

**TOWN OF COBOURG
CAPITAL BUDGET 2021 - 2023**

ENVIRONMENTAL

PROJECT DESCRIPTION	2021 CAPITAL BUDGET			2022		2023	
	TOTAL COST	REVENUE	NET COST	TOTAL	NET	TOTAL	NET
Water Pollution Control Plants							
Sequence Batch Reactor Expansion - (P2)	6,300,000	-6,300,000	0	0	0	0	0
Women's Locker Room - (P2)	73,900	-73,900	0	0	0	0	0
Auto-Sampler - (P1)	50,000	-50,000	0	0	0	0	0
Aeration Tank Shutoff Valves - (P1)	200,000	-200,000	0	0	0	0	0
Digestion Cleanout - (P1)	300,000	-300,000	0	0	0	0	0
Lunchroom Renovations - (P2)	30,000	-30,000	0	0	0	0	0
Driveway Reconstruction - (P1)	200,000	-200,000	0	0	0	0	0
Sludge Recirculating Valves - (P2)	50,000	-50,000	0	0	0	0	0
Headworks Gate Repairs - (P2)	100,000	-100,000	0	0	0	0	0
Alum Room HVAC - (P2)	100,000	-100,000	0	0	0	0	0
Contact Building - (P2)	85,000	-85,000	0	0	0	0	0
Driveway Paving - (P2)	100,000	-100,000	0	0	0	0	0
Gas Detection System - (P2)	75,000	-75,000	0	0	0	0	0
Raw Sewage Pump - (P2)	0	0	0	200,000	0	0	0
Forth Street Pump Station	0	0	0	50,000	0	1,000,000	0
Heat Exchanger Replacement - (P1)	0	0	0	200,000	0	0	0
Contact Chamber - (P1)	0	0	0	50,000	0	1,000,000	0
Capacity Upgrades - (P1)	0	0	0	0	0	1,000,000	0
Total Environmental	7,663,900	-7,663,900	0	500,000	0	3,000,000	0

**TOWN OF COBOURG
CAPITAL BUDGET 2021 - 2023**

5 YEAR CAPITAL BUDGET JUSTIFICATION

ACCOUNT #

DIVISION: Public Works	3. PROJECT DETAIL & JUSTIFICATION: New SBR valued at \$3.2M previously approved. Through design/build process, determined that existing temporary receiving station will not be adequate for two SBR's. System requires a new holding tank, screening and grit removal. Plant requires a revised driveway configuration to accommodate large tanker trucks. Existing SBR also requires upgrades and new piping to/from existing plant. Increase in septic/leachate revenue expected to be 40%. Public Consultation Process No		
DEPARTMENT: Environmental Services			
1. PROJECT NAME & DESCRIPTION Sequence Batch Reactor (SBR) Expansion - Plant #2			
2. COMMITMENTS MADE:	4. EFFECTS ON FUTURE OPERATING BUDGETS:		
	2021	2022	2023
5. EXPENDITURES CONTRACTUAL CAPS BASED ON \$ DIRECT REVENUES GRANTS & SUBSIDIES OTHER	6,300,000		
6. NET REQUIREMENTS:	6,300,000	0	0
TO BE FINANCED FROM: DEBENTURES OWNERS RESERVES OTHER	-6,300,000		
7. ANNUAL TAX REQUIREMENT	0	0	0

**TOWN OF COBOURG
CAPITAL BUDGET 2021 - 2023**

5 YEAR CAPITAL BUDGET JUSTIFICATION

ACCOUNT #

DIVISION: Public Works	3. PROJECT DETAIL & JUSTIFICATION: The new headworks building at Plant #1 is considered a Class 1, Div 1 environment (i.e. risk of explosion due to sewer gas). In order to fulfill MECP sampling criteria, it is necessary to install an intrinsically safe (i.e. non-sparking), refrigerated, auto-sampler. Public Consultation Process No		
DEPARTMENT: Environmental Services			
1. PROJECT NAME & DESCRIPTION Auto Sampler - Plant #1			
2. COMMITMENTS MADE:	4. EFFECTS ON FUTURE OPERATING BUDGETS:		
	2021	2022	2023
5. EXPENDITURES CONTRACTUAL CAPS BASED ON \$ DIRECT REVENUES GRANTS & SUBSIDIES OTHER	50,000		
6. NET REQUIREMENTS: TO BE FINANCED FROM: DEBENTURES OWNERS RESERVES - Sewer OTHER	50,000	0	0
7. ANNUAL TAX REQUIREMENT	0	0	0

