ENVIRONMENTAL

	2018	CAPITAL BUD	GET	20	19	20	20
PROJECT DESCRIPTION	TOTAL COST	REVENUE	NET COST	TOTAL	NET	TOTAL	NET
Water Pollution Control Plants							
SCADA - Plant #1	300,000	-300,000	0	0	0	0	0
Raw Sewage Pump - Plant #2	300,000	-300,000	0	50,000	0	50,000	0
Clarifier Gearbox Plant #2	50,000	-50,000	0	0	0	0	0
Tertiary Filter Sewer - Plant #1	75,000	-75,000	0	0	0	0	0
Brook Road Pumping Station Piping	50,000	-50,000	0	0	0	0	0
Water-Tight Manhole Covers	50,000	-50,000	0	50,000	0	50,000	0
SBR - Plant #2	100,000	-100,000	0	100,000	0	1,800,000	0 1,800,000
SCADA - Pumping Stations	0	-100,000	0	75,000	0	1,800,000	1,800,000
Ozone Disinfection - Plant #2	0	0	0	75,000	0	750,000	0
Total Environmental	925,000	-925,000	0	275,000	0	2,650,000	1,800,000

5 YEAR CAPITAL BUDGET JUSTIFICATION

ACCOUNT # 174001 2/3/4

DIVISION: Public Works	3. PROJECT DETAIL & JU	3. PROJECT DETAIL & JUSTIFICATION:			
DEPARTMENT: Environmental Services 1. PROJECT NAME & DESCRIPTION SCADA - Plant #1	monitor / control the entire t electronically. Installation o (ie Plant #1 & #2) to be ope				
2. COMMITMENTS MADE:	4. EFFECTS ON FUTURE	OPERATING BUDGETS:			
	2018	2019	2020		
5. EXPENDITURES					
CONTRACTUAL CAPS BASED ON \$ DIRECT REVENUES GRANTS & SUBSIDIES OTHER	300,000				
6. NET REQUIREMENTS:	300,000	0	0		
TO BE FINANCED FROM: DEBENTURES OWNERS RESERVES - Sewer OTHER	-300,000				
7. ANNUAL TAX REQUIREMENT	0	0	0		

5 YEAR CAPITAL BUDGET JUSTIFICATION

ACCOUNT # 174002 2/3/4

DIVISION: Public Works	3. PROJECT DETAIL & JU	3. PROJECT DETAIL & JUSTIFICATION:		
DEPARTMENT: Environmental Services 1. PROJECT NAME & DESCRIPTION Raw Sewage Pump - Plant #2	high inflows at Plant #2 the for long enough for replacer pumps, a third pump will be (Plant #2 has two spare exp conducted regularly and to existing pump components	The 2017 Capital Budget included \$50,000 for a new pump however due to high inflows at Plant #2 the existing pumps were not able to be taken offline for long enough for replacement. Instead of replacing one of the existing pumps, a third pump will be purchased as a backup to the existing pumps (Plant #2 has two spare expansion slots) so that maintenance can be conducted regularly and to help keep up with high flows. In 2019/2020, the existing pump components will be upgraded. Public Consultation Process No		
2. COMMITMENTS MADE:	4. EFFECTS ON FUTURE	OPERATING BUDGETS:		
	2018	2019	2020	
5. EXPENDITURES CONTRACTUAL CAPS BASED ON \$ DIRECT REVENUES GRANTS & SUBSIDIES OTHER	300,000	50,000	50,000	
6. NET REQUIREMENTS: TO BE FINANCED FROM:	300,000	50,000	50,000	
DEBENTURES OWNERS RESERVES - Sewer OTHER	-300,000		-50,000	
7. ANNUAL TAX REQUIREMENT	0	0	0	

