Creek TSS from Gibb St. to Greenwood Ave., Oshawa Sub-total	215	D	250 1,250	0.000	0.000	0.000		184.500 922.500	0.750 3.750		0.000
B BUILDINGS			ŕ	0.000		0.000	57.500	922.500	3.750	200.250	0.000
* 83 Proposed Pickering SSSP and forcemain, Pickering	102	D	500	0.000	0.000	0.000		369.000			0.000
* 92 Harmony Creek SSPS - expansion and twinning of forcemain, Oshawa	206	EA	600	0.000	0.000	0.000		442.800			0.000
* 94 Harbour Rd. S SSPS and forcemain replacement, Oshawa	205	EA	250	0.000	0.000	0.000		184.500			0.000
96 Courtice WPCP - Plant expansion from 68 MLD to 136 MLD	202	EA	1,000	0.000	682.000	682.000		168.000		122.100	0.000
* 98 Northeast SSPS and twinning of forcemain, Bowmanville	300 309	EA EA	500 1,050	0.000	0.000 997.500						0.000
		- ⊢ Δ						. 27.300			
* 100 Newcastle WPCP - Plant expansion from 7 MLD to 16 MLD and outfall * 115 Water Pollution Control Plant Assessments	309	D,C	5,000	0.000	5,000.000						0.000

					Cost Expenditure Attribution (\$ 000's)						
		EA				User Reven	nue	(, , , , , , ,			Asset
Project Description	DC Item No.	Land Design Const.	Gross Cost	Grant/ Subsidy/ Other	Benefit to Existing	Total User Revenue	Commercial Development Charges	Residential Development Charges	Institutional Charges	Industrial Charges	Management Reserve Fund
			Α	В	С	D	E	F	G	Н	I
C MACHINERY AND EQUIPMENT											
* 125 Courtice WPCP - Plant upgrades		D,C	4,000	0.000	4,000.000	4,000.000	0.000	0.000	0.000	0.000	0.000
Sub-total			4,000	0.000	4,000.000	4,000.000	0.000	0.000	0.000	0.000	0.000
D IT INFRASTRUCTURE											
Sub-total			0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
E ALLOWANCES AND OTHER PROVISIONS											
130 Inflow/infiltration studies in various locations		D,C	500	0.000	500.000	500.000	0.000	0.000	0.000	0.000	0.000
132 Asset Condition Assessments - Report		D	300	0.000	0.000	0.000	0.000	0.000	0.000	0.000	300.000
133 Asset Condition Assessment/Investigation TSS Systems		D	200	0.000	0.000		0.000	0.000	0.000	0.000	200.000
135 Allowance for acquisition of easements		L	150		150.000		0.000	0.000	0.000	0.000	0.000
136 Allowance for engineering studies		D	150		150.000		0.000	0.000	0.000	0.000	0.000
138 Preliminary Engineering		D	100	0.000	100.000		0.000	0.000	0.000	0.000	0.000
139 Allowance for sundry extensions as per council policy		D,C	15		15.000			0.000	0.000		0.000
140 Allowance for unknown requirements		D,C	100		100.000		0.000	0.000	0.000		0.000
141 Allowance for land severance review and drawing requirements		D,C	100	0.000	100.000		0.000	0.000	0.000	0.000	0.000
142 Allowance for Regional share for works in conjunction with residential subdivision development	707	D,C	1,460		0.000	0.000	67.160	1,077.480	4.380	310.980	0.000
143 Allowance for Regional share for works in conjunction with non-residential development	705	D,C	400	0.000	0.000	0.000	18.400	295.200	1.200	85.200	0.000
144 Allowance for intensification		D,C	350	0.000	0.000	0.000	16.100	258.300	1.050	74.550	0.000
Sub-total			3,825	0.000	1,115.000	1,115.000	101.660	1,630.980	6.630	470.730	500.000
Total Cost Attribution			31,994	0.000	16,879.500	16,879.500	344.570	5,005.680	27.445	1,502.805	8,234.000

^{*} Indicates Capital project requires prior and/or future funding commitments. Refer to Construction of Municipal Services detail sheet.

							Cost	Expenditure Attr	ibution	Assot		
Project Description	DC Item No.	EA Land Design Const.	Gross Cost A	Grant/ Subsidy/ Other B	Benefit to Existing C	User Reven Total User Revenue D	Commercial Development Charges E	Residential Development Charges F	Institutional Charges G	Industrial Charges H	Asset Management Reserve Fund I	
A LINEAR INFRASTRUCTURE												
Regional Road Program												
3 R.R. 36 (Hopkins St) from Consumers Dr to Dundas St, Whitby		С	1,100	0.000			0.000	0.000	0.000	0.000	0.000	
10 Allowance for Sanitary sewers in conjuction with Regional Roads		D,C	1,000	0.000			0.000	0.000	0.000	0.000	0.000	
Sub-total			2,100	0.000	2,100.000	2,100.000	0.000	0.000	0.000	0.000	0.000	
Area Municipality Road Programs												
11A City of Pickering Road Program		D,C	235	0.000	235.000	235.000	0.000	0.000	0.000	0.000	0.000	
11B Town of Ajax Road Program		D,C	365	0.000	365.000	365.000	0.000	0.000	0.000	0.000	0.000	
11C Town of Whitby Road Program		D,C	600	0.000	600.000	600.000	0.000	0.000	0.000	0.000	0.000	
11D City of Oshawa Road Program		D,C	1,100	0.000			0.000	0.000	0.000	0.000	0.000	
11E Municipality of Clarington Road Program 11F Township of Scugog Road Program		D,C D,C	300 75	0.000	300.000 75.000	300.000 75.000	0.000	0.000 0.000	0.000	0.000	0.000	
11G Township of Uxbridge Road Program		D,C	340	0.000	340.000		0.000	0.000	0.000	0.000	0.000	
11H Township of Brock Road Program		D,C	120	0.000	120.000		0.000	0.000	0.000	0.000	0.000	
11i Allowance for unknown requirements in conjunction		D,C	200	0.000	200.000		0.000	0.000	0.000		0.000	
with area municipality road programs		2,0		0.000	200.000	200.000	0.000	0.000	0.000	0.000	0.000	
Sub-total			3,335	0.000	3,335.000	3,335.000	0.000	0.000	0.000	0.000	0.000	
MTO & GO Transit projects												
* 12 Allowance for unknown requirements		D,C	100	0.000	100.000	100.000	0.000	0.000	0.000	0.000	0.000	
Sub-total			100	0.000	100.000	100.000	0.000	0.000	0.000	0.000	0.000	
Betterments/Replacements												
14 Works independent of road programs in various locations		D,C	650	0.000	650.000	650.000	0.000	0.000	0.000	0.000	0.000	
15 Rehabilitation of existing sanitary sewers in various locations		D,C	500	0.000	0.000		0.000	0.000	0.000	0.000	500.000	
36 Replacement of sanitary sewers in various locations		D,C	7,234	0.000	0.000	0.000	0.000	0.000	0.000	0.000	7,234.000	
37 Allowance for construction of services in unserviced areas		С	200	0.000	200.000	200.000	0.000	0.000	0.000	0.000	0.000	
Sub-total			8,584	0.000	850.000	850.000	0.000	0.000	0.000	0.000	7,734.000	
System Expansion												
* 44 Twinning of Duffin Creek TSS from Bayly St. to Hwy 401, Ajax	107	D	1,200	0.000	0.000	0.000	55.200	885.600	3.600	255.600	0.000	
* 45 Corbett TSS on easement from Wentworth to Corbett WPCP, W	224	D	500	0.000	0.000	0.000	23.000	369.000	1.500	106.500	0.000	
* 50 West central Brooklin TSS west of Way St., Whitby	229	D,C	1,700	0.000	0.000	0.000	78.200	1,254.600	5.100	362.100	0.000	
* 51 Central Brooklin TSS, Whitby	230	D	500	0.000	0.000	0.000	23.000	369.000	1.500	106.500	0.000	
* 53 East Brooklin TSS east of Thickson Rd., Whitby * 55 Ash Trunk Sanitary Sewer, Whitby	232	D D	300 1,000	0.000	0.000	0.000	13.800 46.000	221.400 738.000	0.900 3.000	63.900 213.000	0.000	
* 71 Bennett TSS from Baseline Rd. to Hwy No. 2, Bowmanville	303	D D	250	0.000			46.000 11.500	184.500			0.000	
* 73 Twinning of Spry TSS from Baseline Rd. to N/L Spry, Bowmanville	301	EA	750	0.000			34.500	553.500	2.250	159.750	0.000	
Sub-total	551		6,200	0.000			285.200	4,575.600	18.600		0.000	
B BUILDINGS			5,255					,,		,,,_,,		
* 83 Proposed Pickering SSSP and forcemain, Pickering	102	С	10,900	0.000	0.000	0.000	501.400	8,044.200	32.700	2,321.700	0.000	
* 88 Corbett Creek WPCP - expansion from 84 MLD to 109 MLD	200	D	750	0.000			3.150	19.500	0.225	14.625	0.000	
* 106 Port Perry Industrial Area SSPS and FM, Scugog	402	С	8,000	0.000	2,088.000	2,088.000	272.589	4,363.200	17.037	1,259.174	0.000	

					Cost Expenditure Attribution (\$ 000's)						
		EA				User Reven	ue	(ψ σσσ σ)			Asset
Project Description	DC Item No.	Land Design Const.	Gross Cost A	Grant/ Subsidy/ Other B	Benefit to Existing C	Total User Revenue D	Commercial Development Charges E	Residential Development Charges F	Institutional Charges G	Industrial Charges H	Management Reserve Fund I
* 108 River St. SSPS expansion, Sunderland	604	EA	500	0.000	250.000	250.000	20.850	131.500	1.300	96.350	0.000
* 110 Laidlaw St. SSPS expansion, Cannington	605	EA	500	0.000	250.000	250.000	20.850	131.500	1.300	96.350	0.000
* 111 Lake Simcoe WPCP expansion, Beaverton	602	EA	1,000	0.000	900.000	900.000	8.300	53.000	0.500	38.200	0.000
* 112 Harbour St. SSPS expansion, Cannington	606	EA	500	0.000	450.000	450.000	4.150	26.500	0.250	19.100	0.000
 113 Beaverton Employment lands SSPS, Brock 	603	D	500		50.000	50.000	37.500	237.000	2.500	173.000	0.000
* 115 Water Pollution Control Plant Assessments		D,C	5,000	0.000	5,000.000	5,000.000	0.000	0.000	0.000	0.000	0.000
Sub-total C MACHINERY AND EQUIPMENT			27,650	0.000	9,700.500	9,700.500	868.789	13,006.400	55.812	4,018.499	0.000
Sub-total			0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
D IT INFRASTRUCTURE											
Sub-total			0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
E ALLOWANCES AND OTHER PROVISIONS											
130 Inflow/infiltration studies in various locations		D,C	500	0.000	500.000	500.000	0.000	0.000	0.000	0.000	0.000
132 Asset Condition Assessments - Report		D	300		0.000	0.000	0.000	0.000	0.000	0.000	300.000
133 Asset Condition Assessment/Investigation TSS Systems		D	200	0.000	0.000	0.000	0.000	0.000	0.000	0.000	200.000
135 Allowance for acquisition of easements		L	150	0.000	150.000	150.000	0.000	0.000	0.000	0.000	0.000
136 Allowance for engineering studies		D	150	0.000	150.000	150.000	0.000	0.000	0.000	0.000	0.000
138 Preliminary Engineering		D	100	0.000	100.000	100.000	0.000	0.000	0.000	0.000	0.000
139 Allowance for sundry extensions as per council policy		D,C	15	0.000	15.000	15.000	0.000	0.000	0.000	0.000	0.000
140 Allowance for unknown requirements		D,C	100		100.000	100.000	0.000	0.000	0.000	0.000	0.000
141 Allowance for land severance review and drawing requirements		D,C	100	0.000	100.000	100.000	0.000	0.000	0.000	0.000	0.000
142 Allowance for Regional share for works in conjunction with residential subdivision development	707	D,C	1,460	0.000	0.000	0.000	67.160	1,077.480	4.380	310.980	0.000
143 Allowance for Regional share for works in conjunction with non-residential development	705	D,C	400	0.000	0.000	0.000	18.400	295.200	1.200	85.200	0.000
144 Allowance for intensification		D,C	350	0.000	0.000	0.000	16.100	258.300	1.050	74.550	0.000
Sub-total		,	3,825	0.000	1,115.000	1,115.000	101.660	1,630.980	6.630	470.730	500.000
Total Cost Attribution			51,794	0.000	17,200.500	17,200.500	1,255.649	19,212.980	81.042	5,809.829	8,234.000

^{*} Indicates Capital project requires prior and/or future funding commitments. Refer to Construction of Municipal Services detail sheet.

			Cost Expenditure Attribution (\$ 000's)								
		EA				User Reven	iue	(, , , , , , , , , , , , , , , , , , ,			Asset
Project Description	DC Item No.	Land Design Const.	Gross Cost A	Grant/ Subsidy/ Other B	Benefit to Existing C	Total User Revenue D	Commercial Development Charges E	Residential Development Charges F	Institutional Charges G	Industrial Charges H	Management Reserve Fund I
A LINEAR INFRASTRUCTURE											
Regional Road Program											
10 Allowance for Sanitary sewers in conjuction with Regional Roads		D,C	2,000	0.000	2,000.000	2,000.000	0.000	0.000	0.000	0.000	0.000
Sub-total			2,000	0.000	2,000.000	2,000.000	0.000	0.000	0.000	0.000	0.000
Area Municipality Road Programs											
11A City of Pickering Road Program		D,C	235		235.000	235.000	0.000	0.000	0.000	0.000	0.000
11B Town of Ajax Road Program		D,C	365	0.000	365.000	365.000	0.000	0.000	0.000	0.000	0.000
11C Town of Whitby Road Program		D,C	600		600.000	600.000	0.000	0.000	0.000	0.000	0.000
11D City of Oshawa Road Program		D,C	1,100		,	1,100.000	0.000	0.000	0.000	0.000	0.000
11E Municipality of Clarington Road Program		D,C	300		300.000 75.000	300.000 75.000	0.000	0.000	0.000	0.000	0.000
11F Township of Scugog Road Program 11G Township of Uxbridge Road Program	_	D,C D,C	75 340		340.000	340.000	0.000	0.000	0.000	0.000	0.000
11H Township of Oxfordige Road Program		D,C	120		120.000	120.000	0.000	0.000	0.000	0.000	0.000
11i Allowance for unknown requirements in conjunction		D,C	200		200.000	200.000	0.000	0.000	0.000		0.000
with area municipality road programs		D,0	200	0.000	200.000	200.000	0.000	0.000	0.000	0.000	0.000
Sub-total			3,335	0.000	3,335.000	3,335.000	0.000	0.000	0.000	0.000	0.000
3.0 (3.0)			0,000	0.000	0,000.000	0,000.000	0.000	0.000	0.000	0.000	0.000
MTO & GO Transit projects											
* 12 Allowance for unknown requirements		D,C	100	0.000	100.000	100.000	0.000	0.000	0.000	0.000	0.000
Sub-total			100	0.000	100.000	100.000	0.000	0.000	0.000	0.000	0.000
Betterments/Replacements											
14 Works independent of road programs in various locations		D,C	650	0.000	650.000	650.000	0.000	0.000	0.000	0.000	0.000
15 Rehabilitation of existing sanitary sewers in various locations		D,C	500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	500.000
25 Replacement of sewer on Hillcrest Dr. from Beech St. W/L to E/L, Whitby		D,C	800	0.000	0.000	0.000	0.000	0.000	0.000	0.000	800.000
36 Replacement of sanitary sewers in various locations		D,C	6,434	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6,434.000
37 Allowance for construction of services in unserviced areas		С	200	0.000	200.000	200.000	0.000	0.000	0.000	0.000	0.000
Sub-total			8,584	0.000	850.000	850.000	0.000	0.000	0.000	0.000	7,734.000
System Expansion											
* 51 Central Brooklin TSS, Whitby	230	С	3,900		0.000	0.000	179.400	2,878.200	11.700		0.000
* 52 Central East Brooklin TSS east of Baldwin St., Whitby	231	D	1,000	0.000	0.000	0.000	46.000	738.000	3.000	213.000	0.000
* 53 East Brooklin TSS east of Thickson Rd., Whitby	232	С	2,600	0.000	0.000	0.000	119.600	1,918.800	7.800	553.800	0.000
* 57 Farewell Creek TSS on easement west of Grandview St., Oshawa	214	С	2,400		0.000	0.000	110.400	1,771.200		511.200	0.000
* 60 North Oshawa Creek (east branch) TSS, Oshawa	218	D	500	0.000	0.000	0.000	23.000	369.000	1.500	106.500	0.000
* 61 Twinning of Oshawa Creek TSS from Gibb to Greenwood, Oshawa * 71 Bennett TSS from Baseline Rd. to Hwy No. 2, Bowmanville	215 303	C	975 1,200	0.000	0.000	0.000	44.850 55.200	719.550 885.600	2.925 3.600	207.675 255.600	0.000
Sub-total	303		12,575		0.000	0.000	578.450	9,280.350	37.725		0.000
B BUILDINGS			12,575	0.000	0.000	0.000	370.400	3,200.000	01.123	2,070.470	0.000
* 92 Harmony Creek SSPS - expansion and twinning of forcemain, Oshawa	206	D	1,000	0.000	0.000	0.000	46.000	738.000	3.000	213.000	0.000
* 94 Harbour Rd. S SSPS and forcemain replacement, Oshawa	205	С	2,500	0.000	0.000	0.000	115.000	1,845.000	7.500	532.500	0.000
96 Courtice WPCP - Plant expansion from 68 MLD to 136 MLD	202	D	2,000	0.000	1,364.000	1,364.000	52.600	336.000	3.200	244.200	0.000
* 98 Northeast SSPS and forcemain, Bowmanville	300	D	500	0.000	0.000	0.000	23.000	369.000	1.500	106.500	0.000

					Cost Expenditure Attribution (\$ 000's)						
		EA				User Reven	ue	(,			Asset
Project Description	DC Item No.	Land Design Const.	Gross Cost A	Grant/ Subsidy/ Other B	Benefit to Existing C	Total User Revenue D	Commercial Development Charges E	Residential Development Charges F	Institutional Charges G	Industrial Charges H	Management Reserve Fund I
* 115 Water Pollution Control Plant Assessments		D,C	5,000	0.000	5,000.000	5,000.000	0.000	0.000	0.000	0.000	0.000
Sub-total		·	11,000	0.000	6,364.000	6,364.000	236.600	3,288.000	15.200	1,096.200	0.000
C MACHINERY AND EQUIPMENT											
Sub-total			0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
D IT INFRASTRUCTURE											
Sub-total			0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
E ALLOWANCES AND OTHER PROVISIONS											
129 Regional Sewerage Master Planning Study		D,C	800	0.000	0.000	0.000	36.800	590.400	2.400	170.400	0.000
130 Inflow/infiltration studies in various locations		D,C	500	0.000	500.000	500.000	0.000	0.000	0.000	0.000	0.000
132 Asset Condition Assessments - Report		D	300	0.000	0.000	0.000	0.000	0.000	0.000	0.000	300.000
133 Asset Condition Assessment/Investigation TSS Systems		D	200	0.000	0.000	0.000	0.000	0.000	0.000	0.000	200.000
135 Allowance for acquisition of easements		L	150	0.000	150.000	150.000	0.000	0.000	0.000	0.000	0.000
136 Allowance for engineering studies		D	150	0.000	150.000	150.000	0.000	0.000	0.000	0.000	0.000
138 Preliminary Engineering		D	100	0.000	100.000	100.000	0.000	0.000	0.000	0.000	0.000
139 Allowance for sundry extensions as per council policy		D,C	15	0.000	15.000	15.000	0.000	0.000	0.000	0.000	0.000
140 Allowance for unknown requirements		D,C	100	0.000	100.000		0.000	0.000	0.000	0.000	0.000
141 Allowance for land severance review and drawing requirements		D,C	100	0.000	100.000	100.000	0.000	0.000	0.000	0.000	0.000
142 Allowance for Regional share for works in conjunction with residential subdivision development	707	D,C	1,460	0.000	0.000	0.000	67.160	1,077.480	4.380	310.980	0.000
143 Allowance for Regional share for works in conjunction with non-residential development	705	D,C	400	0.000	0.000	0.000	18.400	295.200	1.200	85.200	0.000
144 Allowance for intensification		D,C	350	0.000	0.000	0.000	16.100	258.300	1.050	74.550	0.000
Sub-total		,-	4,625	0.000	1,115.000	1,115.000	138.460	2,221.380	9.030	641.130	500.000
Total Cost Attribution			42,219	0.000	13,764.000	13,764.000	953.510	14,789.730	61.955	4,415.805	8,234.000

^{*} Indicates Capital project requires prior and/or future funding commitments. Refer to Construction of Municipal Services detail sheet.