**TOWN OF COBOURG
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5 YEAR CAPITAL BUDGET JUSTIFICATION

ACCOUNT #

DIVISION: Public Works	3. PROJECT DETAIL & JUSTIFICATION: There are six (6) isolation valves located on the inlet to each of the two Aerators at Plant #1. These valves are 51 years old and need to be replaced. Replacement of these valves is necessary to allow routine maintenance to take place. Public Consultation Process No		
DEPARTMENT: Environmental Services			
1. PROJECT NAME & DESCRIPTION Aeration Tank Shutoff Valves - Plant #1			
2. COMMITMENTS MADE:	4. EFFECTS ON FUTURE OPERATING BUDGETS:		
	2021	2022	2023
5. EXPENDITURES CONTRACTUAL CAPS BASED ON \$ DIRECT REVENUES GRANTS & SUBSIDIES OTHER	200,000		
6. NET REQUIREMENTS: TO BE FINANCED FROM: DEBENTURES OWNERS RESERVES - Sewer OTHER	200,000	0	0
7. ANNUAL TAX REQUIREMENT	0	0	0

**TOWN OF COBOURG
CAPITAL BUDGET 2021 - 2023**

5 YEAR CAPITAL BUDGET JUSTIFICATION

ACCOUNT #

DIVISION: Public Works	3. PROJECT DETAIL & JUSTIFICATION: Anaerobic Digesters are used to process the solid waste from sewage. The microbial degradation of the solids generates methane gas, which is highly explosive. This makes cleaning them exceedingly difficult. For this reason cleanouts are only performed every 5 - 7 years. The Digester at Plant #1 has not been cleaned out in 8 years and has been plugging with debris. A cleanout is overdue and should be done in 2021 as soon as it is warm enough to do so. Public Consultation Process No		
DEPARTMENT: Environmental Services			
1. PROJECT NAME & DESCRIPTION Digester Cleanout - Plant #1			
2. COMMITMENTS MADE:	4. EFFECTS ON FUTURE OPERATING BUDGETS:		
	2021	2022	2023
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

**TOWN OF COBOURG
CAPITAL BUDGET 2021 - 2023**

5 YEAR CAPITAL BUDGET JUSTIFICATION

ACCOUNT #

DIVISION: Public Works	3. PROJECT DETAIL & JUSTIFICATION: The lunchroom at Plant #2 has not been upgraded in over 40 years. The cupboards, counters and appliances are all original and need replacement.		
DEPARTMENT: Environmental Services			
1. PROJECT NAME & DESCRIPTION Lunchroom Renovations - Plant #2	Public Consultation Process No		
2. COMMITMENTS MADE:	4. EFFECTS ON FUTURE OPERATING BUDGETS:		
	2021	2022	2023
5. EXPENDITURES CONTRACTUAL CAPS BASED ON \$ DIRECT REVENUES GRANTS & SUBSIDIES OTHER	30,000		
6. NET REQUIREMENTS: TO BE FINANCED FROM: DEBENTURES OWNERS RESERVES - Sewer OTHER	30,000	0	0
7. ANNUAL TAX REQUIREMENT	0	0	0