5 YEAR CAPITAL BUDGET JUSTIFICATION

DIVISION: Public Works			ACCOUNT # 1740033	
DIVISION: Public Works	3. PROJECT DETAIL & JU	ISTIFICATION:		
DEPARTMENT: Environmental Services 1. PROJECT NAME & DESCRIPTION Clarifier Gearbox - Plant #2	This item was approved for 2017 but was not able to be completed due to lack of parts. The Clarifier mechanism was installed in 1984 (33 years old) and parts are becoming difficult to find. If an OEM part cannot be located, the gearbox will need to be reverse engineered by a metal fabricator.			
	Public Consultation Process	5	No	
2. COMMITMENTS MADE:	4. EFFECTS ON FUTURE	OPERATING BUDGETS:		
	2018	2019	2020	
5. EXPENDITURES				
CONTRACTUAL CAPS BASED ON \$ DIRECT REVENUES GRANTS & SUBSIDIES OTHER	50,000			
6. NET REQUIREMENTS:	50,000	0	0	
TO BE FINANCED FROM: DEBENTURES OWNERS RESERVES - Sewer OTHER	-50,000			
7. ANNUAL TAX REQUIREMENT	0	0	0	

5 YEAR CAPITAL BUDGET JUSTIFICATION

DIVISION Public Works	3 PROJECT DETAIL & III		ACCOUNT # 1740043	
DIVISION: Public Works DEPARTMENT: Environmental Services 1. PROJECT NAME & DESCRIPTION Sanitary Sewer Line from Tertiary Filter to New Headworks	3. PROJECT DETAIL & JUSTIFICATION: The design of the Tertiary Filter at Plant #1 is such that, the sludge vacuumed from the filter disks, is pumped back to the Aeration Tanks. Removing sludge in this manner does not remove the sludge, but rather, recirculates back into the filter. The proper method is to pump the sludge and debris back to the headworks building where the fine screen and grit vortex will completely remove it from the process.			
	Public Consultation Process	5	Νο	
2. COMMITMENTS MADE:	4. EFFECTS ON FUTURE OPERATING BUDGETS:			
	2018	2019	2020	
5. EXPENDITURES				
CONTRACTUAL CAPS BASED ON \$ DIRECT REVENUES GRANTS & SUBSIDIES OTHER	75,000			
6. NET REQUIREMENTS:	75,000	0	0	
TO BE FINANCED FROM: DEBENTURES OWNERS RESERVES - Sewer OTHER	-75,000			
7. ANNUAL TAX REQUIREMENT	0	0	0	

5 YEAR CAPITAL BUDGET JUSTIFICATION

			ACCOUNT # 1740053
DIVISION: Public Works	3. PROJECT DETAIL & JU	JSTIFICATION:	
DEPARTMENT: Environmental Services 1. PROJECT NAME & DESCRIPTION Brook Road Pump Station Piping	The Brook Road Pump Station piping is badly corroded and needs to be replaced. The pipes are 33 years old. The C.N. Watson Full Cost Recovery Report recommended replacement of pipes in 2014, but was deferred. The corrosion on these pipes is now severe and it is highly unlikely that they will last another year without failing.		
	Public Consultation Proces	S	Νο
2. COMMITMENTS MADE:	4. EFFECTS ON FUTURE	OPERATING BUDGETS:	
	2018	2019	2020
5. EXPENDITURES			
CONTRACTUAL CAPS BASED ON \$ DIRECT REVENUES GRANTS & SUBSIDIES OTHER	50,000		
6. NET REQUIREMENTS:	50,000	C	0
TO BE FINANCED FROM: DEBENTURES OWNERS RESERVES - Sewer OTHER	-50,000		
7. ANNUAL TAX REQUIREMENT	0	C	0 0

5 YEAR CAPITAL BUDGET JUSTIFICATION

DIVISION: Public Works		3. PROJECT DETAIL & JUSTIFICATION: Over 100 manholes in the Town reside within the flood plain of the three local		
DEPARTMENT: Environmental Services	creeks. The current manhol	creeks. The current manhole covers are metal, with 2 holes in them to allow removal using a pick. During periods of heavy rain and / or melting snow,		
1. PROJECT NAME & DESCRIPTION	these creeks overflow their	these creeks overflow their banks and pour thousands of cubic meters of		
Water-Tight Manhole Covers	water-tight equivalents, will sewer system. Due to the la replaced, \$50,000/year will	water into the sanitary sewer. Replacing the old style manhole covers with water-tight equivalents, will significantly reduce the inflitration into the Town's sewer system. Due to the large number of manhole covers needing to be replaced, \$50,000/year will be alloted annually until all are replaced. Public Consultation Process No		
2. COMMITMENTS MADE:	4. EFFECTS ON FUTURE	OPERATING BUDGETS:		
	2018	2019	2020	
5. EXPENDITURES				
CONTRACTUAL CAPS BASED ON \$ DIRECT REVENUES GRANTS & SUBSIDIES OTHER	50,000	50,000	50,000	
6. NET REQUIREMENTS:	50,000	50,000	50,000	
TO BE FINANCED FROM: DEBENTURES OWNERS RESERVES - Sewer OTHER	-50,000	-50,000	-50,000	
7. ANNUAL TAX REQUIREMENT	0	0	0	