SANITARY SEWERAGE SYSTEM

PROJECT LOCATION & DESCRIPTION ITEM NO. 1 REGIONAL ROAD PROGRAM R.R. 14 (Liberty St.) from Baseline Rd. to King St., Bowmanville Project No.: R0503 **RELATED PROJECTS** 2019 Water Supply Capital Budget Item No.: 1 Municipality of Clarington (Bowmanville) King St 2 Baseline Rd 401

BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

		2019		Four Year	Forecast		
	Budget Prior to 2019	CAPITAL BUDGET	2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		350.000					350.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION					1,400.000		1,400.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	350.000	0.000	0.000	1,400.000	0.000	1,750.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES							0.000
COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES		350.000			1,400.000		1,750.000
OTHER							0.000
ASSET MGMT RESERVE FUND							0.000
TOTAL ATTRIBUTION	0.000	350.000	0.000	0.000	1,400.000	0.000	1,750.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

SANITARY SEWERAGE SYSTEM

PROJECT LOCATION & DESCRIPTION

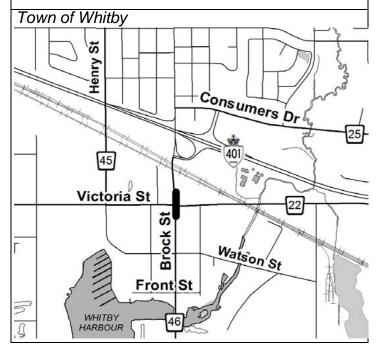
ITEM NO. 2

REGIONAL ROAD PROGRAM

R.R. 22 (Victoria St.)/R.R. 46 (Brock St.) intersection from 50 m North of Victoria St. to 50 m South of Victoria St., Whitby

Project No.:

RELATED PROJECTS



BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

		2019		Four Year	Forecast		
	Budget Prior to 2019		2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		25.000					25.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION		85.000					85.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	110.000	0.000	0.000	0.000	0.000	110.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES							0.000
COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES		110.000					110.000
OTHER							0.000
ASSET MGMT RESERVE FUND							0.000
TOTAL ATTRIBUTION	0.000	110.000	0.000	0.000	0.000	0.000	110.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

SANITARY SEWERAGE SYSTEM

PROJECT LOCATION & DESCRIPTION ITEM NO. 9 REGIONAL ROAD PROGRAM Highway 12 (Brock St.) from Manning Rd. to Rossland Rd., Whitby Project No.: R1523 **RELATED PROJECTS** Town of Whitby Rossland Rd Manning Rd

BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

		2019		Four Year	Forecast		
	Budget Prior to 2019	CAPITAL BUDGET	2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING	30.000	25.000					55.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION		295.000					295.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	30.000	320.000	0.000	0.000	0.000	0.000	350.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES							0.000
COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES	30.000	320.000					350.000
OTHER							0.000
ASSET MGMT RESERVE FUND							0.000
TOTAL ATTRIBUTION	30.000	320.000	0.000	0.000	0.000	0.000	350.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

SANITARY SEWERAGE SYSTEM

PROJECT LOCATION & DESCRIPTION

ITEM NO. 11A

Area Municipality Road Programs

CITY OF PICKERING ROAD PROGRAM (0 Projects)

Refer to Construction of Municipal Services summary for list of streets

Project No.: -

2019 Water Supply Capital Budget Item No. 17A

No Proposed works in 2019

BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

		2019		Four Year	Forecast		
	Budget Prior to 2019	CAPITAL BUDGET	2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING			40.000	40.000	40.000	40.000	160.000
LAND ACQUISITION							0.00
UTILITY RELOCATION							0.00
CONSTRUCTION			195.000	195.000	195.000	195.000	780.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	0.000	235.000	235.000	235.000	235.000	940.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES							0.000
COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES			235.000	235.000	235.000	235.000	940.000
OTHER							0.000
ASSET MGMT RESERVE FUND							0.000
TOTAL ATTRIBUTION	0.000	0.000	235.000	235.000	235.000	235.000	940.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

NEED/EXPLANATION OF PROJECT

Replacement of deficient sanitary sewers and/or construction of new works in conjunction with road reconstruction proposed by the City of Pickering.

SANITARY SEWERAGE SYSTEM

PROJECT LOCATION & DESCRIPTION

ITEM NO. 11B

Area Municipality Road Programs

TOWN OF AJAX ROAD PROGRAM

(5 Projects)

Refer to Construction of Municipal Services summary

for list of streets Project No.: A1999

2019 Water Supply Capital Budget Item No. 17B

BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

		2019		Four Year	Forecast		
	Budget Prior to 2019	CAPITAL BUDGET	2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		110.000	60.000	45.000	45.000	300.000	560.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION		740.000	325.000	320.000	320.000	2,050.000	3,755.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	850.000	385.000	365.000	365.000	2,350.000	4,315.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES		147.600				1,734.300	1,881.900
COMMERCIAL DEVELOPMENT CHARGES*		9.200				108.100	117.300
USER REVENUES		693.200	385.000	365.000	365.000	507.600	2,315.800
OTHER							0.000
ASSET MGMT RESERVE FUND							0.000
TOTAL ATTRIBUTION	0.000	850.000	385.000	365.000	365.000	2,350.000	4,315.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

NEED/EXPLANATION OF PROJECT

Replacement of deficient sanitary sewers and/or construction of new works in conjunction with road reconstruction proposed by the Town of Ajax

SANITARY SEWERAGE SYSTEM

PROJECT LOCATION & DESCRIPTION

ITEM NO. 11C

Area Municipality Road Programs

TOWN OF WHITBY ROAD PROGRAM

(1 Project)

Refer to Construction of Municipal Services summary

for list of streets Project No.: W1999

2019 Water Supply Capital Budget Item No. 17C

BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

		2019		Four Year	Forecast		
	Budget Prior to 2019	CAPITAL BUDGET	2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		200.000	70.000	70.000	70.000	70.000	480.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION		1,060.000	530.000	530.000	530.000	530.000	3,180.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	1,260.000	600.000	600.000	600.000	600.000	3,660.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES							0.000
COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES		1,260.000	600.000	600.000	600.000	600.000	3,660.000
OTHER							0.000
ASSET MGMT RESERVE FUND							0.000
TOTAL ATTRIBUTION	0.000	1,260.000	600.000	600.000	600.000	600.000	3,660.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

NEED/EXPLANATION OF PROJECT

Replacement of deficient sanitary sewer and/or construction of new works in conjunction with road reconstruction proposed by the Town of Whitby.

SANITARY SEWERAGE SYSTEM

PROJECT LOCATION & DESCRIPTION

ITEM NO. 11D

Area Municipality Road Programs

CITY OF OSHAWA ROAD PROGRAM

(0 Projects)

Refer to Construction of Municipal Services summary

for list of streets Project No.: -

2019 Water Supply Capital Budget Item No. 17D

No Proposed works in 2019

BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

		2019		Four Year	Forecast		
	Budget Prior to 2019	CAPITAL BUDGET	2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING			152.000	152.000	152.000	152.000	608.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION			948.000	948.000	948.000	948.000	3,792.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	0.000	1,100.000	1,100.000	1,100.000	1,100.000	4,400.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES							0.000
COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES			1,100.000	1,100.000	1,100.000	1,100.000	4,400.000
OTHER							0.000
ASSET MGMT RESERVE FUND							0.000
TOTAL ATTRIBUTION	0.000	0.000	1,100.000	1,100.000	1,100.000	1,100.000	4,400.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

NEED/EXPLANATION OF PROJECT

Replacement of deficient sanitary sewer and/or construction of new works in conjunction with road reconstruction proposed by the City of Oshawa.

SANITARY SEWERAGE SYSTEM

PROJECT LOCATION & DESCRIPTION

ITEM NO. 11E

Area Municipality Road Programs

MUNICIPALITY OF CLARINGTON ROAD PROGRAM (4 Projects)

Refer to Construction of Municipal Services summary for list of streets

Project No.: C1999

2019 Sanitary Sewerage Capital Budget Item No. 17E

BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

		2019		Four Year	Forecast		
	Budget Prior to 2019	CAPITAL BUDGET	2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		180.000	40.000	40.000	40.000	40.000	340.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION		1,020.000	260.000	260.000	260.000	260.000	2,060.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	1,200.000	300.000	300.000	300.000	300.000	2,400.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES							0.000
COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES		1,200.000	300.000	300.000	300.000	300.000	2,400.000
OTHER							0.000
ASSET MGMT RESERVE FUND							0.000
TOTAL ATTRIBUTION	0.000	1,200.000	300.000	300.000	300.000	300.000	2,400.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

NEED/EXPLANATION OF PROJECT

Replacement of deficient sanitary sewer and/or construction of new works in conjunction with road reconstruction proposed by the Municipality of Clarington.

SANITARY SEWERAGE SYSTEM

PROJECT LOCATION & DESCRIPTION

ITEM NO. 11F

Area Municipality Road Programs

TOWNSHIP OF SCUGOG ROAD PROGRAM (0 Projects)

Refer to Construction of Municipal Services summary for list of streets

Project No.: -

2019 Water Supply Capital Budget Item No. 17F

No Proposed works in 2019

BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

		2019		Four Year	Forecast		
	Budget Prior to 2019	CAPITAL BUDGET	2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING			10.000	10.000	10.000	10.000	40.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION			65.000	65.000	65.000	65.000	260.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	0.000	75.000	75.000	75.000	75.000	300.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES							0.000
COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES			75.000	75.000	75.000	75.000	300.000
OTHER							0.000
ASSET MGMT RESERVE FUND			_				0.000
TOTAL ATTRIBUTION	0.000	0.000	75.000	75.000	75.000	75.000	300.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

NEED/EXPLANATION OF PROJECT

Replacement of deficient sanitary sewer and/or construction of new works in conjunction with road reconstruction proposed by the Township of Scugog.

SANITARY SEWERAGE SYSTEM

PROJECT LOCATION & DESCRIPTION

ITEM NO. 11G

Area Municipality Road Programs

TOWNSHIP OF UXBRIDGE ROAD PROGRAM (1 Project)

Refer to Construction of Municipal Services summary for list of streets

Project No.: U1999

2019 Water Supply Capital Budget Item No. 17G

BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

		2019		Four Year	Forecast		
	Budget Prior to 2019	CAPITAL BUDGET	2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		40.000	50.000	50.000	50.000	50.000	240.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION		160.000	290.000	290.000	290.000	290.000	1,320.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	200.000	340.000	340.000	340.000	340.000	1,560.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES							0.000
COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES		200.000	340.000	340.000	340.000	340.000	1,560.000
OTHER							0.000
ASSET MGMT RESERVE FUND							0.000
TOTAL ATTRIBUTION	0.000	200.000	340.000	340.000	340.000	340.000	1,560.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

NEED/EXPLANATION OF PROJECT

Replacement of deficient sanitary sewer and/or construction of new works in conjunction with road reconstruction proposed by the Township of Uxbridge.

SANITARY SEWERAGE SYSTEM

PROJECT LOCATION & DESCRIPTION

ITEM NO. 11H

Area Municipality Road Programs

TOWNSHIP OF BROCK ROAD PROGRAM (0 Projects)

Refer to Construction of Municipal Services summary for list of streets

Project No.: -

2019 Water Supply Capital Budget Item No. 17H

No works proposed in 2019

BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

		2019		Four Year	Forecast		
	Budget Prior to 2019	CAPITAL BUDGET	2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING			20.000	20.000	20.000	20.000	80.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION			100.000	100.000	100.000	100.000	400.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	0.000	120.000	120.000	120.000	120.000	480.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES							0.000
COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES			120.000	120.000	120.000	120.000	480.000
OTHER							0.000
ASSET MGMT RESERVE FUND							0.000
TOTAL ATTRIBUTION	0.000	0.000	120.000	120.000	120.000	120.000	480.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

NEED/EXPLANATION OF PROJECT

Replacement of deficient sanitary sewer and/or construction of new works in conjunction with road reconstruction proposed by the Township of Brock.

SANITARY SEWERAGE SYSTEM

PROJECT LOCATION & DESCRIPTION

ITEM NO. 11i

Area Municipality Road Programs

ALLOWANCE FOR UNKNOWN SANITARY SEWER REQUIREMENTS IN CONJUNCTION WITH AREA MUNICIPALITY ROAD PROGRAMS

Refer to Construction of Municipal Services summary

for list of streets Project No.: M1903

2019 Water Supply Capital Budget Item No. 17i

BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

		2019		Four Year	Forecast		
	Budget Prior to 2019	CAPITAL BUDGET	2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		20.000	20.000	20.000	20.000	20.000	100.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION		180.000	180.000	180.000	180.000	180.000	900.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	200.000	200.000	200.000	200.000	200.000	1,000.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES							0.000
COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES		200.000	200.000	200.000	200.000	200.000	1,000.000
OTHER							0.000
ASSET MGMT RESERVE FUND							0.000
TOTAL ATTRIBUTION	0.000	200.000	200.000	200.000	200.000	200.000	1,000.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

NEED/EXPLANATION OF PROJECT

This allowance is to provide for unanticipated sanitary sewer works in conjunction with area municipality road programs in various locations (Items 11A to 11H)

SANITARY SEWERAGE SYSTEM

PROJECT LOCATION & DESCRIPTION

ITEM NO. 13

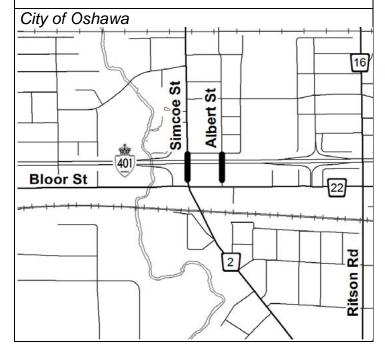
MTO & GO TRANSIT PROJECTS:

Sanitary Sewer replacement in conjunction with the MTO's bridge work at Simcoe St., Albert St. and Highway 401, Oshawa

Project No.: D1801

RELATED PROJECTS

2019 Water Supply Capital Budget Item No. 20



BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

		2019		Four Year	Forecast		
	Budget Prior to 2019	CAPITAL BUDGET	2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		70.000					70.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION			300.000				300.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	70.000	300.000	0.000	0.000	0.000	370.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES							0.000
COMMERCIAL DEVELOPMENT							0.000
CHARGES*							0.000
USER REVENUES		70.000	300.000				370.000
OTHER							0.000
ASSET MGMT RESERVE FUND							0.000
TOTAL ATTRIBUTION	0.000	70.000	300.000	0.000	0.000	0.000	370.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

SANITARY SEWERAGE SYSTEM

Pl	ROJECT LOCATION & DESCRIPTION
TEM NO. 14	
BETTERMENTS	S/ REPLACEMENTS
,	age works to rectify identified system deficiencies road programs in various locations
Project No.: M1	999
	RELATED PROJECTS

BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

		2019		Four Year F	orecast		
	Budget Prior to 2019		2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		150.000	100.000	100.000	100.000	100.000	550.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION		546.100	550.000	550.000	550.000	550.000	2,746.100
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	696.100	650.000	650.000	650.000	650.000	3,296.100
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES							0.000
COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES		696.100	650.000	650.000	650.000	650.000	3,296.100
OTHER							0.000
ASSET MGMT RESERVE FUND							0.000
TOTAL ATTRIBUTION	0.000	696.100	650.000	650.000	650.000	650.000	3,296.100

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

NFFD/FXPI	ANATION	OF PR	O.IEC

SANITARY SEWERAGE SYSTEM

PROJECT LOCATION & DESCRIPTION	
ITEM NO. 15	
BETTERMENTS/ REPLACEMENTS	
Rehabilitation of existing sanitary sewer in various locations of road programs in various locations	
Project No.: D1912	
RELATED PROJECTS	

BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

		2019		Four Year	Forecast		
	Budget Prior to 2019	Budget Prior CAPITAL	2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		50.000	50.000	75.000	75.000	75.000	325.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION		250.000	250.000	425.000	425.000	425.000	1,775.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	300.000	300.000	500.000	500.000	500.000	2,100.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES							0.000
COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES							0.000
OTHER							0.000
ASSET MGMT RESERVE FUND		300.000	300.000	500.000	500.000	500.000	2,100.000
TOTAL ATTRIBUTION	0.000	300.000	300.000	500.000	500.000	500.000	2,100.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

NFFD/FXPI	ANATION	OF PRO	JECT

SANITARY SEWERAGE SYSTEM

PROJECT LOCATION & DESCRIPTION

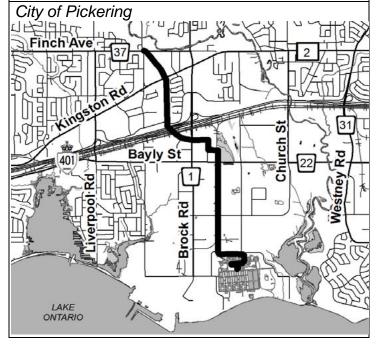
ITEM NO. 16

BETTERMENTS/ REPLACEMENTS

Durham York Primary Trunk Sanitary Sewer System - Condition Assessment and Rehabilitation requirements (CCTV inspection, minor repair and rehabilitation works to be completed on Chamber 4 to 7)

Project No.: Y1501

RELATED PROJECTS



BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

		2019		Four Year F	orecast		
	Budget Prior to 2019	CAPITAL BUDGET	2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING	830.000	10,000.000					10,830.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION	1,207.600		66,600.000				67,807.600
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	2,037.600	10,000.000	66,600.000	0.000	0.000	0.000	78,637.600
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES							0.000
COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES	290.000	1,000.000	6,660.000				7,950.000
OTHER	1,747.600	9,000.000	59,940.000				70,687.600
ASSET MGMT RESERVE FUND							0.000
TOTAL ATTRIBUTION	2,037.600	10,000.000	66,600.000	0.000	0.000	0.000	78,637.600

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

NEED/EXPLANATION OF PROJECT

Cost sharing with York Region.

SANITARY SEWERAGE SYSTEM

PROJECT LOCATION & DESCRIPTION

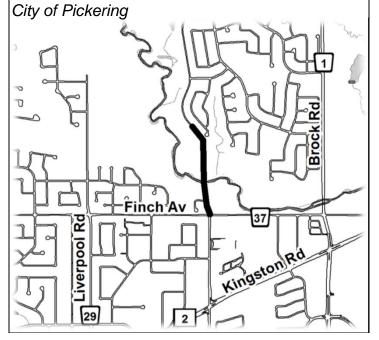
ITEM NO. 17

BETTERMENTS/ REPLACEMENTS

Replacement and improvements to the Central Duffin Collector siphon (1200 mm and 800mm) on Valley Farm Rd., 670 m north of Finch Ave., Pickering

Project No.: D1501

RELATED PROJECTS



BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

		2019		Four Year F	orecast		
	Budget Prior to 2019		2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING	300.000						300.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION	500.000	1,000.000					1,500.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	800.000	1,000.000	0.000	0.000	0.000	0.000	1,800.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES							0.000
COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES							0.000
OTHER							0.000
ASSET MGMT RESERVE FUND	800.000	1,000.000					1,800.000
TOTAL ATTRIBUTION	800.000	1,000.000	0.000	0.000	0.000	0.000	1,800.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

NEED/EXPLANATION OF PROJECT

Asset Management Project - siphon has reached the end of its useful life.