**TOWN OF COBOURG
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5 YEAR CAPITAL BUDGET JUSTIFICATION

ACCOUNT #

DIVISION: Public Works	3. PROJECT DETAIL & JUSTIFICATION: The driveway leading into Plant #1 is in very poor repair. It has not had any maintenance in over 40 years. Approx 2,000 m2 of the driveway to be removed, re-graded, paved and proper drainage installed. An additional 1,500 m2 will require resurfacing only.		
DEPARTMENT: Environmental Services			
1. PROJECT NAME & DESCRIPTION Driveway Reconstruction - Plant #1	Public Consultation Process No		
2. COMMITMENTS MADE:	4. EFFECTS ON FUTURE OPERATING BUDGETS:		
	2021	2022	2023
5. EXPENDITURES CONTRACTUAL CAPS BASED ON \$ DIRECT REVENUES GRANTS & SUBSIDIES OTHER	200,000		
6. NET REQUIREMENTS: TO BE FINANCED FROM: DEBENTURES OWNERS RESERVES - Sewer OTHER	200,000	0	0
7. ANNUAL TAX REQUIREMENT	0	0	0

**TOWN OF COBOURG
CAPITAL BUDGET 2021 - 2023**

5 YEAR CAPITAL BUDGET JUSTIFICATION

ACCOUNT #

DIVISION: Public Works	3. PROJECT DETAIL & JUSTIFICATION: The current valving at Plant #2 does not permit the standby pump to be used when one of the primary pumps is out of service. By correcting the piping and automating the valves (3), the SCADA will be able to automatically change over to the standby pump, if the primary recirculating pump for either Digester malfunctions. Public Consultation Process No		
DEPARTMENT: Environmental Services			
1. PROJECT NAME & DESCRIPTION Sludge Recirculating Valves - Plant #2			
2. COMMITMENTS MADE:	4. EFFECTS ON FUTURE OPERATING BUDGETS:		
	2021	2022	2023
5. EXPENDITURES CONTRACTUAL CAPS BASED ON \$ DIRECT REVENUES GRANTS & SUBSIDIES OTHER	50,000		
6. NET REQUIREMENTS: TO BE FINANCED FROM: DEBENTURES OWNERS RESERVES - Sewer OTHER	50,000	0	0
7. ANNUAL TAX REQUIREMENT	0	0	0

**TOWN OF COBOURG
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5 YEAR CAPITAL BUDGET JUSTIFICATION

ACCOUNT #

DIVISION: Public Works	3. PROJECT DETAIL & JUSTIFICATION: The gates in the headworks building of Plant #2 are twisted and the gates cannot be closed. These will need to be replaced to permit raw sewage pumps to be removed for service.		
DEPARTMENT: Environmental Services			
1. PROJECT NAME & DESCRIPTION Headworks Gate Repairs - Plant #2	Public Consultation Process No		
2. COMMITMENTS MADE:	4. EFFECTS ON FUTURE OPERATING BUDGETS:		
	2021	2022	2023
5. EXPENDITURES CONTRACTUAL CAPS BASED ON \$ DIRECT REVENUES GRANTS & SUBSIDIES OTHER	100,000		
6. NET REQUIREMENTS: TO BE FINANCED FROM: DEBENTURES OWNERS RESERVES - Sewer OTHER	100,000	0	0
7. ANNUAL TAX REQUIREMENT	0	0	0

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5 YEAR CAPITAL BUDGET JUSTIFICATION

ACCOUNT #

DIVISION: Public Works	3. PROJECT DETAIL & JUSTIFICATION: The Alum Room at Plant #2 is an extremely corrosive environment due to the presence of large quantities of aluminum sulfate (Alum). The room needs to be fitted with a heated air supply to ensure an adequate number of air exchanges.		
DEPARTMENT: Environmental Services			
1. PROJECT NAME & DESCRIPTION Alum Room HVAC - Plant #2	Public Consultation Process No		
2. COMMITMENTS MADE:	4. EFFECTS ON FUTURE OPERATING BUDGETS:		
	2021	2022	2023
5. EXPENDITURES CONTRACTUAL CAPS BASED ON \$ DIRECT REVENUES GRANTS & SUBSIDIES OTHER	100,000		
6. NET REQUIREMENTS: TO BE FINANCED FROM: DEBENTURES OWNERS RESERVES - Sewer OTHER	100,000	0	0
7. ANNUAL TAX REQUIREMENT	0	0	0