5 YEAR CAPITAL BUDGET JUSTIFICATION

DIVISION: Public Works	3. PROJECT DETAIL & JU		
		4/7, 365 days/yr, pre-treating	a sentic waste/landfill
DEPARTMENT: Environmental Services		ivery of liquid waste makes i	
1. PROJECT NAME & DESCRIPTION	SBR out of service for routine maintenance. A second SBR will allow preventative maintenance to be carried out without an interruption of the pre-treatement		
	process. The SBR generates in excess of \$500,000 annually, through		
Sequence Batch Reactor - Plant #2	processing fees. This revenue stream is currently restricted by the SBR's capa		
		equire a commitment from the	
	will continue to be hauled to	Plant #2 for a pre-determin	ed number of years.
	Public Consultation Process	5	No
2. COMMITMENTS MADE:	4. EFFECTS ON FUTURE	OPERATING BUDGETS:	
	2018	2019	2020
5. EXPENDITURES			
CONTRACTUAL	100,000	100,000	1,800,000
CAPS BASED ON \$	100,000	100,000	1,800,000
DIRECT REVENUES			
GRANTS & SUBSIDIES			
OTHER			
6. NET REQUIREMENTS:	100,000	100,000	1,800,000
TO BE FINANCED FROM: DEBENTURES			
OWNERS			
RESERVES - Sewer	-100,000	-100,000	
OTHER		.00,000	
7. ANNUAL TAX REQUIREMENT	0	0	1,800,000

5 YEAR CAPITAL BUDGET JUSTIFICATION

		-	ACCOUNT #	
DIVISION: Public Works	3. PROJECT DETAIL & JU	STIFICATION:		
DEPARTMENT: Environmental Services 1. PROJECT NAME & DESCRIPTION SCADA Installation Pumping Station	of the entire Sanitary Collect emergency situations, a sing at either Treatment Plant an	Tying in all Pumping Stations to the SCADA system will allow com of the entire Sanitary Collection and Treatment systems within the emergency situations, a single operator would be able to correct p at either Treatment Plant and any Pump Station, by inputting com into a computer at whichever facility he is currently located.		
	Public Consultation Process	3	No	
2. COMMITMENTS MADE:	4. EFFECTS ON FUTURE (OPERATING BUDGETS:		
	2018	2019	2020	
5. EXPENDITURES CONTRACTUAL CAPS BASED ON \$ DIRECT REVENUES GRANTS & SUBSIDIES OTHER		75,000		
6. NET REQUIREMENTS: TO BE FINANCED FROM: DEBENTURES OWNERS RESERVES - Sewer OTHER	0	75,000 -75,000		
7. ANNUAL TAX REQUIREMENT	0	0	0	

5 YEAR CAPITAL BUDGET JUSTIFICATION

ACCOUNT # 174007 2/3/4

chemical residues afterward more efficient disinfection w has already been introduce completion of the pilot proje	d. Eliminating chlorine as a critic transformed to the series of the	disinfectant will provide nvironment. Ozone	
	Ozone destroys pathogens 300 times faster than clorine and leaves no harmful chemical residues afterward. Eliminating chlorine as a disinfectant will provide more efficient disinfection with zero risk to the aquatic environment. Ozone has already been introduced as a pilot project at Plant #1. Upon sucessful completion of the pilot project and when the system is fully functional and reliable, implementation at Plant #2 should be considered.		
		No	
	I		
2018	2019	2020	
		750,000	
0	0	750,000	
		-750,000	
	reliable, implementation at I Public Consultation Process 4. EFFECTS ON FUTURE 2018 0	reliable, implementation at Plant #2 should be considered Public Consultation Process 4. EFFECTS ON FUTURE OPERATING BUDGETS: 2018 2019	