SANITARY SEWERAGE SYSTEM

PROJECT LOCATION & DESCRIPTION

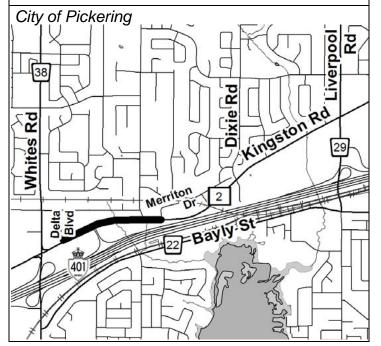
ITEM NO.: 18

BETTERMENTS/ REPLACEMENTS

Rehabilitation of sanitary sewer on Kingston Rd. (Highway No. 2) from 240 m east of Delta Blvd. to Merritton Dr., Pickering

Project No.: D1848

RELATED PROJECTS



BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

		2019		Four Year F	orecast		
	Budget Prior to 2019		2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		60.000					60.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION		310.000					310.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	370.000	0.000	0.000	0.000	0.000	370.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES							0.000
COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES							0.000
OTHER							0.000
ASSET MGMT RESERVE FUND		370.000					370.000
TOTAL ATTRIBUTION	0.000	370.000	0.000	0.000	0.000	0.000	370.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

NEED/EXPLANATION OF PROJECT

SANITARY SEWERAGE SYSTEM

PROJECT LOCATION & DESCRIPTION

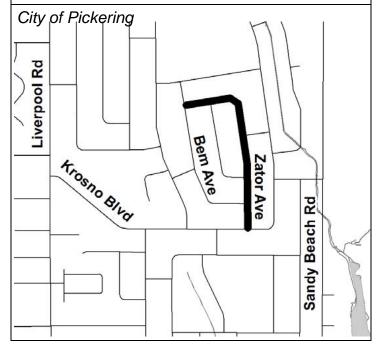
ITEM NO. 19

BETTERMENTS/ REPLACEMENTS

Replacement of sanitary sewer on Zator Ave. from Bem Ave. to Krosno Blvd., Pickering

Project No.: P1901

RELATED PROJECTS



BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

		2019		Four Year I	Forecast		
	Budget Prior to 2019		2021	2022	2023	TOTAL	
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		150.000					150.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION		850.000					850.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	1,000.000	0.000	0.000	0.000	0.000	1,000.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES							0.000
COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES							0.000
OTHER							0.000
ASSET MGMT RESERVE FUND		1,000.000					1,000.000
TOTAL ATTRIBUTION	0.000	1,000.000	0.000	0.000	0.000	0.000	1,000.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

NEED/EXPLANATION OF PROJECT

SANITARY SEWERAGE SYSTEM

PROJECT LOCATION & DESCRIPTION

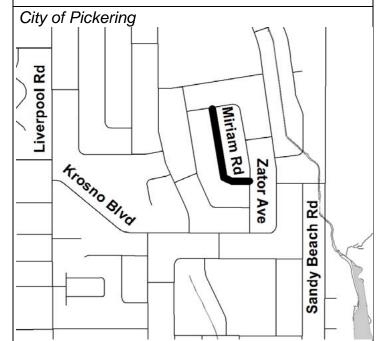
ITEM NO.: 20

BETTERMENTS/ REPLACEMENTS

Replacement of sanitary sewer on Miriam Rd. from Zator Ave. S/L to Zator Ave. N/L, Pickering

Project No.: P1902

RELATED PROJECTS



BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

		2019		Four Year I	orecast		
	Budget Prior to 2019		2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		120.000					120.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION		480.000					480.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	600.000	0.000	0.000	0.000	0.000	600.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES							0.000
COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES							0.000
OTHER							0.000
ASSET MGMT RESERVE FUND		600.000					600.000
TOTAL ATTRIBUTION	0.000	600.000	0.000	0.000	0.000	0.000	600.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

NEED/EXPLANATION OF PROJECT

SANITARY SEWERAGE SYSTEM

PROJECT LOCATION & DESCRIPTION

ITEM NO.: 22

BETTERMENTS/ REPLACEMENTS

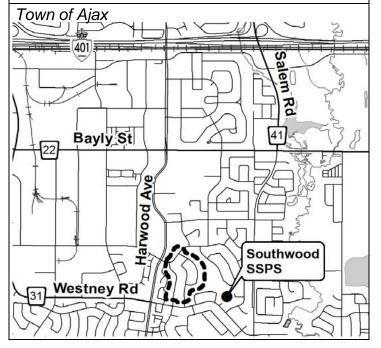
Southwood Park Area System improvements and investigation works

Phase 1: sanitary sewer maintenance hole repairs and modifications

Phase 2: Sanitary sewer system investigation

Project No.: A1901

RELATED PROJECTS



BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

		2019					
	Budget Prior to 2019	CAPITAL BUDGET	2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		250.000					250.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION		950.000					950.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	1,200.000	0.000	0.000	0.000	0.000	1,200.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES							0.000
COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES		1,200.000					1,200.000
OTHER							0.000
ASSET MGMT RESERVE FUND							0.000
TOTAL ATTRIBUTION	0.000	1,200.000	0.000	0.000	0.000	0.000	1,200.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

NEED/EXPLANATION OF PROJECT

SANITARY SEWERAGE SYSTEM

PROJECT LOCATION & DESCRIPTION

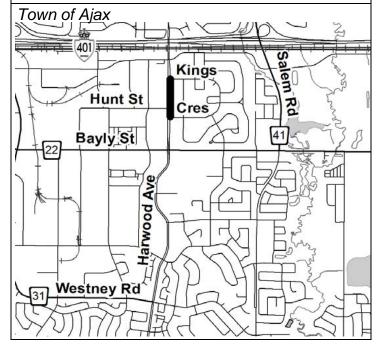
ITEM NO.: 23

BETTERMENTS/ REPLACEMENTS

Hunt St./Kings Crescent and Harwood Avenue sanitary sewer diversion, Ajax

Project No.: A1902

RELATED PROJECTS



BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

		2019		Four Year F	orecast		
	Budget Prior to 2019		2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		50.000					50.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION		215.000					215.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	265.000	0.000	0.000	0.000	0.000	265.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES		195.570					195.570
COMMERCIAL DEVELOPMENT CHARGES*		12.190					12.190
USER REVENUES		57.240					57.240
OTHER							0.000
ASSET MGMT RESERVE FUND							0.000
TOTAL ATTRIBUTION	0.000	265.000	0.000	0.000	0.000	0.000	265.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

NEED/EXPLANATION OF PROJECT

SANITARY SEWERAGE SYSTEM

PROJECT LOCATION & DESCRIPTION ITEM NO.: 24 BETTERMENTS/ REPLACEMENTS Replacement of sanitary sewer on Euclid St. from Dundas St. to 75 m north of John St., Whitby Project No.: W1305 **RELATED PROJECTS** Town of Whitby Beech St 43 St Brock St John St St Cochrane **Euclid** Mary St **Dundas St**

BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

	Budget Prior to 2019	2019 CAPITAL BUDGET					
			2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING	100.000						100.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION	430.000	70.000					500.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	530.000	70.000	0.000	0.000	0.000	0.000	600.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES							0.000
COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES							0.000
OTHER							0.000
ASSET MGMT RESERVE FUND	530.000	70.000					600.000
TOTAL ATTRIBUTION	530.000	70.000	0.000	0.000	0.000	0.000	600.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

NEED/EXPLANATION OF PROJECT

Asset Management Project - Sanitary sewer has reached the end of its useful service life.

45

SANITARY SEWERAGE SYSTEM

PROJECT LOCATION & DESCRIPTION ITEM NO.: 30 BETTERMENTS/ REPLACEMENTS Replacement of sanitary sewer on Olive Ave. from Simcoe St. S. to Drew St., Oshawa Project No.: O1903 **RELATED PROJECTS** 2018 Water Supply Capital Budget Item No.: 57 City of Oshawa <u>5</u> St Simcoe Centre 16 Gibb St St 2A Olive Ave 59 S Ritson Rd **CP Rail** 2

BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

	Budget Prior to 2019	2019 CAPITAL BUDGET					
			2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		240.000					240.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION			1,030.000				1,030.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	240.000	1,030.000	0.000	0.000	0.000	1,270.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES							0.000
COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES		240.000	1,030.000				1,270.000
OTHER							0.000
ASSET MGMT RESERVE FUND							0.000
TOTAL ATTRIBUTION	0.000	240.000	1,030.000	0.000	0.000	0.000	1,270.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

NEED/EXPLANATION OF PROJECT

SANITARY SEWERAGE SYSTEM

PROJECT LOCATION & DESCRIPTION

ITEM NO.: 31

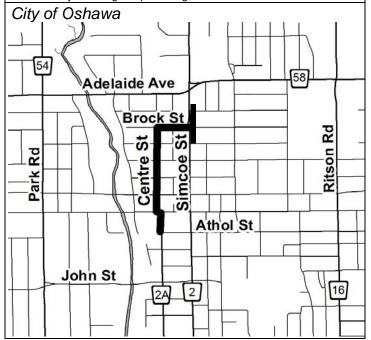
BETTERMENTS/ REPLACEMENTS

Replacement of sanitary sewer on R.R. 2A (Centre St.) from Athol St. to Brock St., and Simcoe St. from Brock St. W. to Adelaide Ave., Oshawa

Project No.: O1503

RELATED PROJECTS

2016 Water Supply Capital Budget Item No.: 53 2018 Water Supply Capital Budget Item No.: 44 2015 Sanitary Sewerage Capital Budget Item No.: 26



BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

	Budget Prior to 2019	2019 CAPITAL BUDGET	Four Year Forecast				
			2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING	100.000	110.000					210.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION		1,275.000					1,275.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	100.000	1,385.000	0.000	0.000	0.000	0.000	1,485.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES							0.000
COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES							0.000
OTHER							0.000
ASSET MGMT RESERVE FUND	100.000	1,385.000					1,485.000
TOTAL ATTRIBUTION	100.000	1,385.000	0.000	0.000	0.000	0.000	1,485.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

NEED/EXPLANATION OF PROJECT

SANITARY SEWERAGE SYSTEM

PROJECT LOCATION & DESCRIPTION

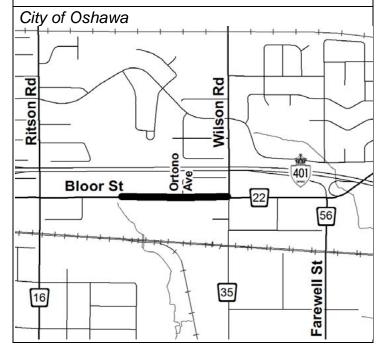
ITEM NO.: 33

BETTERMENTS/ REPLACEMENTS

Replacement of sanitary sewer on R.R. 22 (Bloor St.) from 275 m east of Ortono Ave. to Wilson Rd., Oshawa

Project No.: O1908

RELATED PROJECTS



BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

	Budget Prior to 2019	2019 CAPITAL BUDGET					
			2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		150.000					150.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION		950.000					950.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	1,100.000	0.000	0.000	0.000	0.000	1,100.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES							0.000
COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES		1,100.000					1,100.000
OTHER				İ			0.000
ASSET MGMT RESERVE FUND							0.000
TOTAL ATTRIBUTION	0.000	1,100.000	0.000	0.000	0.000	0.000	1,100.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

NEED/EXPLANATION OF PROJECT

SANITARY SEWERAGE SYSTEM

PROJECT LOCATION & DESCRIPTION

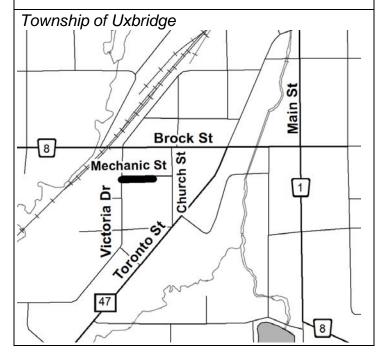
ITEM NO.: 34

BETTERMENTS/ REPLACEMENTS

Replacement of sanitary sewer on Mechanic St. from Victoria Dr. to Church St., Uxbridge

Project No.: U1901

RELATED PROJECTS



BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

	Budget Prior to 2019	2019 CAPITAL BUDGET		ı			
			2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		50.000					50.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION		120.000					120.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	170.000	0.000	0.000	0.000	0.000	170.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES							0.000
COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES							0.000
OTHER							0.000
ASSET MGMT RESERVE FUND		170.000					170.000
TOTAL ATTRIBUTION	0.000	170.000	0.000	0.000	0.000	0.000	170.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

NEED/EXPLANATION OF PROJECT

SANITARY SEWERAGE SYSTEM

PROJECT LOCATION & DESCRIPTION

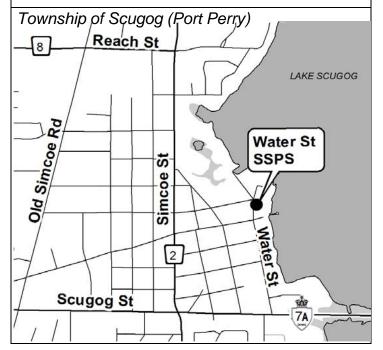
ITEM NO.: 35

BETTERMENTS/ REPLACEMENTS

Valve replacement on the Scugog forcemain outside the Water Street Sanitary Sewage Pumping Station

Project No.: D1901

RELATED PROJECTS



BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

		2019		Four Year F	orecast		
	Budget Prior to 2019	CAPITAL BUDGET	2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		40.000					40.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION		160.000					160.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	200.000	0.000	0.000	0.000	0.000	200.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES							0.000
COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES							0.000
OTHER							0.000
ASSET MGMT RESERVE FUND		200.000					200.000
TOTAL ATTRIBUTION	0.000	200.000	0.000	0.000	0.000	0.000	200.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

NEED/EXPLANATION OF PROJECT

Asset Management Project - Sanitary sewer has reached the end of its useful service life.

SANITARY SEWERAGE SYSTEM

PROJECT LOCATION & DESCRIPTION

ITEM NO. 38

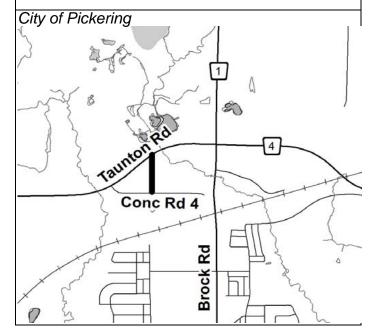
SYSTEM EXPANSION

Central Duffin Collector (CDC) Trunk Sanitary Sewer from Fourth Concession Rd. to Taunton Rd., Pickering

Project No.: D1707

RELATED PROJECTS

2017 Sanitary Sewerage Capital Budget Item No. 36



BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

		2019		Four Year	Forecast		
	Budget Prior to 2019	CAPITAL BUDGET	2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING	200.000	160.000					360.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION		1,700.000					1,700.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	200.000	1,860.000	0.000	0.000	0.000	0.000	2,060.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES							0.000
COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES	33.400	310.620					344.020
OTHER	166.600	1,549.380					1,715.980
ASSET MGMT RESERVE FUND							0.000
TOTAL ATTRIBUTION	200.000	1,860.000	0.000	0.000	0.000	0.000	2,060.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

NEED/EXPLANATION OF PROJECT

Linear infrastructure required for the development of the Seaton Community.

SANITARY SEWERAGE SYSTEM

PROJECT LOCATION & DESCRIPTION

ITEM NO. 39

SYSTEM EXPANSION

Central Duffin Collector (CDC) Trunk Sanitary Sewer - Taunton Rd. to South of the employment lands

Project No.: D1708

RELATED PROJECTS

2017 Sanitary Sewerage Capital Budget Item No. 37

City of Pickering



BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

		2019		Four Year	Forecast		
	Budget Prior to 2019	CAPITAL BUDGET	2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING	1,000.000	500.000					1,500.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION		9,400.000					9,400.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	1,000.000	9,900.000	0.000	0.000	0.000	0.000	10,900.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES							0.000
COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES	344.000	3,405.600					3,749.600
OTHER	656.000	6,494.400					7,150.400
ASSET MGMT RESERVE FUND							0.000
TOTAL ATTRIBUTION	1,000.000	9,900.000	0.000	0.000	0.000	0.000	10,900.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

NEED/EXPLANATION OF PROJECT

Linear infrastructure required for the development of the Seaton Community.

SANITARY SEWERAGE SYSTEM

PROJECT LOCATION & DESCRIPTION

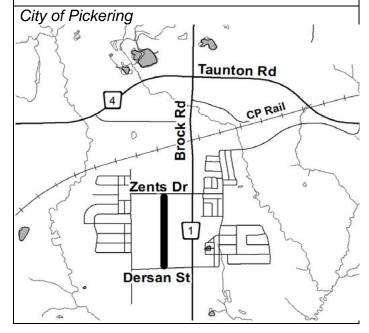
ITEM NO. 40

SYSTEM EXPANSION

Duffin Heights sanitary sewer on future street from Dersan St. to Zents Dr., Pickering

Project No.: D1902

RELATED PROJECTS



BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

		2019		Four Year	Forecast		
	Budget Prior to 2019	CAPITAL BUDGET	2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		125.000					125.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION		600.000					600.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	725.000	0.000	0.000	0.000	0.000	725.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES		535.050					535.050
COMMERCIAL DEVELOPMENT CHARGES*		33.350					33.350
USER REVENUES		156.600					156.600
OTHER							0.000
ASSET MGMT RESERVE FUND							0.000
TOTAL ATTRIBUTION	0.000	725.000	0.000	0.000	0.000	0.000	725.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

NEED/EXPLANATION OF PROJECT

Linear infrastructure required for the development of the Duffin Heights Community.

SANITARY SEWERAGE SYSTEM

PROJECT LOCATION & DESCRIPTION

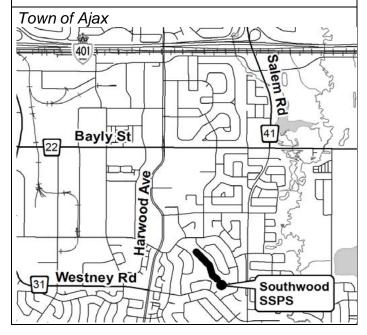
ITEM NO.: 42

SYSTEM EXPANSION

Twinning of existing 450 mm sanitary sewer on easement from Southwood Sanitary Sewage Pumping Station to approximately 500 m North, Ajax

Project No.: D1903

RELATED PROJECTS



BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

		2019		Four Year	Forecast		
	Budget Prior to 2019	CAPITAL BUDGET	2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		150.000					150.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION			1,250.000				1,250.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	150.000	1,250.000	0.000	0.000	0.000	1,400.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES		110.700	922.500				1,033.200
COMMERCIAL DEVELOPMENT CHARGES*		6.900	57.500				64.400
USER REVENUES		32.400	270.000				302.400
OTHER					Ì		0.000
ASSET MGMT RESERVE FUND							0.000
TOTAL ATTRIBUTION	0.000	150.000	1,250.000	0.000	0.000	0.000	1,400.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

NEED/EXPLANATION OF PROJECT

Twinning of the trunk sanitary sewer is required to provide increase capacity and system security.

SANITARY SEWERAGE SYSTEM

PROJECT LOCATION & DESCRIPTION

ITEM NO. 66

SYSTEM EXPANSION

Courtice Trunk Sanitary Sewer - Phase 3

Baseline Rd. from Courtice Rd. to Trulls Rd. and Trulls Rd. from

Baseline Rd. to Bloor St.

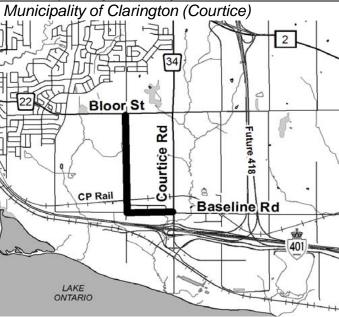
Project No.: C0702

RELATED PROJECTS

2011 Sanitary Sewerage Capital Budget Item No. 52

2013 Sanitary Sewerage Capital Budget Item No. 52

2016 Sanitary Sewerage Capital Budget Item No. 61



BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

		2019		Four Year	Forecast		
	Budget Prior to 2019	CAPITAL BUDGET	2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING	6,659.000			3,500.000			10,159.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION	20,880.000	25,900.000		39,900.000		14,800.000	101,480.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	27,539.000	25,900.000	0.000	43,400.000	0.000	14,800.000	111,639.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES	6,115.632			32,029.200		10,922.400	49,067.232
COMMERCIAL DEVELOPMENT CHARGES*	1,607.995			1,996.400		680.800	4,285.195
USER REVENUES	5,326.873			9,374.400		3,196.800	17,898.073
DEBENTURES	14,488.500	25,900.000					40,388.500
ASSET MGMT RESERVE FUND							0.000
TOTAL ATTRIBUTION	27,539.000	25,900.000	0.000	43,400.000	0.000	14,800.000	111,639.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

NEED/EXPLANATION OF PROJECT

Phase 1:400 m South of Energy Dr. to 100 m North of Energy Dr. - Completed

Phase 2:100 m North of Energy Dr. to the intersection of Baseline Rd. and Courtice Rd. - construction has commenced

Phase 3: Baseline Rd. from Courtice Rd. to Trulls Rd. and Trulls Rd. from Baseline Rd. to Bloor St.

Phase 4: Trulls Rd. from Bloor St. to Future Adelaide Ave.

Phase 5: Adelaide Ave. Extension from Trulls Rd. to Townline Rd.