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5 YEAR CAPITAL BUDGET JUSTIFICATION

ACCOUNT #

DIVISION: Public Works	3. PROJECT DETAIL & JUSTIFICATION: Plant #2 requires a building adjacent to the Contact Chamber to permit heated storage of sampling equipment and, eventually, a new disinfection system. Plant #1 has already converted from chlorine to ozone as a disinfecting agent. Plant #2 will be changing over to ozone in the next 2-3 years and will require a building to house the equipment. Plant #2 also requires a heated sampling area. This building will be large enough to accommodate both functions. Building will also be utilized temporarily for dechlorination process until ozone can be implemented. Public Consultation Process No		
DEPARTMENT: Environmental Services			
1. PROJECT NAME & DESCRIPTION Disinfection / Sampling (Contact) Building - Plant #2			
2. COMMITMENTS MADE:	4. EFFECTS ON FUTURE OPERATING BUDGETS:		
	2021	2022	2023
5. EXPENDITURES CONTRACTUAL CAPS BASED ON \$ DIRECT REVENUES GRANTS & SUBSIDIES OTHER	85,000		
6. NET REQUIREMENTS: TO BE FINANCED FROM: DEBENTURES OWNERS RESERVES - Sewer OTHER	85,000	0	0
	-85,000		
7. ANNUAL TAX REQUIREMENT	0	0	0

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5 YEAR CAPITAL BUDGET JUSTIFICATION

ACCOUNT #

DIVISION: Public Works	3. PROJECT DETAIL & JUSTIFICATION: The driveway at Plant #2 is over 30 years old many sections are in poor repair. Other sections have been torn up to repair watermain breaks. Will need to resurface 2,000 m2 of asphalt. Anticipated to be added to SBR capital construction works to be completed following completion of all SBR construction.		
DEPARTMENT: Environmental Services			
1. PROJECT NAME & DESCRIPTION Driveway Repairs - Plant #2	Public Consultation Process No		
2. COMMITMENTS MADE:	4. EFFECTS ON FUTURE OPERATING BUDGETS:		
	2021	2022	2023
5. EXPENDITURES CONTRACTUAL CAPS BASED ON \$ DIRECT REVENUES GRANTS & SUBSIDIES OTHER	100,000		
6. NET REQUIREMENTS: TO BE FINANCED FROM: DEBENTURES OWNERS RESERVES - Sewer OTHER	100,000	0	0
7. ANNUAL TAX REQUIREMENT	0	0	0

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5 YEAR CAPITAL BUDGET JUSTIFICATION

ACCOUNT #

DIVISION: Public Works	3. PROJECT DETAIL & JUSTIFICATION:		
DEPARTMENT: Environmental Services	The gas detection system is failing in the digester building at Plant 2. This is a health and safety requirement and must be replaced.		
1. PROJECT NAME & DESCRIPTION Gas Detection System - Plant #2	Public Consultation Process No		
2. COMMITMENTS MADE:	4. EFFECTS ON FUTURE OPERATING BUDGETS:		
	2021	2022	2023
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	75,000	0	0
	-75,000		
7. ANNUAL TAX REQUIREMENT	0	0	0

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5 YEAR CAPITAL BUDGET JUSTIFICATION

ACCOUNT #

DIVISION: Public Works	3. PROJECT DETAIL & JUSTIFICATION: Plant #2 requires two raw sewage pumps to keep up with the flow of incoming sewage. A third pump is necessary to allow the primary pumps to be serviced without losing the required pumping capacity.		
DEPARTMENT: Environmental Services			
1. PROJECT NAME & DESCRIPTION Raw Sewage Pump - Plant #2	Public Consultation Process No		
2. COMMITMENTS MADE:	4. EFFECTS ON FUTURE OPERATING BUDGETS:		
	2021	2022	2023
5. EXPENDITURES CONTRACTUAL CAPS BASED ON \$ DIRECT REVENUES GRANTS & SUBSIDIES OTHER		200,000	
6. NET REQUIREMENTS:	0	200,000	0
TO BE FINANCED FROM: DEBENTURES OWNERS RESERVES - Sewer OTHER		-200,000	
7. ANNUAL TAX REQUIREMENT	0	0	0