SANITARY SEWERAGE SYSTEM

PROJECT LOCATION & DESCRIPTION

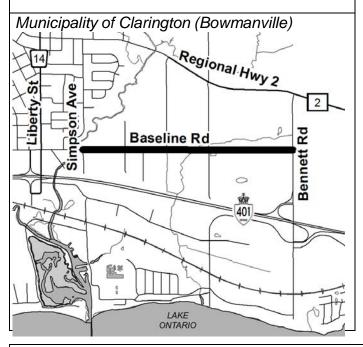
ITEM NO. 70

SYSTEM EXPANSION

Baseline Rd. Trunk Sanitary Sewer from Simpson Ave. to Bennett Rd., Bowmanville

Project No.: D1910

RELATED PROJECTS



BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

		2019		Four Year	Forecast		
	Budget Prior to 2019	CAPITAL BUDGET	2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		600.000	200.000				800.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION		2,400.000			3,800.000		6,200.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	3,000.000	200.000	0.000	3,800.000	0.000	7,000.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES		2,214.000	147.600		2,804.400		5,166.000
COMMERCIAL DEVELOPMENT CHARGES*		138.000	9.200		174.800		322.000
USER REVENUES		648.000	43.200		820.800		1,512.000
OTHER							0.000
ASSET MGMT RESERVE FUND							0.000
TOTAL ATTRIBUTION	0.000	3,000.000	200.000	0.000	3,800.000	0.000	7,000.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

NEED/EXPLANATION OF PROJECT

Timing of construction dependent on rate of development. Trunk Sanitary Sewer Phasing:

Phase 1 Mearns Ave. to Lambs Rd.

Phase 2: Simpson Ave. to Mearns Ave.

Phase 3: Lambs Rd. to Bennett Rd.

SANITARY SEWERAGE SYSTEM

PROJECT LOCATION & DESCRIPTION

ITEM NO. 75

SYSTEM EXPANSION

Foster Creek Trunk Sanitary Sewer on Sunset Blvd./Lakeview Rd. from Rudell Rd. to Church St., Newcastle

Project No.: C1002

RELATED PROJECTS

Municipality of Clarington (Newcastle)



BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

		2019		Four Year	Forecast		
	Budget Prior to 2019	CAPITAL BUDGET	2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING	506.400						506.400
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION	1,825.000	1,200.000					3,025.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	2,331.400	1,200.000	0.000	0.000	0.000	0.000	3,531.400
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES	1,727.922	885.600					2,613.522
COMMERCIAL DEVELOPMENT CHARGES*	144.500	55.200					199.700
USER REVENUES	76.978	259.200					336.178
NEW INDUSTRIAL DEV. CHGS.	382.000						382.000
ASSET MGMT RESERVE FUND							0.000
TOTAL ATTRIBUTION	2,331.400	1,200.000	0.000	0.000	0.000	0.000	3,531.400

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

NEED/EXPLANATION OF PROJECT

Timing of construction dependent on rate of development. Trunk Sanitary Sewer Phasing:

Phase 1 Mearns Ave. to Lambs Rd.

Phase 2: Simpson Ave. to Mearns Ave.

Phase 3: Lambs Rd. to Bennett Rd.

SANITARY SEWERAGE SYSTEM

PROJECT LOCATION & DESCRIPTION ITEM NO. 80 **BUILDINGS** Duffin Creek Water Pollution Control Plant - Condition Assessment Pickering Project No.: Y1901 RELATED PROJECTS City of Pickering Bayly St š Squires Beach Rd Liverpool Rd Rd Brock McKay Rd

BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

ENVIRONMENTAL ASSESSMENT ENGINEERING LAND ACQUISITION UTILITY RELOCATION CONSTRUCTION CONTINGENCY OTHER TOTAL EXPENDITURES SUBSIDY/GRANTS UNIVERSED SHOW SON STAND SHOW SHOW SHOW SHOW SHOW SHOW SHOW SHOW	0.000 600.000 0.000 0.000
ENVIRONMENTAL ASSESSMENT ENGINEERING LAND ACQUISITION UTILITY RELOCATION CONSTRUCTION CONTINGENCY OTHER TOTAL EXPENDITURES 0.000 600.000 0.000 0.000 0.000 ATTRIBUTION: SUBSIDY/GRANTS RESIDENTIAL DEVELOPMENT CHARGES	0.000 0.000
ENGINEERING	0.000 0.000
LAND ACQUISITION UTILITY RELOCATION CONSTRUCTION CONTINGENCY OTHER TOTAL EXPENDITURES ATTRIBUTION: SUBSIDY/GRANTS RESIDENTIAL DEVELOPMENT CHARGES CHARGES	0.000
UTILITY RELOCATION	0.000
CONSTRUCTION CONTINGENCY OTHER CONTINGENCY TOTAL EXPENDITURES 0.000 600.000 0.000 ATTRIBUTION: CONTINGENCY SUBSIDY/GRANTS CONTINGENCY RESIDENTIAL DEVELOPMENT CHARGES	
CONTINGENCY 0THER TOTAL EXPENDITURES 0.000 600.000 0.000	0.000
OTHER 0.000 600.000 <	0.000
TOTAL EXPENDITURES 0.000 600.000 0.000 </td <td>0.000</td>	0.000
ATTRIBUTION: SUBSIDY/GRANTS RESIDENTIAL DEVELOPMENT CHARGES	0.000
SUBSIDY/GRANTS RESIDENTIAL DEVELOPMENT CHARGES	600.000
RESIDENTIAL DEVELOPMENT CHARGES	
CHARGES	0.000
COMMERCIAL DEVELOPMENT	0.000
CHARGES*	0.000
USER REVENUES	0.000
OTHER - YORK 461.400	461.400
ASSET MGMT RESERVE FUND 138.600	138.600
TOTAL ATTRIBUTION 0.000 600.000 0.000 0.000 0.000 0.000	

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

NEED/EXPLANATION OF PROJECT

Cost sharing with York Region.

Lake Ontario

SANITARY SEWERAGE SYSTEM

PROJECT LOCATION & DESCRIPTION ITEM NO. 81 BUILDINGS Duffin Creek Water Pollution Control Plant - Stage III Solids expansion, Pickering Project No.: Y0502 RELATED PROJECTS 2008 Sanitary Sewerage Capital Budget Item No. 21 2009 Sanitary Sewerage Capital Budget Item No. 23 2010 Sanitary Sewerage Capital Budget Item No. 52 City of Pickering Bayly St Squires Beach Rd Rd McKay Rd

BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

		2019		Four Year	Forecast			
	Budget Prior to 2019	CAPITAL BUDGET	2020	2021	2022	2023	TOTAL	
EXPENDITURES:								
ENVIRONMENTAL ASSESSMENT							0.000	
ENGINEERING	56,147.368						56,147.368	
LAND ACQUISITION							0.000	
UTILITY RELOCATION							0.000	
CONSTRUCTION	262,800.000	13,000.000					275,800.000	
CONTINGENCY							0.000	
OTHER							0.000	
TOTAL EXPENDITURES	318,947.368	13,000.000	0.000	0.000	0.000	0.000	331,947.368	
ATTRIBUTION:								
SUBSIDY/GRANTS							0.000	
RESIDENTIAL DEVELOPMENT CHARGES	24,228.120	2,470.000					26,698.120	
COMMERCIAL DEVELOPMENT CHARGES*	2,394.935	395.200					2,790.135	
USER REVENUES	10,240.025	938.600					11,178.625	
OTHER - DEBENTURES	32,443.250					İ	32,443.250	
OTHER - YORK/ SEATON	249,641.038	9,196.200					258,837.238	
TOTAL ATTRIBUTION	318,947.368	13,000.000	0.000	0.000	0.000	0.000	331,947.368	

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

NEED/EXPLANATION OF PROJECT

Cost sharing with York Region.

Lake Ontario

SANITARY SEWERAGE SYSTEM

PROJECT LOCATION & DESCRIPTION ITEM NO.: 82 BUILDINGS Proposed Seaton - Sanitary Sewage Pumping Station 4 and forcemain, Pickering Project No.: D1710 RELATED PROJECTS 2017 Sanitary Sewerage Capital Budget Item No. 72 City of Pickering 407 EIR Seaton SSPS 4 & **Forcemain Taunton Rd**

BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

		2019		Four Year	Forecast			
	Budget Prior to 2019	CAPITAL BUDGET	2020	2021	2022	2023	TOTAL	
EXPENDITURES:								
ENVIRONMENTAL ASSESSMENT							0.000	
ENGINEERING	700.000						700.000	
LAND ACQUISITION							0.000	
UTILITY RELOCATION							0.000	
CONSTRUCTION		4,000.000					4,000.000	
CONTINGENCY							0.000	
OTHER							0.000	
TOTAL EXPENDITURES	700.000	4,000.000	0.000	0.000	0.000	0.000	4,700.000	
ATTRIBUTION:								
SUBSIDY/GRANTS							0.000	
RESIDENTIAL DEVELOPMENT CHARGES							0.000	
COMMERCIAL DEVELOPMENT CHARGES*							0.000	
USER REVENUES	100.000	100.000					200.000	
OTHER - SEATON	600.000	3,900.000					4,500.000	
ASSET MGMT RESERVE FUND							0.000	
TOTAL ATTRIBUTION	700.000	4,000.000	0.000	0.000	0.000	0.000	4,700.000	

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

NEED/EXPLANATION OF PROJECT

Durham to oversee the detailed design and construction of the vertical infrastructure required for the development of the Seaton Community.

SANITARY SEWERAGE SYSTEM

PROJECT LOCATION & DESCRIPTION ITEM NO. 85 **BUILDINGS** Carruthers Sanitary Sewage Pumping Station - Chemical evaluation for odour control Project No.: D1735 RELATED PROJECTS 2018 Sanitary Sewerage Capital Budget Item No. 69 Town of Ajax Kingston Rd Creek SSPS Bayly St

BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

		2019		Four Year	Forecast		
	Budget Prior to 2019		2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING	440.000						440.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION		600.000					600.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	440.000	600.000	0.000	0.000	0.000	0.000	1,040.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES							0.000
COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES	440.000	600.000					1,040.000
OTHER							0.000
ASSET MGMT RESERVE FUND							0.000
TOTAL ATTRIBUTION	440.000	600.000	0.000	0.000	0.000	0.000	1,040.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

SANITARY SEWERAGE SYSTEM

PROJECT LOCATION & DESCRIPTION ITEM NO. 86 **BUILDINGS** Corbett Creek Water Pollution Control Plant - works to rectify existing deficiencies, Whitby Project No.: D1913 RELATED PROJECTS Town of Whitby Champlain Av 401 Victoria St **Corbett Creek** WPCP Thickson Rd Wentworth St Thornton Rd **Boundary Rd** LAKE ONTARIO

BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

		2019		Four Year	Forecast		
	Budget Prior to 2019	CAPITAL BUDGET	2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		1,120.000					1,120.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION		880.000	5,500.000				6,380.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	2,000.000	5,500.000	0.000	0.000	0.000	7,500.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES		1,054.000	2,898.500				3,952.500
COMMERCIAL DEVELOPMENT CHARGES*		166.000	456.500				622.500
USER REVENUES		10.000	2,145.000				2,155.000
INDUSTRIAL CHARGES		770.000					770.000
ASSET MGMT RESERVE FUND							0.000
TOTAL ATTRIBUTION	0.000	2,000.000	5,500.000	0.000	0.000	0.000	7,500.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

NEED/EXPLANATION OF PROJECT

Required to rectify existing deficiencies at the plant.

SANITARY SEWERAGE SYSTEM

PROJECT LOCATION & DESCRIPTION ITEM NO. 87 BUILDINGS Corbett Creek Water Pollution Control Plant - New headworks building Project No.: D1409 RELATED PROJECTS 2014 Sanitary Sewerage Capital Budget Item No. 64 Town of Whitby Champlain Av 401 Victoria St **Corbett Creek** WPCP Thickson Rd Wentworth St 60 Rd **Boundary Rd** Thornton LAKE ONTARIO

BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

		2019		Four Year I	Forecast		
	Budget Prior to 2019	CAPITAL BUDGET	2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING	800.000	500.000					1,300.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION				4,900.000			4,900.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	800.000	500.000	0.000	4,900.000	0.000	0.000	6,200.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES							0.000
COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES	800.000	500.000		4,900.000			6,200.000
OTHER						_	0.000
ASSET MGMT RESERVE FUND							0.000
TOTAL ATTRIBUTION	800.000	500.000	0.000	4,900.000	0.000	0.000	6,200.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

NEED/EXPLANATION OF PROJECT

Work will commence once the deficiencies project has been completed.

SANITARY SEWERAGE SYSTEM

PROJECT LOCATION & DESCRIPTION ITEM NO. 90 **BUILDINGS** Harmony Creek Water Pollution Control Plant No. 2 upgrades, Oshawa Project No.: D1523 RELATED PROJECTS 2018 Sanitary Sewerage Capital Budget Item No. 75 City of Oshawa Bloor St **Harmony Creek** WPCP Wentworth St Farewell St 60

BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

		2019		Four Year	Forecast		
	Budget Prior to 2019	CAPITAL BUDGET	2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING	1,600.000						1,600.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION	21,566.564	230.000					21,796.564
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	23,166.564	230.000	0.000	0.000	0.000	0.000	23,396.564
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES							0.000
COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES	23,166.564	230.000					23,396.564
OTHER							0.000
ASSET MGMT RESERVE FUND							0.000
TOTAL ATTRIBUTION	23,166.564	230.000	0.000	0.000	0.000	0.000	23,396.564

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

SANITARY SEWERAGE SYSTEM

PROJECT LOCATION & DESCRIPTION ITEM NO. 99 BUILDINGS Newcastle Water Pollution Control Plant - Capacity Re-rating 4 MLD to 7 MLD to include Sludge Storage Project No.: D1117 RELATED PROJECTS Municipality of Clarington (Newcastle)

akebreeze Dr

ONTARIO

BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

		2019		Four Year	Forecast		
	Budget Prior to 2019	CAPITAL BUDGET	2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.00
ENGINEERING	1,420.000						1,420.00
LAND ACQUISITION							0.00
UTILITY RELOCATION							0.00
CONSTRUCTION	2,280.000	1,214.000	4,900.000				8,394.00
CONTINGENCY							0.000
OTHER							0.00
TOTAL EXPENDITURES	3,700.000	1,214.000	4,900.000	0.000	0.000	0.000	9,814.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES	643.670	639.778	2,582.300				3,865.74
COMMERCIAL DEVELOPMENT CHARGES*	72.100	100.519	405.720				578.33
USER REVENUES	1,572.500	243.703	1,911.980				3,728.18
OTHER - DEBENTURES	1,411.730						1,411.73
INDUSTRIAL CHARGES		230.000					230.00
TOTAL ATTRIBUTION	3,700.000	1,214.000	4,900.000	0.000	0.000	0.000	9,814.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

NEED/EXPLANATION OF PROJECT

Potential for additional capacity through an optimization study and modification to the plant. Possible plant expansion deferred beyond forecast. Allowance for potential upgrades subject to the completion of the optimization study.

SANITARY SEWERAGE SYSTEM

PROJECT LOCATION & DESCRIPTION ITEM NO. 101 BUILDINGS Rudell St. Sanitary Sewerage Pumping Station - decommissioning Project No.: D1914 RELATED PROJECTS Municipality of Clarington (Newcastle) 16 -King Ave Rudell Rd S E Hart Blvd Rudell Rd SSPS

BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

		2019		Four Year	Forecast		
	Budget Prior to 2019	CAPITAL BUDGET	2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		60.000	30.000				90.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION			510.000				510.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	60.000	540.000	0.000	0.000	0.000	600.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES							0.000
COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES		60.000	540.000				600.000
OTHER							0.000
ASSET MGMT RESERVE FUND							0.000
TOTAL ATTRIBUTION	0.000	60.000	540.000	0.000	0.000	0.000	600.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

SANITARY SEWERAGE SYSTEM

PROJECT LOCATION & DESCRIPTION

ITEM NO. 103

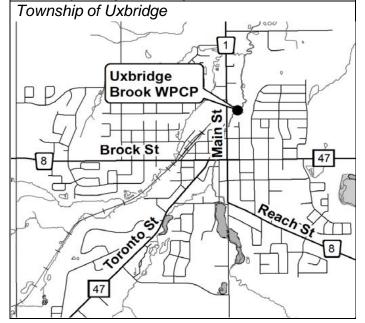
BUILDINGS

Uxbridge Water Pollution Control Plant - Optimization Study, upgrades and rehabilitation works based on the condition assessment

Project No.: D1204

RELATED PROJECTS

2012 Sanitary Sewerage Capital Budget Item No. 70 2015 Sanitary Sewerage Capital Budget Item No. 85



BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

		2019		Four Year	Forecast		
	Budget Prior to 2019		2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING	600.000	100.000					700.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION		2,400.000	1,800.000				4,200.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	600.000	2,500.000	1,800.000	0.000	0.000	0.000	4,900.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES	239.850	1,317.500					1,557.350
COMMERCIAL DEVELOPMENT CHARGES*	47.250	207.000					254.250
USER REVENUES	312.900	975.500	1,800.000				3,088.400
OTHER							0.000
ASSET MGMT RESERVE FUND							0.000
TOTAL ATTRIBUTION	600.000	2,500.000	1,800.000	0.000	0.000	0.000	4,900.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

SANITARY SEWERAGE SYSTEM

PROJECT LOCATION & DESCRIPTION ITEM NO. 105 BUILDINGS Water St. Sanitary Sewage Pumping Station - expansion/replacement Project No.: D1304 **RELATED PROJECTS** 2013 Sanitary Sewerage Capital Budget No. 73 2016 Sanitary Sewerage Capital Budget No. 98 Township of Scugog (Port Perry) Reach St 8 LAKE SCUGOG Rd Old Simcoe Water St रु SSPS Simcoe (Water St 2 Scugog St

BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

		2019		Four Year	Forecast		
	Budget Prior to 2019	CAPITAL BUDGET	2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING	908.350						908.350
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION		1,667.272	5,430.300				7,097.572
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	908.350	1,667.272	5,430.300	0.000	0.000	0.000	8,005.922
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES		418.485	1,363.005				1,781.490
COMMERCIAL DEVELOPMENT CHARGES*		26.009	84.713				110.722
USER REVENUES		122.378	398.584				520.962
OTHER							0.000
ASSET MGMT RESERVE FUND	908.350	1,100.400	3,583.998				5,592.748
TOTAL ATTRIBUTION	908.350	1,667.272	5,430.300	0.000	0.000	0.000	8,005.922

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

SANITARY SEWERAGE SYSTEM

PROJECT LOCATION & DESCRIPTION ITEM NO. 117 MACHINERY AND EQUIPMENT Duffin Creek Water Pollution Control Plant - Replacement of Reactor No. 1 & 2, Pickering Project No.: Y1503 RELATED PROJECTS 2015 Sanitary Sewerage Capital Budget Item No. 92 2017 Sanitary Sewerage Capital Budget Item No. 99 City of Pickering Bayly St **Duffin Creek** WPCP LAKE ONTARIO

BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

	Budget	2019		Four Year	Forecast		
	Prior to 2019	CAPITAL BUDGET	2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING	15,000.000	6,000.000					21,000.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION			10,000.000	29,700.000	40,300.000	29,700.000	109,700.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	15,000.000	6,000.000	10,000.000	29,700.000	40,300.000	29,700.000	130,700.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES							0.000
COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES	3,930.000	1,572.000	2,620.000	7,781.400	10,558.600	7,781.400	34,243.400
OTHER - YORK	11,070.000	4,428.000	7,380.000	21,918.600	29,741.400	21,918.600	96,456.600
ASSET MGMT RESERVE FUND							0.000
TOTAL ATTRIBUTION	15,000.000	6,000.000	10,000.000	29,700.000	40,300.000	29,700.000	130,700.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

NEED/EXPLANATION OF PROJECT

Cost sharing with York Region

SANITARY SEWERAGE SYSTEM

PROJECT LOCATION & DESCRIPTION

ITEM NO. 118

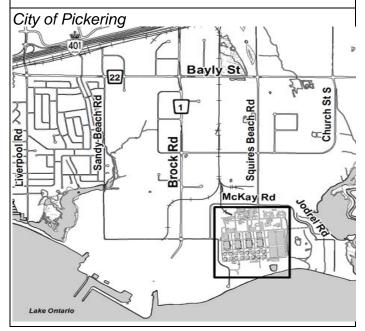
MACHINERY AND EQUIPMENT

Regional Environmental Laboratory Upgrades and ventilation associated works, Pickering

Project No.: Y1602

RELATED PROJECTS

2016 Sanitary Sewerage Capital Budget Item No. 76 2018 Water Supply Capital Budget Item No. 109



BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

	Budget	2019		Four Year	Forecast		
	Prior to 2019	CAPITAL BUDGET	2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING	450.000						450.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION	3,100.000	650.000					3,750.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	3,550.000	650.000	0.000	0.000	0.000	0.000	4,200.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES	1,318.825	239.850					1,558.675
COMMERCIAL DEVELOPMENT CHARGES*	102.950	14.950					117.900
USER REVENUES	57.175	70.200					127.375
NEW INDUSTRIAL DEV. CHGS.	296.050	0.000					296.050
OTHER - YORK	1,775.000	325.000					2,100.000
TOTAL ATTRIBUTION	3,550.000	650.000	0.000	0.000	0.000	0.000	4,200.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

NEED/EXPLANATION OF PROJECT

Cost sharing with York Region.

SANITARY SEWERAGE SYSTEM

PROJECT LOCATION & DESCRIPTION

ITEM NO. 119

MACHINERY AND EQUIPMENT

Duffin Creek Water Pollution Control Plant - Phosphorous Optimization Implementation Plan

Project No.: Y1902

RELATED PROJECTS

City of Pickering



BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

	Budget	2019		Four Year	Forecast		
	Prior to 2019	CAPITAL BUDGET	2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		700.000					700.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION		850.000	3,450.000				4,300.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	1,550.000	3,450.000	0.000	0.000	0.000	5,000.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES							0.000
COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES		310.000	690.000				1,000.000
OTHER - YORK		1,240.000	2,760.000				4,000.000
ASSET MGMT RESERVE FUND							0.000
TOTAL ATTRIBUTION	0.000	1,550.000	3,450.000	0.000	0.000	0.000	5,000.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

NEED/EXPLANATION OF PROJECT

Cost sharing with York Region

SANITARY SEWERAGE SYSTEM

PROJECT LOCATION & DESCRIPTION ITEM NO. 121 MACHINERY AND EQUIPMENT Bayly St. Sanitary Sewage Pumping Station - Mechanical Screen Replacement and Motor Control Centre review & upgrades, Ajax Project No.: D1714 RELATED PROJECTS 2017 Sanitary Sewerage Capital Budget Item No. 105 Town of Ajax Bayly St **Bayly St SSPS** Westney Rd

BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

	Budget	2019		Four Year	Forecast		
	Prior to 2019	CAPITAL BUDGET	2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING	350.000	200.000					550.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION		800.000	1,400.000				2,200.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	350.000	1,000.000	1,400.000	0.000	0.000	0.000	2,750.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES							0.000
COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES	350.000	1,000.000	1,400.000				2,750.000
OTHER				_			0.000
ASSET MGMT RESERVE FUND							0.000
TOTAL ATTRIBUTION	350.000	1,000.000	1,400.000	0.000	0.000	0.000	2,750.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

NEED/EXPLANATION OF PROJECT

Project will be completed in two phases.

LAKE ONTARIO

Phase 1: Replacement of the Mechanical Screen

Phase 2: Motor Control Centre (MCC) review and upgrades

SANITARY SEWERAGE SYSTEM

PROJECT LOCATION & DESCRIPTION

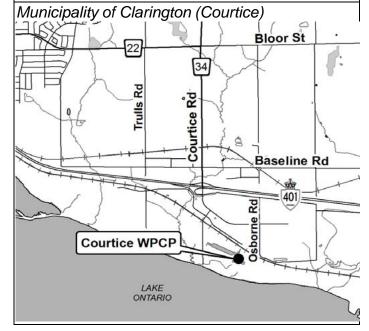
ITEM NO. 124

MACHINERY AND EQUIPMENT

Courtice Water Pollution Control Plant - remediation work at digester No. 1 performance improvements for the grit tanks and refurbishment of the mixers.

Project No.: D1920

RELATED PROJECTS



BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

	Budget	2019		Four Year	Forecast		
	Prior to 2019	CAPITAL BUDGET	2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		240.000					240.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION		1,460.000					1,460.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	1,700.000	0.000	0.000	0.000	0.000	1,700.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES							0.000
COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES							0.000
OTHER							0.000
ASSET MGMT RESERVE FUND		1,700.000					1,700.000
TOTAL ATTRIBUTION	0.000	1,700.000	0.000	0.000	0.000	0.000	1,700.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

SANITARY SEWERAGE SYSTEM

PROJECT LOCATION & DESCRIPTION ITEM NO. 126 MACHINERY AND EQUIPMENT Courtice Water Pollution Control Plant - Capacitor Bank replacement Project No.: D1921 RELATED PROJECTS Municipality of Clarington (Courtice) Bloor St Courtice Rd Baseline Rd **Courtice WPCP** LAKE ONTARIO

BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

	Budget	2019					
	Prior to 2019	CAPITAL BUDGET	2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		30.000					30.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION		120.000					120.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	150.000	0.000	0.000	0.000	0.000	150.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES							0.000
COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES		150.000					150.000
OTHER							0.000
ASSET MGMT RESERVE FUND							0.000
TOTAL ATTRIBUTION	0.000	150.000	0.000	0.000	0.000	0.000	150.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

SANITARY SEWERAGE SYSTEM

PROJECT LOCATION & DESCRIPTION

ITEM NO. 133

ALLOWANCES AND OTHER PROVISIONS

Asset Condition Assessment/ Investigation on trunk sanitary sewer system

Project No.: D1420

RELATED PROJECTS

2014 Sanitary Sewerage Capital Budget Item No. 98 2015 Sanitary Sewerage Capital Budget Item No. 106

BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

	Budget Prior to 2019	2019					
		CAPITAL BUDGET	2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING	609.000	200.000	200.000	200.000	200.000	200.000	1,609.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION							0.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	609.000	200.000	200.000	200.000	200.000	200.000	1,609.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES							0.000
COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES							0.000
OTHER							0.000
ASSET MGMT RESERVE FUND	609.000	200.000	200.000	200.000	200.000	200.000	1,609.000
TOTAL ATTRIBUTION	609.000	200.000	200.000	200.000	200.000	200.000	1,609.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

SANITARY SEWERAGE SYSTEM

PROJECT LOCATION & DESCRIPTION

ITEM NO. 135

ALLOWANCES AND OTHER PROVISIONS

Allowance for acquisition of easements

Project No.: M1901

RELATED PROJECTS

2019 Water Supply Capital Budget Item No. 222

BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

		2019					
	Budget Prior to 2019		2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING							0.000
LAND ACQUISITION		150.000	150.000	150.000	150.000	150.000	750.000
UTILITY RELOCATION							0.000
CONSTRUCTION							0.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	150.000	150.000	150.000	150.000	150.000	750.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES							0.000
COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES		150.000	150.000	150.000	150.000	150.000	750.000
OTHER							0.000
ASSET MGMT RESERVE FUND							0.000
TOTAL ATTRIBUTION	0.000	150.000	150.000	150.000	150.000	150.000	750.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

NEED/EXPLANATION OF PROJECT

A number of sanitary sewer are located on easements to which the Region does not have a clear title. This allowance is for acquisition of easement for existing sanitary sewers in various locations.

SANITARY SEWERAGE SYSTEM

PROJECT LOCATION & DESCRIPTION
л NO. 136
OWANCES AND OTHER PROVISIONS
wance for engineering studies
ect No.: M1907
RELATED PROJECTS
9 Water Supply Capital Budget Item No. 223

BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

	Budget Prior to 2019	2019					
		Budget Prior CAPITAL	2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		250.000	150.000	150.000	150.000	150.000	850.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION							0.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	250.000	150.000	150.000	150.000	150.000	850.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES							0.000
COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES		250.000	150.000	150.000	150.000	150.000	850.000
OTHER							0.000
ASSET MGMT RESERVE FUND							0.000
TOTAL ATTRIBUTION	0.000	250.000	150.000	150.000	150.000	150.000	850.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

SANITARY SEWERAGE SYSTEM

PROJECT LOCATION & DESCRIPTION

ITEM NO. 138

ALLOWANCES AND OTHER PROVISIONS

Preliminary Engineering

Project No.: 66143

RELATED PROJECTS

2019 Water Supply Capital Budget Item No. 225

BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

	Budget Prior to 2019						
			2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		100.000	100.000	100.000	100.000	100.000	500.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION							0.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	100.000	100.000	100.000	100.000	100.000	500.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES							0.000
COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES		100.000	100.000	100.000	100.000	100.000	500.000
OTHER							0.000
ASSET MGMT RESERVE FUND							0.000
TOTAL ATTRIBUTION	0.000	100.000	100.000	100.000	100.000	100.000	500.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

NEED/EXPLANATION OF PROJECT

Allowance for preliminary engineering carried out in advance of budget provision.

SANITARY SEWERAGE SYSTEM

ITEM NO. 139

ALLOWANCES AND OTHER PROVISIONS

Allowance for sundry extensions as per Council policy

Project No.: M1908

RELATED PROJECTS

2019 Water Supply Capital Budget Item No. 226

BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

	Budget Prior to 2019						
			2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		15.000	15.000	15.000	15.000	15.000	75.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION							0.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	15.000	15.000	15.000	15.000	15.000	75.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES							0.000
COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES		15.000	15.000	15.000	15.000	15.000	75.000
OTHER							0.000
ASSET MGMT RESERVE FUND							0.000
TOTAL ATTRIBUTION	0.000	15.000	15.000	15.000	15.000	15.000	75.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

NEED/EXPLANATION OF PROJECT

Regional share for sundry extensions.

SANITARY SEWERAGE SYSTEM

PROJECT LOCATION & DESCRIPTION
ITEM NO. 140
ALLOWANCES AND OTHER PROVISIONS
Allowance for unknown requirements
Project No.: M1909
RELATED PROJECTS
2019 Water Supply Capital Budget Item No. 227

BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

		2019 _ Budget Prior CAPITAL to 2019 BUDGET					
			2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		100.000	100.000	100.000	100.000	100.000	500.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION							0.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	100.000	100.000	100.000	100.000	100.000	500.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES							0.000
COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES		100.000	100.000	100.000	100.000	100.000	500.000
OTHER							0.000
ASSET MGMT RESERVE FUND							0.000
TOTAL ATTRIBUTION	0.000	100.000	100.000	100.000	100.000	100.000	500.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

NEED/EXPLANATION OF PROJECT

Allowance for unanticipated works.

SANITARY SEWERAGE SYSTEM

DDO IECT I	OCATION 9	DESCRIPTION
PROJECT L	UCATION &	DESCRIPTION

ITEM NO. 141

ALLOWANCES AND OTHER PROVISIONS

Allowance for land severance review and drawing requirements

Project No.: M1962

RELATED PROJECTS

2019 Water Supply Capital Budget Item No. 228

BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

		2019					
	Budget Prior to 2019		2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		100.000	100.000	100.000	100.000	100.000	500.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION							0.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	100.000	100.000	100.000	100.000	100.000	500.000
ATTRIBUTION:							
SUBSIDY/GRANTS	1						0.000
RESIDENTIAL DEVELOPMENT CHARGES							0.000
COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES		100.000	100.000	100.000	100.000	100.000	500.000
OTHER							0.000
ASSET MGMT RESERVE FUND							0.000
TOTAL ATTRIBUTION	0.000	100.000	100.000	100.000	100.000	100.000	500.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

NEED/EXPLANATION OF PROJECT

Regional share for sanitary sewers related to existing, new residential and new non-residential development, in conjunction with new residential subdivisions.

SANITARY SEWERAGE SYSTEM

PROJECT LOCATION & DESCRIPTION

ITEM NO. 142

ALLOWANCES AND OTHER PROVISIONS

Allowance for Regional share for works in conjunction with residential subdivision development.

Project No.: M1910

RELATED PROJECTS

2019 Water Supply Capital Budget Item No. 229

BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

		2019					
	Budget Prior to 2019	CAPITAL BUDGET	2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		200.000	200.000	200.000	200.000	200.000	1,000.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION		1,260.000	1,260.000	1,260.000	1,260.000	1,260.000	6,300.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	1,460.000	1,460.000	1,460.000	1,460.000	1,460.000	7,300.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES		1,077.480	1,077.480	1,077.480	1,077.480	1,077.480	5,387.400
COMMERCIAL DEVELOPMENT CHARGES*		67.160	67.160	67.160	67.160	67.160	335.800
USER REVENUES		315.360	315.360	315.360	315.360	315.360	1,576.800
OTHER							0.000
ASSET MGMT RESERVE FUND							0.000
TOTAL ATTRIBUTION	0.000	1,460.000	1,460.000	1,460.000	1,460.000	1,460.000	7,300.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

NEED/EXPLANATION OF PROJECT

Regional share for sanitary sewers related to existing, new residential and new non-residential development, in conjunction with new residential subdivisions.

SANITARY SEWERAGE SYSTEM

PROJECT LOCATION & DESCRIPTION

ITEM NO. 143

ALLOWANCES AND OTHER PROVISIONS

Allowance for Regional share for works in conjunction with non residential development.

Project No.: M1911

RELATED PROJECTS

2019 Water Supply Capital Budget Item No. 230

BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

		2019					
	Budget Prior to 2019	CAPITAL BUDGET	2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		57.200	57.200	57.200	57.200	57.200	286.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION		342.800	342.800	342.800	342.800	342.800	1,714.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	400.000	400.000	400.000	400.000	400.000	2,000.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES		295.200	295.200	295.200	295.200	295.200	1,476.000
COMMERCIAL DEVELOPMENT CHARGES*		18.400	18.400	18.400	18.400	18.400	92.000
USER REVENUES		86.400	86.400	86.400	86.400	86.400	432.000
OTHER							0.000
ASSET MGMT RESERVE FUND							0.000
TOTAL ATTRIBUTION	0.000	400.000	400.000	400.000	400.000	400.000	2,000.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

NEED/EXPLANATION OF PROJECT

Allowance for possible Regional share in design and construction of sanitary sewers for non- residential development.

SANITARY SEWERAGE SYSTEM

PROJEC	CT LOCATION & DESCRIPTION
EM NO. 144	
LLOWANCES AND C	OTHER PROVISIONS
llowance for intensific	ation
roject No.: M1961	
	RELATED PROJECTS

BUDGET PROVISION AND COST ATTRIBUTION (\$000's)

		2019					
	Budget Prior to 2019	CAPITAL BUDGET	2020	2021	2022	2023	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		60.000	60.000	60.000	60.000	60.000	300.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION		290.000	290.000	290.000	290.000	290.000	1,450.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	350.000	350.000	350.000	350.000	350.000	1,750.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
RESIDENTIAL DEVELOPMENT CHARGES		258.300	258.300	258.300	258.300	258.300	1,291.500
COMMERCIAL DEVELOPMENT CHARGES*		16.100	16.100	16.100	16.100	16.100	80.500
USER REVENUES		75.600	75.600	75.600	75.600	75.600	378.000
OTHER							0.000
ASSET MGMT RESERVE FUND							0.000
TOTAL ATTRIBUTION	0.000	350.000	350.000	350.000	350.000	350.000	1,750.000

Under the Council approved Development Charge By-law #28-2018, the Region approved full Commercial, Industrial and Institutional Development Charges, effective July 1, 2018.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

NEED/EXPLANATION OF PROJECT

Allowance for possible Regional share in design and construction of sanitary sewers for intensification

2019 CAPITAL BUDGET AND NINE YEAR FORECAST

		BUDGET 2019 Nine Year Forecast												
ITEN No.		Project No.	PRIOR TO 2019	CAPITAL BUDGET	2020	2021	2022	2023	2024	2025	2026	2027	2028	TOTAL REMARKS
	CONSTRUCTION OF MUNICIPAL SERVICES ROAD RELATED PROJECTS													
Α	LINEAR INFRASTRUCTURE													Replacement of deficient sanitary sewers and/or construction of required works in
	Regional Road Program													conjunction with the Regional Road Program
1	R.R. 14 (Liberty St.) from Baseline Rd. to King St., Bowmanville Detailed Design Construction Total	R0503		350,000			1,400,000							350,000 1,400,000 1,750,000
2	R.R. 22 (Victoria St.)/R.R. 46 (Brock St.) intersection from 50 m North of Victoria St. to 50m South of Victoria St., Whitby			110,000										110,000
3	R.R. 36 (Hopkins St.) from Consumers Dr. to Dundas St., Whitby Detailed Design Construction Total								215,000			1,100,000		215,000 1,100,000 1,315,000
4	R.R. 43 (Cochrane St.) from Ferguson St. to Bonacord Ave., Whitby Detailed Design Construction Total	R1519	50,000			640,000								50,000 640,000 690,000
5	R.R. 53 (Stevenson Rd.) from Bond St. to Rossland Rd., Oshawa Detailled Design Construction Total					275,000				1,105,000				275,000 1,105,000 1,380,000
6	R.R. 57 (Bowmanville Ave.) from Baseline Rd. to Nash Rd., Bowmanville Detailed Design Construction Total	R1309	400,000		2,300,000	450,000					1,200,000			Phase 1 - Intersection improvements Hwy 2 and 400.000 Stevens Rd. 3,950,000 Phase 2 - Baseline Rd. to Hwy No. 2 4,350,000 Phase 3 - Stevens Rd. to Nash Rd.
7	R.R. 59 (Gibb St.) from Stevenson Rd. to Simcoe St., Oshawa Detailed Design Construction Total	R0604	80,000			220,000								80,000 220,000 300,000
8	R.R. 59 (Gibb St.)/Olive Ave. Interconnection from Drew St. to Ritson Rd., Oshawa						100,000		225,000					325,000
9	Highway 12 (Brock St.) from Manning Rd. to Rossland Rd., Whitby	R1523	30,000	320,000										350,000
10	Allowance for sanitary sewers in conjunction with the Regional Road Program					500,000	500,000	2,000,000	1,600,000	1,000,000	800,000	1,000,000	2,000,000	9,400,000
	Sub-total Regional road program		560,000	780,000	2,300,000	2,085,000	2,000,000	2,000,000	2,040,000	2,105,000	2,000,000	2,100,000	2,000,000	19,970,000
11	Area Municipality Roads Programs													
	The repair and replacement of deficient sanitary sewers are proposed to be carried out both in conjunction with area municipality road programs (item No. § 14 h. 0 ±11), 11 projects and independent of road programs in various locations (Item No. 13) 6 projects. Total 17 projects.													
11A	City of Pickering Road Program (0 Projects)													Replacement of deficient sanitary sewers and/or construction of required works in conjunction with the City of Pickering road program.
	Works forecast for 2020 to 2028				235,000	235,000	235,000	235,000	235,000	235,000	235,000	235,000	235,000	2,115,000

SANITARY SEWERAGE SYSTEM

		BUDGET	2019				Nine	Year Forecast	t				
EM PROJECT DESCRIPTION	Project	PRIOR TO	CAPITAL BUDGET	0000	2021	2022				0000	2027	0000	TOTAL
Inc. Inc.	No. A1999	2019	850,000	2020	2021	2022	2023	2024	2025	2026	2027	2028	TOTAL REMARKS 850,000 Replacement of deficient sanitary sewers and/or construction of required works in
Dreyer Dr. from Harwood Ave. to Pickering Beach Rd. Graham Crt from Dreyer Dr. to dead-end Farley Ct. from Dreyer Br. to dead-end Admiral Rd. from Roosevelt Ave. to Parry Rd. Hunt St. from 340 m west of MacKenzie Ave. to Harwood Ave. (Design only)													conjunction with the Town of Ajax road program.
Works forecast for 2020 to 2028				385,000	365,000	365,000	2,350,000	365,000	365,000	365,000	365,000	365,000	5,290,000
Town of Whitby Road Program (1 Project)	W1999		1,260,000										1,260,000 Replacement of deficient sanitary sewers and/or construction of required works in conjunction with the Town of Whitby
Centre St. from Miller St. to Dunlop St.													road program.
Works forecast for 2020 to 2028				600,000	600,000	600,000	600,000	600,000	600,000	600,000	600,000	600,000	5,400,000
City of Oshawa Road Program (0 Projects)													Replacement of deficient sanitary sewers and/or construction of required works in conjunction with the City of Oshawa
Works forecast for 2020 to 2028				1,100,000	1,100,000	1,100,000	1,100,000	1,100,000	1,100,000	1,100,000	1,100,000	1,100,000	9,900,000
Municipality of Clarington Road Program [4 Projects] Prospect St. from Odell St. to Fourth St. Second St. from Prospect St. to Lambs Lane Veterans Ave. from Prospect St. to Lambs Lane Brown St. from Queen St. to Victoria St.	C1999		1,200,000										Replacement of deficient sanitary sewers and/or construction of required works in conjunction with the Municipality of Clarington road program.
Works forecast for 2020 to 2028				300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	2,700,000
Township of Scugog Road Program (0 Projects)													Replacement of deficient sanitary sewers and/or construction of required works in conjunction with the Township of Scugog road program.
Works forecast for 2020 to 2028				75,000	75,000	75,000	75,000	75,000	75,000	75,000	75,000	75,000	675,000
Township of Uxbridge Road Program [1 Project]	U1999		200,000										200,000 Replacement of deficient sanitary sewers and/or construction of required works in conjunction with the Township of Uxbridge
Planks Lane from Main St. to Third Ave. Works forecast for 2020 to 2028				340,000	340,000	340,000	340,000	340,000	340,000	340,000	340,000	340,000	road program. 3,060,000
Township of Brock Road Program (0 Projects)													Replacement of deficient sanitary sewers and/or construction of required works in conjunction with the Township of Brock road program.
Works forecast for 2020 to 2028				120,000	120,000	120,000	120,000	120,000	120,000	120,000	120,000	120,000	1,080,000
Allowance for unknown sanitary sewerage requirements in conjunction with area municipality road programs in various locations	M1903		200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	2,000,000 Allowance to provide for unanticipated sanitary sewerage works in conjunction with area municipality road programs in various locations (items No. 11A to 11H)
Sub-total works to rectify identified deficiencies and/or construction of required works in conjunction with area municipality road programs (items 11A to 11i)		0	3,710,000	3,355,000	3,335,000	3,335,000	5,320,000	3,335,000	3,335,000	3,335,000	3,335,000	3,335,000	35,730,000

			BUDGET	2019				Nine	Year Forecast					
ITEM No.	PROJECT DESCRIPTION	Project No.	PRIOR TO 2019	CAPITAL BUDGET	2020	2021	2022	2023	2024	2025	2026	2027	2028	TOTAL REMARKS
	MTO AND GO Transit Projects	-												
12	Allowance for sanitary sewers in conjunction with the MTO & Go Transit projects				100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	900,000 Allowance for sanitary sewer replacement/realignment
13	Sanitary sewer replacement in various locations in conjunction with the bridge work at Simcoe St., Albert St. and Highway 401, Oshawa	D1801		70,000	300,000									370,000 Works in conjunction with the MTO for the replacement and/or realignment of sanitary sewers.
	bridge work at Simcoe St., Albert St. and righway 401, Oshawa													and/or realignment of samuary sewers.
	Sub-total works in conjunction with MTO and		0	70,000	400,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	1,270,000
	GO-Transit projects Betterment/Replacement													
14	Betterment/Replacement Sanitary sewerage works to rectify identified system deficiencies	M1999		696,100										696,100 Provision for replacement and/or
14	independent of road programs in various locations (6 projects)	W11999		030,100										rehabilitation of deficient sanitary sewers independent of road programs in various
	(o projecto)													locations.
	Erosion protection for sanitary sewers in various locations	M1915												
	Krosno Creek Crossing - Trunk Sanitary Sewer erosion protection													
	Allowance for final restoration for remedial works constructed in prior years	M1916												
	Remedial works in various locations (Locations and priorities under review)	M1917												
	Preliminary engineering/ surveys for future construction of remedial works	M1918												
	Future remedial works in various locations				650,000	650,000	650,000	650,000	650,000	650,000	650,000	650,000	650,000	5,850,000
15	Rehabilitation of existing sanitary sewers in various locations	D1912		300,000	300,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	4,600,000 Asset Management Project - Rehabilitation (cement mortar lining) of sanitary sewersin various locations.
	PICKERING/ AJAX SYSTEM													,
16	Durham York Primary Trunk Sanitary Sewer System - Condition	Y1501												
	Assessment and Rehabilitation requirements (CCTV inspection, minor repair and rehabilitation works to be completed on Chamber 4 to 7)		2,037,600	10,000,000	66,600,000									78,637,600 Cost sharing with York Region Rehabilitation works has been recommended on Chamber 4 to Chamber 7 using slipling methodology
	York Region's Share		1,747,600	9,000,000 1,000,000	59,940,000									
	Durham Region's Share Total		290,000 2,037,600	10,000,000	6,660,000 66,600,000									
17	Replacement and improvements to the Central Duffin Collector siphon (1200 mm and 800mm) on Valley Farm Rd., 670 m north of Finch Ave.,	D1501	800,000	1,000,000										1,800,000 Asset Management Project - sanitary sewer has reached the end of its useful service life.
	Pickering													the end of its useful service life.
18	Rehabilitation of sanitary sewer on Kingston Rd. (Highway No. 2) from	D1848		370,000										370,000 Asset Management Project - will be completed in conjunction
	240 m east of Delta Blvd. to Merritton Dr., Pickering													with the Bus Rapid Transit. (BRT)
19	Replacement of sanitary sewer on Zator Ave. from Bem Ave. to Kronso Blvd., Pickering	P1901		1,000,000										1,000,000 Asset Management Project - sanitary sewer has reached the end of its useful service life.
20	Replacement of sanitary sewer on Miriam Rd. from Zator Ave. S/L to Zator Ave. N/L, Pickering	P1902		600,000										600,000 Asset Management Project - sanitary sewer has reached the end of its useful service life.
21	Replacement of sanitary sewer on Krosno Blvd. from Modlin Rd. to Alyssum St., Pickering				100,000	780,000								880,000 Asset Management Project - sanitary sewer has reached the end of its useful service life.
22	Southwood Park Area System improvements and investigation works	A1901		1,200,000										1,200,000 System improvements and security.
	Phase 1: sanitary sewer maintenance hole repairs and modifications Phase 2: sanitary sewer system investigation													
23	Hunt Street/ Kings Crescent and Harwood Avenue sanitary sewer diversion, Ajax	A1902		265,000										265,000 System improvement for future development.
	WHITBY / OSHAWA / CLARINGTON (COURTICE)													
	SYSTEM													
24	Replacement of sanitary sewer on Euclid St. from Dundas St. to 75 m North of John St., Whitby	W1305	530,000	70,000										600,000 Asset Management Project - sanitary sewer has reached the end of its useful service life.

			BUDGET	2019				Nine	Year Forecast						
ITEM No.	PROJECT DESCRIPTION	Project No.	PRIOR TO 2019	CAPITAL BUDGET	2020	2021	2022	2023	2024	2025	2026	2027	2028	TOTAL	REMARKS
25	Replacement of sanitary sewer on Hillcrest Dr. from Beech St. W/L to Beech St. E/L, Whitby	NO.	2019	BODGET	2020	2021	2022	2023	2024	2025	2026	2021	800,000	800,000	Asset Management Project - sanitary sewer has reached the end of its useful service life.
26	Replacement of sanitary sewer on Maria St. from Annes St. to Frances St., Whitby								600,000					600,000	Asset Management Project - sanitary sewer has reached the end of its useful service life.
27	Replacement of a sanitary sewer on Walnut St. from Euclid St. to Kent St., Whitby							180,000							Asset Management Project - sanitary sewer has reached the end of its useful service life.
28	Replacement of a sanitary sewer on Simcoe St. S. from Quebec St. to Gibb St., Oshawa								150,000						Asset Management Project - sanitary sewer has reached the end of its useful service life.
29	Replacement of a sanitary sewer on Highland Ave. from Gliddon Ave. to Athol St., Oshawa	O1508	500,000		50,000										Asset Management Project - sanitary sewer has reached the end of its useful service life.
30	Replacement of sanitary sewer on Olive Ave. from Simcoe St. S. to Drew St., Oshawa	O1903		240,000	1,030,000									1,270,000	Sanitary sewer has reached the end of its useful service life.
31	Replacement of a sanitary sewer on R.R. 2A (Centre St.) from Athol St. to Brock St., and Simcoe St. from Brock St. W. to Adelaide Ave., Oshawa	O1503	100,000	1,385,000											Asset Management Project - sanitary sewer has reached the end of its useful service life.
32	Replacement of sanitary sewer on RR 22 (Bloor St.) from Cubert St. to Oxford St., Oshawa					360,000								360,000	Asset Management Project - sanitary sewer has reached the end of its useful service life.
33	Replacement of sanitary sewer on RR 22 (Bloor St.) from 275 m east of Ortono Ave. to Wilson Rd., Oshawa	O1908		1,100,000											Work will be completed in conjunction with the Phase 3 Bloor St. feedermain.
	UXBRIDGE (UXBRIDGE) SYSTEM														
34	Replacement of sanitary sewer on Mechanic St. from Victoria Dr. to Church St., Uxbridge	U1901		170,000										170,000	Asset Management Project - sanitary sewer has reached the end of its useful service life.
	SCUGOG (PORT PERRY) SYSTEM														
35	Valve replacement on the Scugog forcemain outside the Water Street Sanitary Sewage Pumping Station	D1901		200,000											Asset Management Project - sanitary sewer has reached the end of its useful service life.
36	Replacement of sanitary sewer in various locations					1,894,000	6,234,000	5,654,000	6,345,400	6,234,000	7,234,000	7,234,000	6,434,000		Asset Management Project - sanitary sewer has reached the end of its useful service life.
	CONSTRUCTION OF SERVICES IN UNSERVICED AREAS IN RESPONSE TO REQUESTS OR PETITIONS														
37	Allowance for construction of services in unserviced areas in response to requests or petitions				200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000		Allowance for construction of sanitary sewer in unserviced areas in response to requests or petitions.
	Sub-total construction of services in unserviced areas			0	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	1,800,000	
	Sub-total Betterments/Replacement		3,967,600	18,596,100	68,930,000	4,384,000	7,584,000	7,184,000	8,445,400	7,584,000	8,584,000	8,584,000	8,584,000	152,427,100	
	System Expansion														
	PICKERING / AJAX SYSTEM														
38	Central Duffin Collector (CDC) Trunk Sanitary Sewer from Fourth Concession Rd. to Taunton Rd., Pickering Detailed Design Construction Total	D1707	200,000	160,000 1,700,000											Linear infrastructure required for the development of the Seaton Community.
39	Central Duffin Collector (CDC) Brock Rd. Trunk Sanitary Sewer - Taunton Rd. to South of the employment lands Detailed Design Construction Total	D1708	1,000,000	500,000 9,400,000											Linear infrastructure required for the development of the Seaton Community.
40	Duffin Heights sanitary sewer on future street from Dersan St. to Zents Dr., Pickering Detailed Design Construction Total	D1902		125,000 600,000											Linear infrastructure required for the development of the Duffin Heights Community.
41	Vort/Durham Sewage System - Primary Trunk Sanitary Sewer Twinning, Pickering Environmental Assessment Detailed Design Construction Total					6,000,000		15,000,000		218,600,000				6,000,000 15,000,000 218,600,000 239,600,000	

			BUDGET	2019				Nino	Year Forecast						
ITEM No.	PROJECT DESCRIPTION	Project No.	PRIOR TO 2019	CAPITAL BUDGET	2020	2021	2022	2023	2024	2025	2026	2027	2028	TOTAL	REMARKS
NO.	York Region's Share Durham Region's Share Total	NO.	2019	BUDGET	2020	4,800,000 1,200,000 6,000,000	2022	12,000,000 3,000,000 15,000,000	2024	174,880,000 43,720,000 218,600,000	2020	2021	2028	IOIAL	REMARKS
42	Twinning of existing 450 mm sanitary sewer on easement from Southwood Sanitary Sewage Pumping Station to approximately 500 m North, Ajax Detailed Design Construction Total	D1903		150,000	1,250,000									150,000 1,250,000 1,400,000	
43	Sanilary sewer on Church St. from Hydro Right of way to Taunton Rd., Ajax Detailed Design Construction Total						200,000	2,970,000						200,000 2,970,000 3,170,000	
44	Twinning of Duffin Creek Trunk Sanitary Sewer on easement from Bayly St. Sanitary Sewage Pumping Station to Highway 401, Ajax Detailed Design											1,200,000		1,200,000	Twinning of the trunk sanitary sewer is required to provide system security and increased capacity. Construction beyond forecast
	WHITBY / OSHAWA / CLARINGTON (COURTICE) SYSTEM														
45	Corbett Trunk Sanitary Sewer on easement from Wentworth St. to Corbett Creek WPCP, Whitby Environmental Assessment Detailed Design Total									500,000		500,000		500,000 500,000 1,000,000	
46	West Whitby sub trunk on Dundas St. from Coronation Rd. to Halls Rd., Whitby Detailed Design Construction Total						500,000	3,000,000						500,000 3,000,000 3,500,000	
47	Brooklin Trunk Sanitary Sewer on easement from Anderson St. to Thickson Rd. Sanitary Sewage Pumping Station, Whitby Detailed Design Construction Total				880,000		3,520,000							880,000 3,520,000 4,400,000	
48	West Brooklin Trunk Sanitary Sewer from west of Cochrane St. to east of Highway No. 12, Whitby Detailed Design Construction Total					1,200,000		7,000,000		6,700,000				1,200,000 13,700,000 14,900,000	
49	Southwest Brooklin Trunk Sanitary Sewer from west Cochrane St. on New collector road east of Highway 12 Detailed Design Construction Total					400,000		3,800,000						400,000 3,800,000 4,200,000	
50	West Central Brooklin Trunk Sanitary Sewer west of Way St., Whitby (Region's Share only)											1,700,000		1,700,000	Required to service new development. Timing of construction dependent on the rate of development.
51	Central Brooklin Trunk Sanitary Sewer, Whitby (Region's Share only)											500,000	3,900,000		Required to service new development. Timing of construction dependent on the rate of development.
52	Central East Brooklin Trunk Sanitary Sewer east of Baldwin St., Whitby (Regions Share only)												1,000,000	1,000,000	Required to service new development. Timing of construction dependent on the rate of development.
53	East Brooklin Trunk Sanitary Sewer east of Thickson Rd., Whitby (Region's Share only)											300,000	2,600,000		Required to service new development. Timing of construction dependent on the rate of development.
54	Thickson Rd. Sub-trunk Sanitary Sewer from Glengowan St. to Conlin Rd., Whitby (Region's Share only) Detailed Design Construction Total				400,000			2,700,000						400,000 2,700,000 3,100,000	

			BUDGET	2019				Nine	Year Forecast	:			T	
ITEM		Project No.	PRIOR TO 2019	CAPITAL	2020	2021	2022	2023	2024	2025	2026	2027	2028	TOTAL REMARKS
No. 55		No.	2019	BUDGET	2020	2021	2022	2023	2024	1,000,000	2026	1,000,000	2028	REMARKS Required to service new development. Timing of construction dependent on the rate of development. Construction beyond forecast. 1,000,000 1,000,000 2,000,000
56	Conlin Rd. W. Trunk Sanitary Sewer on Conlin Rd. from Whitbyl Oshawa Boundary to Conlin Rd. Sanitary Sewage Pumping Station, WhitbylOshawa Detailed Design Construction Total				800,000		5,800,000							Required to service new development. Timing of construction dependent on the rate of development. 800,000 5.800,000 6.600,000
57	Farewell Creek Trunk Sanitary Sewer twinning on easement west of Grandview St., Oshawa Environmental Assessment and Detailed Design Construction Total										500,000		2,400,000	Required to service new development. Timing of construction dependent on the rate of development. 500,000 2,400,000 2,900,000
58	Twinning of northwest branch of Harmony Creek Sub-Trunk Sanitary Sewer from Central Park Blvd N. & Hillcroft St. to to Beatrice St., Oshawa Detailed Design Construction Total	O9835	350,000		2,050,000									Replacement of existing surcharged trunk sanitary sewer Design and land acquisition completed. Construction forecast in 2020, depending on 350,000 flow monitoring results. 2,050,000 2,400,000
59	North Oshawa Creek (East branch) Trunk Sanitary Sewer on easement from Arctic Red Dr. to Winchester Rd., Oshawa Detailed Design Construction Total						900,000	3,500,000						Required to service new development. Timing of construction dependent on the rate of development. 900,000 3,500,000 4,400,000
60	North Oshawa Creek (East branch) Trunk Sanitary Sewer on easement from southeast of Thornton Rd. to Simcoe St., Oshawa Environmental Assessment Detailed Design Total										500,000		500,000	Required to service new development. Timing of construction dependent on the rate of development. 500,000 Construction beyond forecast. 500,000 1,000,000
61	Twinning of Oshawa Creek Trunk Sanitary Sewer from Gibb St. to Greenwood Ave., Oshawa Detailed Design Construction Total										250,000		975,000	Twinning of the trunk sanitary sewer is required primarily to provide system security and provide increased capacity. 975,000 1,225,000
62	Forcemain on Conlin Rd. from Ritson Rd. to Harmony Rd., Oshawa Detailed Design Construction Total				800,000	7,200,000								Required to service new development. Timing of construction dependent on the rate of development. 800,000 7,200,000 8,000,000
63	Harmony Rd. Sub Trunk Sanitary Sewer on Harmony Rd. from Conlin Rd. to approximately 1500 m Northerly, Oshawa Detailed Design Construction Total				420,000	3,800,000								Required to service new development. Timing of construction dependent on the rate of development. 420,000 3,800,000 4,220,000
64	North Oshawa Creek (West Branch) Trunk Sanitary Sewer from Conlin Rd. Sanitary Sewage Pumping Station to Britannia Rd., Oshawa Environmental Assessment and land Detailed Design Construction Total				500,000		500,000		3,850,000					Required to service new development. Timing of construction dependent on the rate of development. 500,000 500,000 3.850,000 4,850,000
65	North Oshawa Creek (West Branch) Trunk Sanitary Sewer from south side of hydro corridor to Columbus Rd., Oshawa Environmental Assessment Detailed Design Construction Total				500,000		1,500,000		13,800,000					Required to service new development. Timing of construction dependent on the rate of development. 500,000 1,500,000 13,800,000 15,800,000

			BUDGET	2019				Nine	Year Forecast					
ITEM	PROJECT DESCRIPTION	Project No.	PRIOR TO 2019	CAPITAL BUDGET	2020	2021	2022	2023	2024	2025	2026	2027	2028	TOTAL REMARKS
NO.	Courtice Trunk Sanitary Sewer Environmental Assessment and Detailed Design Phase 1.400 m South of Energy Dr. to 100 m North of Energy Dr. Phase 2.100 m North of Energy Dr. to the intersection of Baseline Rd. and Courtice Rd. Phase 3: Baseline Rd. from Courtice Rd. to Trulls Rd. and Trulls Rd. from Baseline Rd. to Bloor St. Phase 4: Trulls Rd. from Bor St. to Future Adelaide Ave.	No. C0702	3,639,000 2,800,000 21,100,000	25,900,000	2020	43.400.000	2022	2023	2024	2025	2026	2027	2028	Environmental Assessment completed 3,639,000 Delailed design initiated from Phase 3 to 7 2,800,000 Phase 1: construction completed 21,100,000 Phase 2: construction has commenced 25,900,000 43,400,000
67	Phase 5: Adelaide Ave. Extension from Trulls Rd. to Townline Rd. Courtice Trunk Sanitary Sewer - Phase 6 Crownline Rd. from Adelaide Ave. to Coldstream Dr	C1406				45,400,000		14,800,000						14,800,000 111,639,000 Required to service new development. Timing of construction dependent on rate of development.
	Oshawa / Courtice Detailed Design Construction Total		535,000 14,865,000						14,500,000					Stage 1: Beatrice St. to Coldstream Dr. 535,000 Stage 2: Adelaide Ave. to Beatrice St 29,365,000 29,900,000
68	Southwest Courtice Sub -Trunk Sanitary Sewer on Baseline Rd. from Trulls Rd., to 650 m west of Trulls Rd., Courtice Detailed Design Construction Total	D1821	300,000		3,700,000									Required to service new development. Timing of construction dependent on the rate of development. 300,000 3,700,000 4,000,000
69	South-east Courtice Sub-Trunk Sanitary Sewer on easement along north side of Canadian National Railway from Trulis Rd. to Courtice Rd. & on Courtice Rd. from north side of Canadian National Railway to Bloor St., Courtice Detailed Design					550,000								Required to service new development. Timing of construction dependent on the rate of development. 550.000
	CLARINGTON (BOWMANVILLE) SYSTEM					330,000		4,100,000						4,100,000 4,650,000
70	Baseline Rd. Trunk Sanitary Sewer from Simpson Ave. to Bennett Rd., Bowmanville Detailed Design Construction Total	D1910		600,000 2,400,000	200,000		3,800,000							Timing of construction dependent on rate of development. Trunk Sanitary Sewer Phasing: 800,000 Phase 1: Mearns Ave. to Lambs Rd. 6,200,000 Phase 2: Simpson Ave. to Mearns Ave. 7,000,000 Phase 3: Lambs Rd. to Bennett Rd.
71	Bennett Rd. Trunk Sanitary Sewer from Baseline Rd. to Highway No. 2 Bowmanville Detailed Design Construction Total											250,000	1,200,000	Required to service new development. Timing of construction dependent on the rate of development. 1,200,000 1,200,000 1,450,000
72	Port Darlington Rd. Trunk Sanitary Sewer from Baseline Rd. to to existing easement, Bowmanville Detailed Design Construction Total				1,700,000		7,100,000							Required to service new development. Timing of construction dependent on the rate of development. 1,700,000 7,100,000 8,800,000
73	Twinning of Spry Ave. Trunk Sanitary Sewer from Baseline Rd. to N/L of Spry Ave., Bowmanville Environmental Assessment											750,000		Required to service new development. Timing of construction dependent on the rate of development. 750,000 Detailed design and construction beyond forecast.
74	Soper Creek Trunk Sanitary Sewer on Mearns Ave. from Freeland Ave. to Concession Rd. 3 and on Concession Rd. 3 from Mearns Ave. to 450 m west of Mearns Ave. Detailed Design CLARINGTON (NEWCASTLE) SYSTEM									200,000				Required to service new development. Timing of construction dependent on the rate of development. rate of development. 200,000 Construction beyond forecast
75	Foster Creek Trunk Sanitary Sewer on Sunset Blvd./ Lakeview Rd. from Rudell Rd. to Church St., Newcastle Environmental Assessment / Detailed Design Construction Total	C1002	331,400 2,000,000	1,200,000										Required allow Sunset Blvd. SSPS to be taken off-line and decommissioned. 331,400 Timing of construction dependent on 3,200,000 rate of development. 3,531,400
76	Foster Creek Trunk Sanitary Sewer on North St. from north side of Canadian Pacific Railway to Concession Rd. 3, Newcastle Detailed Design Construction Total				500,000	2,000,000								500,000 2,000,000 2,500,000

			BUDGET	2019				Nine	Year Forecast						
ITEM	PROJECT DESCRIPTION	Project No.	PRIOR TO 2019	CAPITAL BUDGET	2020	2021	2022	2023	2024	2025	2026	2027	2028	TOTAL	REMARKS
77	Wilmot Creek Trunk Sanitary Sewer on easement (through future development) from Rudell Rd. to King Ave., Newcastle Detailed Design Construction Total	No. D1822	300,000	BUDGET	2,900,000	2021	2022	2023	2024	2025	2026	2027	2028	300,000 2,900,000 3,200,000	Required to service new development and system security. Timing of construction dependent on the rate of development.
78	Wilmot Creek Trunk Sanitary Sewer on easement (through future development) from King Ave. to Hwy 115/35, Newcastle Detailed Design Construction Total				300,000	1,100,000								300,000 1,100,000 1,400,000	
	Sub-total System Expansion		47,420,400	42,735,000	16,900,000	65,650,000	23,820,000	56,870,000	32,150,000	227,000,000	1,250,000	6,200,000	12,575,000	532,570,400	
В	BUILDINGS														
	PICKERING / AJAX SYSTEM														
79	Class Environmental Assessment to address the outfall limitations at Duffin Creek Water Pollution Control Plant, Pickering Environmental Assessment Phosphorus Optimization & Field Study Construction	Y0802	5,992,000 2,263,000				240,000,000							5,992,000 2,263,000 240,000,000 248,255,000	
	York Region's Share Durham Region's Share Total		4,750,000 3,505,000 8,255,000				192,000,000 48,000,000 240,000,000								
80	Duffin Creek Water Pollution Control Plant - Condition Assessment Pickering	Y1901		600,000					600,000					1,200,000	Asset Management Project - Cost sharing with York Region.
	York Region's Share Durham Region's Share Total			461,400 138,600 600,000					461,400 138,600 600,000						
81	Duffin Creek Water Pollution Control Plant - Stage III Solids expansion Pickering	Y0502	318,947,368	13,000,000										331,947,368	Cost sharing with York Region.
	York Region's Share Durham Region's Share Total		197,747,368 121,200,000 318,947,368	8,060,000 4,940,000 13,000,000											
82	Proposed Seaton - Sanitary Sewage Pumping Station 4 and forcemain Pickering Detailed Design Construction Contract Administration Total	D1710	700,000	4,000,000										700,000	Durham to oversee the detailed design and construction of vertical infrastructure required for the development of the Seaton Community.
83	Proposed Pickering Sanitary Sewage Pumping Station and forcemain Pickering Environmental Assessment Detailed Design Construction Total									500,000	500,000	10,900,000		500,000 500,000 10,900,000 11,900,000	
84	Carruthers Sanitary Sewage Pumping Station pump addition and Standby power, Ajax Detailed Design Construction Total	D1116	260,000		1,700,000									260,000 1,700,000 1,960,000	
85	Carruthers Sanitary Sewage Pumping Station - Chemical evaluation for odour control Study Conceptual /Detailed Design Construction Total	D1735	160,000 280,000	600,000										160,000 280,000 600,000 1,040,000	
86	WHITEY / OSHAWA / CLARINGTON (COURTICE) SYSTEM Corbett Creek Water Pollution Control Plant - works to rectify existing deficiencies Detailed Design Construction Total	D1913		1,120,000 880,000	5,500,000									1,120,000 6,380,000 7,500,000	

			BUDGET	2019				Nine	Year Forecas	t				
ITEM No.	PROJECT DESCRIPTION	Project No.	PRIOR TO 2019	CAPITAL BUDGET	2020	2021	2022	2023	2024	2025	2026	2027	2028	TOTAL REMARKS
87	Corbett Creek Water Pollution Control Plant - New headworks building Facility Plan/Conceptual Design Detailed Design Construction Total	D1409	200,000	500,000		4,900,000								Work will commence once the deficiencies project has 200,000 been completed. 1,100,000 4,900,000 6,200,000
88	Expansion of Corbett Creek Water Pollution Control Plant from 84 MLD to 109 MLD Environmental Assessment and Detailed Design									500,000		750,000		Expansion to provide capacity for new development. Construction beyond forecast.
89	Brooklin Sanitary Diversion Strategy - Proposed Thickson Rd. Sanitary Sewage Pumping Station and forcemain, Whitby Environmental Assessment Detailed Design Construction	D1824	1,000,000		1,500,000			24,000,000						Timing of construction dependent on the rate of development. 1,000,000 1,500,000 24,000,000 26,500,000
90	Harmony Creek Water Pollution Control Plant upgrades, Oshawa Detailed Design Construction Total	D1523	1,600,000 21,566,564	230,000										1,600,000 lupgrades on Plant No. 2 are completed. 21,796,564 23,396,564
91	Harmony Creek Water Pollution Control Plant No. 1 demolition, Oshawa Detailed Design Construction Total	D1010	620,000 380,000		2,100,000									The demolition of Plant No. 1 will commence once all upgrades at Plant No. 2 are completed. 620,000 2,480,000 3,100,000
92	Harmony Creek Sanitary Sewage Pumping Station - expansion and forcemain twinning Environmental Assessment Detailed Design Total										600,000		1,000,000	Timing of construction dependent on rate of development. 600,000 Construction beyond forecast. 1,000,000 1,600,000
93	Expansion of the Conlin Rd. Sanitary Sewage Pumping Station and twinning of the forcemain, Oshawa Environmental Assessment Detailed Design Detailed Design Construction	D1825	500,000		1,000,000		66,000,000							Timing of construction dependent on rate of development. 500,000 1,000,000 66,000,000 67,500,000
94	Proposed Harbour Rd. South Sanitary Sewage Pumping Station and forcemain, Oshawa Environmental Assessment Detailed Design Construction Total								250,000		250,000		2,500,000	Timing of construction dependent on rate of development. 250,000 2,500,000 3,000,000
95	Simcoe St. South Sanitary Sewage Pumping Station and forcemain replacement, Oshawa Detailed design Construction Total	D1711	288,000		4,600,000									Replacement of the existing sanitary sewage 288,000 pumping station. 4,600,000 4,888,000
96	Expansion of Courtice Water Pollution Control Plant from 68 MLD to 136 MLD Environmental Assessment Detailed Design Total										1,000,000		2,000,000	Expansion to provide capacity for new development. 1,000,000 Construction beyond forecast. 2,000,000 3,000,000
97	Proposed Baseline Rd. Sanitary Sewage Pumping Station and forcemain, Courtice Environmental Assessment Detailed Design Construction Total					500,000	400,000	3,250,000						Timing of construction dependent on rate of development. 500,000 400,000 3,250,000 4,150,000
98	CLARINGTON (BOWMANVILLE) SYSTEM Proposed Northeast Sanitary Sewage Pumping Station and forcemain Bowmanville Environmental Assessment Detailed Design Total										500,000		500,000	Construction beyond forecast 500,000 500,000 1,000,000

			BUDGET	2019				Nine	Year Forecast						
ITEM No.	PROJECT DESCRIPTION	Project No.	PRIOR TO 2019	CAPITAL BUDGET	2020	2021	2022	2023	2024	2025	2026	2027	2028	TOTAL	REMARKS
99	CLARINGTON (NEWCASTLE) SYSTEM Newcastle Water Pollution Control Plant - Capacity Re-rating 4 MLD to 7 MLD to include sludge storage Optimization Study Detailed Design Construction Total	D1117	200,000 1,220,000 2,280,000	1,214,000	4,900,000									200,000 1,220,000	Potential for additional capacity through an optimization study and modification to the plant. Possible plant expansion deferred beyond forecast. Allowance for potential upgrades subject to optimization study.
100	Expansion of Newcastle Water Pollution Control Plant from 7 MLD to 16 MLD and outfall Environmental Assessment										1,050,000			1,050,000	Detailed design and construction beyond forecast.
101	Rudell Rd. Sanitary Sewage Pumping Station - decommissioning	D1914		60,000	540,000									600,000	
102	Sunset Sanitary Sewage Pumping Station - decommissioning					600,000								600,000	
	UXBRIDGE (UXBRIDGE) SYSTEM														
103	Uxbridge Water Pollution Control Plant - Optimization Study, upgrades and rehabilitation works based on the condition assessment.	D1204	600,000	2,500,000	1,800,000										Plant upgrades and rehabilitation based on optimization study and plant condition assessment.
104	Uxbridge Water Pollution Control Plant - rehabilitation works based on the condition assessment Condition Assessment update/Detailed design Construction Total							400,000		1,000,000					Asset Management Project Preventative maintenance to optimize the performance of the asset and service life of the plant.
	SCUGOG (PORT PERRY) SYSTEM														
105	Water St. Sanitary Sewage Pumping Station - expansion/replacement Evaluation / Environmental Assessment / Detailed Design Construction	D1304	908,350	1,667,272	5,430,300										Asset Management Project - project budget to be confirmed and updated upon the completion of the environmental assessment.
106	Port Perry Industrial Area Sanitary Sewage Pumping Station and forcemain, Port Perry Detailed Design Construction Total									2,100,000		8,000,000		2,100,000 8,000,000 10,100,000	
	BROCK (SUNDERLAND) SYSTEM														
107	Sunderland Water Pollution Control Plant - Lagoon System Environmental Assessment Detailed Design Construction Total	D1826	500,000		500,000		9,000,000							500,000 500,000 9,000,000 10,000,000	
108	River St. Sanitary Sewage Pumping Station expansion Environmental Assessment											500,000		500,000	Detailed design and construction beyond forecast.
	BROCK (CANNINGTON) SYSTEM														
109	Cannington Water Pollution Control Plant - Lagoon System Environmental Assessment Detailed Design Construction Total	D1828	500,000		500,000		9,000,000							500,000 500,000 9,000,000 10,000,000	
110	Laidlaw St. Sanitary Sewage Pumping Station expansion Environmental Assessment											500,000		500,000	Detailed design and construction beyond forecast.
	BROCK (BEAVERTON) SYSTEM														
111	Lake Simcoe Water Pollution Control Plant - expansion Environmental Assessment											1,000,000		1,000,000	Detailed design and construction beyond forecast.
112	Harbour St. Sanitary Sewage Pumping Station expansion Environmental Assessment											500,000		500,000	Detailed design and construction beyond forecast.
113	Beaverton Employment lands Sanitary Sewage Pumping Station Environmental Assessment Detailed Design Total									500,000		500,000		500,000 500,000 1,000,000	

			BUDGET	2019				Nine	Year Forecast						
ITEN No.		Project No.	PRIOR TO 2019	CAPITAL BUDGET	2020	2021	2022	2023	2024	2025	2026	2027	2028	TOTAL	REMARKS
140.	REGION WIDE (WASTEWATER) SYSTEM	110.	2013	JUDULI	2020	2021	1011	2020	2024	1010	2020	LULI	2020	IVIAL	NEMANIO
114	Septage receiving stations					250,000	1,500,000								Required to accommodate increasing volumes of septage delivered by truck to the Region's Water Pollution Control Plants.
115	Water Pollution Control Plant - Asset Management								5,000,000	5,000,000	5,000,000	5,000,000	5,000,000		Allowance for the future replacement/rehabilitation of assets at the water pollution control plants. Based on site specific condition assessments.
	Sub-total Buildings		361,565,282	26,371,272	30,070,300	6,250,000	325,900,000	27,650,000	5,850,000	9,600,000	8,900,000	27,650,000	11,000,000	840,806,854	
С	MACHINERY AND EQUIPMENT														
	PICKERING / AJAX SYSTEM														The Devices are assisted to see and
116	Duffin Creek Water Pollution Control Plant - Digester mixing improvements and Motor Control Centre Replacement, Pickering	Y1502	7,000,000		17,000,000									24,000,000	The Regions are required to upgrade Cost sharing with York Region
	York Region's Share Durham Region's Share Total		5,166,000 1,834,000 7,000,000		12,546,000 4,454,000 17,000,000										
117	Duffin Creek Water Pollution Control Plant - Replacement of Reactor No. 1 & 2, Pickering Conceptual Design Detailed Design Construction Total	Y1503	1,000,000 14,000,000	6,000,000	10,000,000	29,700,000	40,300,000	29,700,000		40,300,000				1,000,000 20,000,000 150,000,000 171,000,000	
	York Region's Share Durham Region's Share Total		11,070,000 3,930,000 15,000,000	4,428,000 1,572,000 6,000,000	7,380,000 2,620,000 10,000,000	21,918,600 7,781,400 29,700,000	29,741,400 10,558,600 40,300,000	21,918,600 7,781,400 29,700,000		29,741,400 10,558,600 40,300,000					
118	Regional Environmental Laboratory Upgrades and ventilation associated works, Pickering Preliminary (Detailed Design Construction Total	Y1602	450,000 3,100,000	650,000										450,000 3,750,000 4,200,000	
	York Region's Share Durham Region's Share Total		1,775,000 1,775,000 3,550,000	325,000 325,000 650,000											
119	Duffin Creek Water Pollution Control Plant -Phosphorous Optimization Implementation Plan	Y1902		1,550,000	3,450,000									5,000,000	Cost sharing with York Region
	York Region's Share Durham Region's Share Total			1,240,000 310,000 1,550,000	2,760,000 690,000 3,450,000										
120	Duffin Creek Water Pollution Control Plant - Remedial works and improvements in various locations through out the plant Preliminary works and Detailed Design Construction Total				1,500,000	13,000,000								1,500,000 13,000,000 14,500,000	Remedial works/improvements to the following: chlorine residual controls, primary bridges, scum collectors, Screening buildings platforms and chamber outside the IPS. Replacement of the chemical metering pumps and modifications to the stormwater collection system
	York Region's Share Durham Region's Share Total				1,200,000 300,000 1,500,000	10,400,000 2,600,000 13,000,000									Cost sharing with York Region.
	Bayly St. Sanitary Sewage Pumping Station - Mechanical Screen Replacement, Motor Control Centre review and upgrades, Ajax Preliminary works and Detailed Design Construction Tottal	D1714	350,000	200,000 800,000	1,400,000										
122	Cloverridge Sanitary Sewage Pumping Station - Mechanical Screen Replacement and reviewlupgrades to the Motor Control Centre, Ajax Preliminary works/Detailed Design Construction Total				500,000	2,100,000								500,000 2,100,000 2,600,000	

C	٥	
•	J	

			BUDGET	2019				Nine	Year Forecast						
No.	PROJECT DESCRIPTION	Project No.	PRIOR TO 2019	CAPITAL BUDGET	2020	2021	2022	2023	2024	2025	2026	2027	2028	TOTAL	REMARKS
	WHITBY / OSHAWA / CLARINGTON (COURTICE) SYSTEM	110.	2010	505021	2020	2021	2022	2020	2021	2020	2020	292.	2020	TOTAL	The Market
123	Madawaska Sanitary Sewage Pumping Station New diesel genset, enclosure and associated works, Oshawa Preliminary work/Detailed Design Construction Total	D1118	200,000		1,200,000									200,000 1,200,000 1,400,000	To ensure system operational in the event of electrical power outrages.
124	Courtice Water Pollution Control Plant -remediation work at digester No. 1, performance improvements for the grit tank and refurishment of the mixers	D1920		1,700,000											Preventative maintenance to optimize the performance of the asset and service life of the plant.
125	Courtice Water Pollution Control Plant - upgrades					350,000	500,000		4,000,000		4,000,000				Allowance for Courtice WPCP upgrades - requirements to be confirmed once the condition assessment has been completed.
126	Courtice Water Pollution Control Plant - Capacitor bank replacement	D1921		150,000											Allowance for replacement of the capacitor bank to ensure proper operation to correct a power factor lag or phase shift in an alternating current power supply.
	CLARINGTON (BOWMANVILLE) SYSTEM														
127	Port Darlington Water Pollution Control Plant - Major Maintenance replacement work, Bowmanville Detailed design Construction Total				500,000 3,200,000	4,200,000								500,000 7,400,000 7,900,000	Asset Management Project - Plant No. 1 work required to rehabilitate and renew the existing infrastructure.
	Sub-total Machinery and Equipment		26,100,000	11,050,000	38,750,000	49,350,000	40,800,000	29,700,000	4,000,000	40,300,000	4,000,000	0	0	244,050,000	
D	IT INFRASTRUCTURE														
128	SCADA System Master Plan for the sanitary sewage pumping stations and implementation requirements						1,000,000	1,000,000						2,000,000	Asset Management Project - Allowance for SCADA project.
	Sub-total IT Infrastructure			0	0	0	1,000,000	1,000,000	0	0	0	0	0	2,000,000	
E	ALLOWANCES AND OTHER PROVISIONS														
129	Regional Sewage Master planning study for the Regional Official Plan Review	D1421	800,000					800,000					800,000	2,400,000	
130	Inflow/infiltration studies and required remedial works in various locations	D0606	400,000		500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000		Studies to identify areas of excessive infiltration into sanitary sewers and construction of required remedial works.
131	Emergency Planning Updating Requirements	D1307	175,000		100,000										Allowance for updating required to ensure optimal performance during an emergency.
132	Asset Condition Assessments - Reports for the Vertical Assets	D1419	1,003,350		300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000		Provincial requirement to assess condition of all assets and develop a rehabilitation strategy.
133	Asset Condition Assessment/ investigation on trunk sanitary sewer system	D1420	609,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000		Allowance for assessment of large trunk sanitary sewers.
134	Master planning energy management				200,000					200,000					Study to identify a long term strategy for implementation of an efficient and effective energy policy.
135	Allowance for acquisition of easements	M1901		150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000		Allowance for acquisition of easements for existing sanitary sewers.
136	Allowance for engineering studies	M1907		250,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000		Allowance for miscellaneous engineering studies.
137	Phosphorus Reduction Study for Lake Simcoe Water Pollution Control Plants.							250,000							Potential study for Lake Simcoe Phosphorus Reduction Strategy identified future requirements for improvements to effluent quality at WPCPs. Durham's 4 WPCPs in the Lake Simcoe basin will need to be evaluated.

REGION OF DURHAM, WORKS DEPARTMENT
SANITARY SEWERAGE SYSTEM

CONSTRUCTION OF MUNICIPAL SERVICES

			BUDGET	2019		Nine Year Forecast								
ITEM		Project	PRIOR TO	CAPITAL										
No.	PROJECT DESCRIPTION	No.	2019	BUDGET	2020	2021	2022	2023	2024	2025	2026	2027	2028	TOTAL REMARKS
138	Preliminary engineering	66143		100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	1,000,000 Allowance for preliminary engineering carried out in advance of budget provision.
139	Allowance for sundry extensions as per Council policy	M1908		15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000	150,000 Regional share for sundry extensions.
140	Allowance for unknown requirements	M1909		100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	1,000,000 Allowance for unanticipated works.
141	Allowance for land severance review and drawing requirements	M1962		100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	1,000,000 Allowance for works required to product drawings for the location of stubbed services in the field.
142	Allowance for Regional share for works in conjunction with residential subdivision development	M1910		1,460,000	1,460,000	1,460,000	1,460,000	1,460,000	1,460,000	1,460,000	1,460,000	1,460,000	1,460,000	14,600,000 Regional share for sanitary sewers related to existing, new residential and new non-residential development, in conjunction with new residential subdivisions.
143	Allowance for Regional share for works in conjunction with non-residential development	M1911		400,000	400,000	400,000	400,000	400,000	400,000	400,000	400,000	400,000	400,000	4,000,000 Allowance for possible Regional share in design and construction of sanitary sewers for non-residential development.
144	Allowance for intensification	M1961		350,000	350,000	350,000	350,000	350,000	350,000	350,000	350,000	350,000	350,000	3,500,000 Allowance for possible Regional share in design and construction of sanitary sewers for intensification
	Sub-total Improvement/expansion of existing facilities		2,987,350	3,125,000	4,125,000	3,825,000	3,825,000	4,875,000	3,825,000	4,025,000	3,825,000	3,825,000	4,625,000	42,887,350
	TOTAL GROSS EXPENDITURE		442,600,632	106,437,372	164,830,300	134,979,000	408,364,000	134,699,000	59,745,400	294,049,000	31,994,000	51,794,000	42,219,000	1,871,711,704

TABLE OF CONTENTS

2019 BUSINESS PLANS & BUDGETS

UTILITY FINANCE

NOTE: On this page, just click on the particular Section and you will be linked to the corresponding page

<u>P</u>	age Number
PROGRAM SUMMARY	374
EXPLANATION OF PROGRAM CHANGES	375
PROGRAM DETAILS	
1. Customer Services	376
2. Billing and Analysis	381
3. Tangible Capital Assets - Replacement	386



2019 Business Plan

Utility Finance

By Program	20	18	2019			
(\$,000's)	Estimated	Approved	Base	Program	Proposed	
,	Actuals	Budget	Budget	Change	Budget	
Expense Programs	\$	\$	\$	\$	\$	
Operating:						
1 Customer Services	2,390	2,605	2,547	385	2,932	
2 Billing and Analysis	3,777	3,961	3,776	285	4,061	
Headquarters Shared Cost	315	315	322	-	322	
Operating Subtotal	6,482	6,881	6,645	670	7,315	
Tangible Capital Assets:		_				
3 Replacement	14	14	20	-	20	
Tangible Capital Assets						
Subtotal	14	14	20	-	20	
Total Program Expenses	6,496	6,895	6,665	670	7,335	
Revenue Programs						
Fees and Charges	(1,138)	(1,336)	(1,336)	-	(1,336)	
Total Revenue Programs	(1,138)	(1,336)	(1,336)	-	(1,336)	
Net Program Expenses	5,358	5,559	5,329	670	5,999	
			(\$230)			
Summary of Increase (Decrease	se)	——	-4.14%		\$440	
•					7.92%	

Summary of Base Budget Changes

	\$	Comments
Salaries & Benefits	57	Economic increases
Salaries & Benefits	(300)	Remove one-time temporary staffing
Operating Expenses	7	Headquarters shared cost
Tangible Capital Assets - Replacement	6	Increased requirements
	(230)	

EXPLANATION OF PROGRAM CHANGES



2019 Program Changes

Utility Finance

Customer Services	\$(000's)
 Increase in Computer Maintenance and Operations for new billing system and customer portal. 	385
	385
Billing and Analysis	
Decrease in Postage to reflect forecasted requirements.	(100)
 Increase in Computer Maintenance and Operations for new billing system and customer portal. 	385
	285
Total Program Changes	670

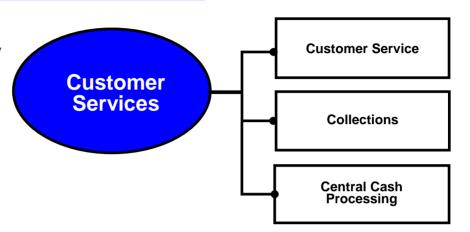


2019 Program Detail

Utility Finance

Purpose:

 To collect water and sanitary sewer user rate revenues and provide an efficient and effective customer service operation that meets the needs of our customers and maintains the Region's positive image.



Description of Program Activities:

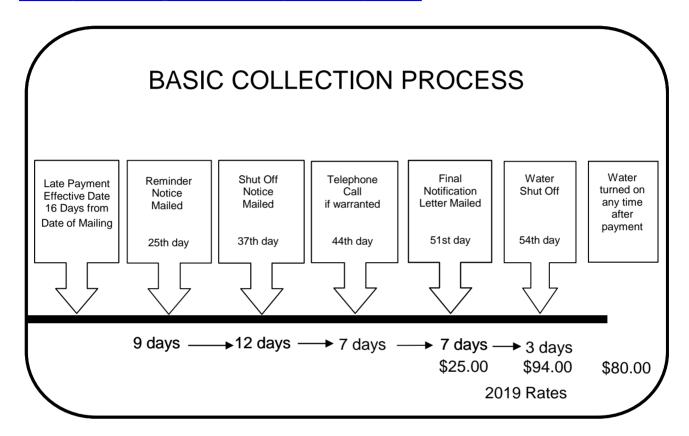
- Customer Service Respond to water/sanitary sewer customer inquiries (telephone, letter, fax, e-mail, or in person).
- Provide effective customer service to approximately 176,000 water/sanitary sewer customers, respond to over 100,000 telephone inquiries, over 12,000 e-mails and over 3,900 customer inquiries made in person. Review and take action on over 6,300 lawyer's letters regarding change of ownership.
- Operate dedicated call centre for customer service inquiries and collections.
- Collections Collection of outstanding balances related to water and sanitary sewer accounts. Collect
 approximately \$210 million annually in water/sanitary sewer revenues (keeping overall write-offs very low
 at 0.02% of revenues).
- Issue collection notices, place collection calls, negotiate and monitor customer-specific payment arrangements, transfer arrears to local municipal taxation offices, utilize collection agency and shut-off services as a last resort for non-payment of account. Handle collections related to power of sale notifications.
- Field collections staff visit premises for on-site collection and shut-off of services where necessary.
- Central Cash Processing Receipt and deposit activity related to water/sanitary sewer payments and other Regional payments (social housing, childcare, police, long-term care, landfill, and other miscellaneous services and revenues).
- Provide front counter cashier services for payment of all Regional services consisting of water and sanitary sewer accounts and other Regional services. Sell transit fare media to approximately 2,300 customers annually.
- Receive, deposit and record approximately 784,000 water/sanitary sewer payments:
 - a) Electronic 753,000 payments
 - b) Mail 23,000 payments
 - c) Counter (in person) 3,200 payments
 - d) Drop Boxes 4,700 payments
 - e) Other 200 payments



2019 Program Detail

Utility Finance

Description of Program Activities (Continued):



Description of Program Resources:

2019 Full Time Staff = 21.75
 2018 Full Time Staff = 21.75

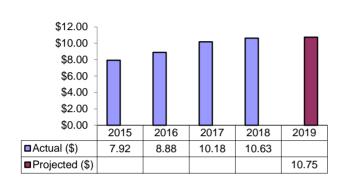


2019 Program Detail

Utility Finance

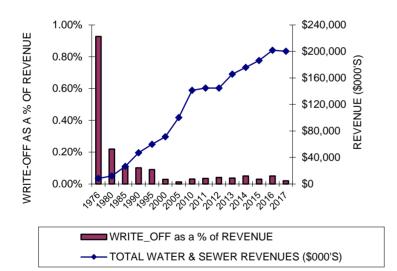
Performance Measurements:

EFFICIENCY



<u>Cost of Incoming Queue Call per</u> Customer Services Call Centre Rep

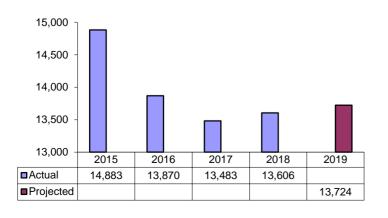
Customer Service reps handle about 100,000 in-bound calls, as well as making collection calls and performing other customer inquiry and collection activities.



Total Revenues and Write-offs as a Percentage of Total Revenue

Some of the water and sanitary sewer billings are uncollectible. Currently, the value of write-offs as a percentage of revenue is a very respectable 0.02% of revenues and is expected to remain at this level.

EFFECTIVENESS



Accounts/Customer Service Staff

The number of accounts per customer service staff ratio is anticipated to remain at approximately the same level as the prior year.

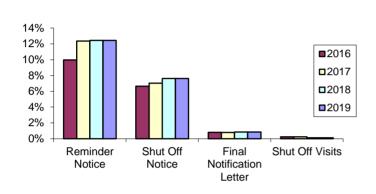


2019 Program Detail

Utility Finance

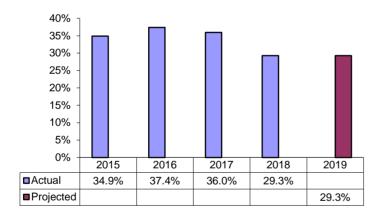
Performance Measurements (Continued):

EFFECTIVENESS (CONTINUED)



Collection Activities as a Percentage of Bills Issued

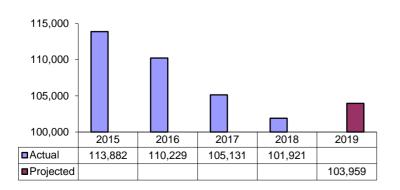
Collection activity is expected to remain about the same as prior years, with only an estimated 1% increase in the number of accounts.



Abandoned Call Rate

Call volumes, the complexity of queries, and growth in the number of customers have resulted in call wait times and abandoned calls remaining high.

COMMUNITY IMPACT



Calls Answered by Customer Services

Complex customer inquiries take longer to answer in a satisfactory manner.



2019 Program Detail

Utility Finance

Detailed Cost of Program:	20	18	2019			
(\$,000's)	Estimated	Approved	Base	Program	Proposed	
(ψ,000 3)	Actuals	Budget	Budget	Change	Budget	
Operating Expenses						
Personnel Expenses	1,899	2,337	2,279	-	2,279	
Personnel Related	5	12	12	-	12	
Communications	49	90	90	-	90	
Supplies	28	34	34	-	34	
Computer Maintenance &						
Operations	309	-	-	385	385	
Materials & Services	10	12	12	_	12	
Equipment Maintenance &						
Repairs	1	9	9	-	9	
Vehicle Operations	3	7	7	-	7	
Professional Services	50	50	50	-	50	
Financial Expenses	31	31	31	-	31	
Minor Assets & Equipment	-	3	3	-	3	
Major Repairs & Renovations	5	20	20	-	20	
Gross Operating Expenses	2,390	2,605	2,547	385	2,932	

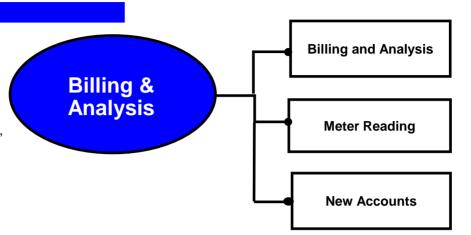


2019 Program Detail

Utility Finance

Purpose:

◆ To promptly invoice customers for water and sanitary sewer services provided by the Region of Durham as well as controlling all meter reading, accounting transactions, revenue analysis and reporting requirements.



Description of Program Activities:

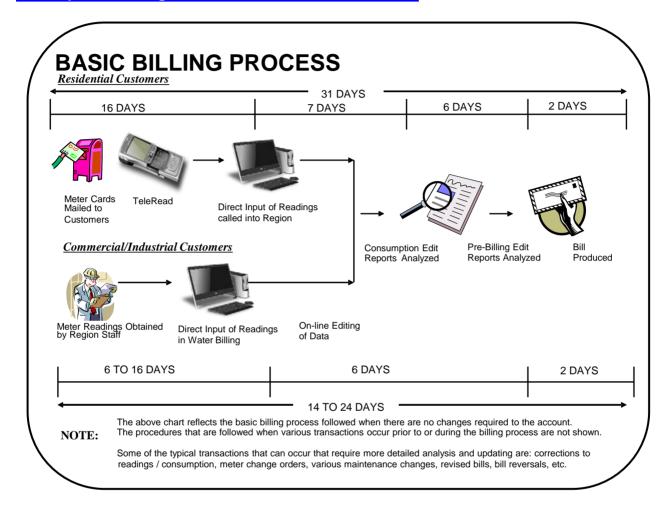
- Billing & Analysis Control the production and issuance of water/sewer bills and manage all accounting activity, revenue forecasting and reporting requirements.
- Issue over 700,000 water/sewer bills (approximately \$210 million in revenue) annually for over 176,000 water and sewer customers (including almost 172,000 residential customers and over 4,800 industrial, commercial and institutional (ICI) customers).
- Meter Reading Obtain water meter readings associated with residential, ICI, and Final (Customer moves) accounts, as well as investigating and assisting customers to identify water consumption problems.
- Residential Readings (quarterly)
- a) Customer Meter Card Program 3 mailed cards per year (over 377,000 readings). 93% of all returned customer readings are submitted through the TeleRead program.
- b) Region Meter Reads 1 time per year/customer (almost 172,000 readings).
- c) Customer Site Investigations Assist customers in resolving high consumption issues (over 18,000 site investigations annually).
- ICI Readings bi-monthly meter readings obtained by Regional meter readers (over 30,000 reads annually).
- Final Readings over 10,000 annual readings coordinated with customers when they move.
- Meter Reading Assistance Program Obtain meter readings for those customers who find it difficult to read the meters (over 27,000 readings annually for 6,860 customers).
- New Accounts Control and set up of all new customer accounts (approximately 2,000 new accounts set up in 2018).



2019 Program Detail

Utility Finance

Description of Program Activities Continued:



Description of Program Resources:

2019 Full Time Staff = 19.75
 2018 Full Time Staff = 19.75

PROGRAM 2 BILLING AND ANALYSIS

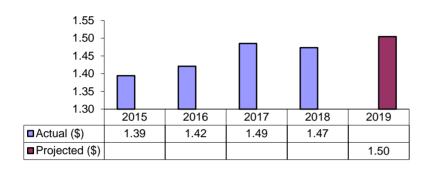


2019 Program Detail

Utility Finance

Performance Measurements:

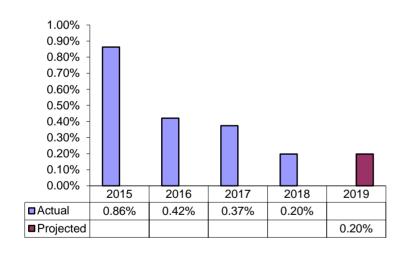
EFFICIENCY



Cost per Bill

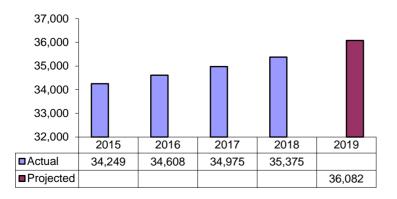
The cost per bill is expected to show a marginal increase in 2019.

EFFECTIVENESS



Percentage of Accounts With 4 or More Consecutive Estimates

Due to dedicated work being done in recent years via meter reading visits to properties, increased remote reading capabilities and customer contacts, a dramatic decrease in the number of accounts with 4 or more consecutive estimates has been obtained, despite the increase in the number of accounts. Receiving actual reads results in more accurate bills and highlights consumption problems faster.



Billing Staff/Accounts Ratio

The number of accounts handled by each staff member is expected to increase yearly due to customer growth.

PROGRAM 2 BILLING AND ANALYSIS

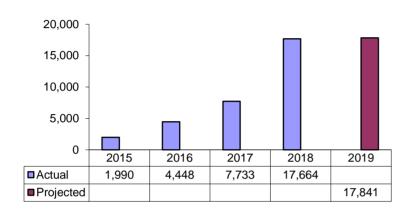


2019 Program Detail

Utility Finance

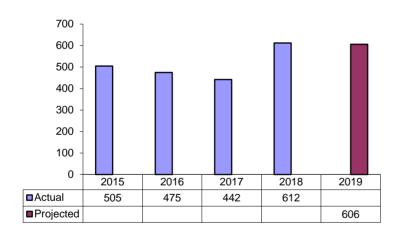
Performance Measurements (Continued):

COMMUNITY IMPACT



General Meter Reading Site Visits

General meter reading site visits are expected to continue to be high over the next few years as we concentrate on reducing our estimated accounts (with more frequent site visits).



Scheduled Customer Meter Reading Appointments

Scheduled meter reading appointments are made to assist customers in locating plumbing problems. The number of meter reading appointments is expected to be similar to the prior year.



2019 Program Detail

Utility Finance

Detailed Cost of Program:	20	18	2019			
(\$,000's)	Estimated	Approved	Base	Program	Proposed	
(ψ,000 3)	Actuals	Budget	Budget	Change	Budget	
Operating Expenses		_				
Personnel Expenses	1,891	2,353	2,168	-	2,168	
Personnel Related	6	13	13	-	13	
Communications	1,178	1,154	1,154	(100)	1,054	
Supplies	138	135	135	-	135	
Computer Maintenance &						
Operations	309	-	-	385	385	
Materials & Services	6	15	15	-	15	
Equipment Maintenance &						
Repairs	15	9	9	-	9	
Vehicle Operations	16	20	20	-	20	
Professional Services	30	60	60	-	60	
Contracted Services	159	165	165	-	165	
Financial Expenses	3	3	3	-	3	
Minor Assets & Equipment	8	2	2	-	2	
Major Repairs & Renovations	6	20	20	-	20	
Contribution to Reserve &						
Reserve Funds	12	12	12	-	12	
Gross Operating Expenses	3,777	3,961	3,776	285	4,061	

PROGRAM 3 TANGIBLE CAPITAL ASSETS - REPLACEMENT



2019 Program Detail

Utility Finance

	Description	Qty	Unit Cost	Total
			\$	\$
Cust	omer Services - Program 1			
1	Desktop Computers	16	700	11,200
2	Laptop Computer	1	1,500	1,500
			-	12,700
Billin	ng and Analysis - Program 2		_	
3	Meter Reading Devices		7,000	7,000
	· ·		_	7,000
			_	<u> </u>
			_ _	19,700

TABLE OF CONTENTS

2019 BUSINESS PLANS & BUDGETS

REGIONAL CORPORATE COSTS FOR WATER AND SEWER

NOTE: On this page, just click on the particular Section and you will be linked to the corresponding page

corresponding page	Page Number
REGIONAL CORPORATE COSTS FOR WATER	
PROGRAM SUMMARY	388
EXPLANATION OF PROGRAM CHANGES	389
REGIONAL CORPORATE COSTS FOR SEWER	
PROGRAM SUMMARY	390
EXPLANATION OF PROGRAM CHANGES	391



2019 Business Plan

Regional Corporate Costs for Water

By Program	20	18	2019			
(\$,000's)	Estimated	Approved	Base	Program	Proposed	
	Actuals	Budget	Budget	Change	Budget	
Expense Programs	\$	\$	\$	\$	\$	
Advertising	18	21	21	_	21	
Audit Fees	25	25	25	_	25	
Contribution to Reserve Funds	635	635	647	_	647	
				-	_	
Contribution to Capital Fund	728	728	804	-	804	
Debt Issuance Expense	10	24	24	-	24	
Insurance	424	424	439	-	439	
Interest Expense	162	176	176	-	176	
Bad Debt Expense	29	34	34	-	34	
Allocation of Admin Charges	4,035	4,280	4,067	(92)	3,975	
Net Program Expenses	6,066	6,347	6,237	(92)	6,145	
			(\$			
			(\$110)			
Summary of Increase (Decrea	ıse)		-1.73%		(\$202)	
•	-			>	-3.18%	

Summary of Base Budget Changes

	\$	Comments
Allocation of Admin Charges	32	Economic Increase
Allocation of Admin Charges	(245)	Reallocation to Works- Water
Other Services	103	Inflationary Increases
	(110)	

EXPLANATION OF PROGRAM CHANGES



2019 Program Changes

Regional Corporate
Costs for Water

Regional Corporate Costs for Water

• With the launch of the new water billing system in 2019 there is a reduction in support costs for the exisiting system. The partial year licensing and hosting fees for the new system are included in the Utility Finance budget.	(92)
	(92)
Total Program Changes	(92)



2019 Business Plan

Regional Corporate Costs for Sewer

By Program	20	18		2019	
(\$,000's)	Estimated	Approved	Base	Program	Proposed
	Actuals	Budget	Budget	Change	Budget
Expense Programs	\$	\$	\$	\$	\$
Advertising	18	21	21		21
Audit Fees	22	22	27	_	27
Contribution to Reserve Funds	635	635	648	_	648
Contribution to Capital Fund	793	793	854	_	854
Debt Issuance Expense	8	25	25	-	25
Insurance .	554	554	574	-	574
Interest Expense	95	115	115	-	115
Bad Debt Expense	35	47	46	-	46
Allocation of Admin Charges	3,436	3,682	3,469	(92)	3,377
Net Program Expenses	5,596	5,894	5,779	(92)	5,687
			(\$115)		
Summary of Increase (Decrea	se)		-1.95%		(\$207)
-					-3.51%

Summary of Base Budget Changes

	\$	Comments
Allocation of Admin Charges	32	Economic Increase
Allocation of Admin Charges	(245)	Reallocation to Works-Sewer
Other Services	98	Inflationary Increases
	(115)	

EXPLANATION OF PROGRAM CHANGES



2019 Program Changes

Regional Corporate
Costs for Sewer

Regional Corporate Costs for Sewer

• With the launch of the new water billing system in 2019 there is a reduction in support costs for the exisiting system. The partial year licensing and hosting fees for the new system are included in the Utility Finance budget.	(92)
	(92)
Total Program Changes	(92)