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ACCOUNT #

DIVISION: Public Works	3. PROJECT DETAIL & JUSTIFICATION: The Forth St Pump Station is the oldest sanitary pump station owned by the Town. It has been in service since 1947. The building is 73 years old and the wetwell and forcemain capacities need to be upgraded to match current flows. Based on the outcome of the 2021 capacity study, a potential outcome could be to relocate and expand the Forth St Pumping Station to allow the residents on Cedermere, Tay, Bagot and Tremaine Terrace to connect to the Town's sanitary sewer collection system. Cedermere, Tay and south end of Bagot are currently using septic tanks or private sewers.		
DEPARTMENT: Environmental Services			
1. PROJECT NAME & DESCRIPTION Forth St Pump Station	Public Consultation Process No		
2. COMMITMENTS MADE:	4. EFFECTS ON FUTURE OPERATING BUDGETS:		
	2021	2022	2023
5. EXPENDITURES CONTRACTUAL CAPS BASED ON \$ DIRECT REVENUES GRANTS & SUBSIDIES OTHER		50,000	1,000,000
6. NET REQUIREMENTS:	0	50,000	1,000,000
TO BE FINANCED FROM: DEBENTURES OWNERS RESERVES - Sewer OTHER		-50,000	-1,000,000
7. ANNUAL TAX REQUIREMENT	0	0	0

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5 YEAR CAPITAL BUDGET JUSTIFICATION

ACCOUNT #

DIVISION: Public Works	3. PROJECT DETAIL & JUSTIFICATION: The heat exchanger is necessary to maintain the sludge temperature inside the Anaerobic Digester at 35 C. The existing heat exchanger is over 25 years old and was identified in the Watson Full Cost Recovery Report as needing to be replaced in 2019 and should be replaced soon.		
DEPARTMENT: Environmental Services			
1. PROJECT NAME & DESCRIPTION Heat Exchanger Replacement - Plant #1	Public Consultation Process No		
2. COMMITMENTS MADE:	4. EFFECTS ON FUTURE OPERATING BUDGETS:		
	2021	2022	2023
5. EXPENDITURES CONTRACTUAL CAPS BASED ON \$ DIRECT REVENUES GRANTS & SUBSIDIES OTHER		200,000	
6. NET REQUIREMENTS:	0	200,000	0
TO BE FINANCED FROM: DEBENTURES OWNERS RESERVES - Sewer OTHER		-200,000	
7. ANNUAL TAX REQUIREMENT	0	0	0

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5 YEAR CAPITAL BUDGET JUSTIFICATION

ACCOUNT #

DIVISION: Public Works	3. PROJECT DETAIL & JUSTIFICATION: The Ministry of the Environment (MECP) is moving toward year-round disinfection of wastewater effluent. Plant #1 only has a single Contact Chamber Any repairs are currently carried out during the non-disinfection season (Nov 15 to May 15). With year-round disinfection, there will be no off-season for repairs. It will be necessary to either build a new Contact Chamber or modify the existing one to facilitate repairs and maintenance.		
DEPARTMENT: Environmental Services			
1. PROJECT NAME & DESCRIPTION Contact Chamber - Plant #1	Public Consultation Process No		
2. COMMITMENTS MADE:	4. EFFECTS ON FUTURE OPERATING BUDGETS:		
	2021	2022	2023
5. EXPENDITURES CONTRACTUAL CAPS BASED ON \$ DIRECT REVENUES GRANTS & SUBSIDIES OTHER		50,000	1,000,000
6. NET REQUIREMENTS:	0	50,000	1,000,000
TO BE FINANCED FROM: DEBENTURES OWNERS RESERVES - Sewer OTHER		-50,000	-1,000,000
7. ANNUAL TAX REQUIREMENT	0	0	0

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5 YEAR CAPITAL BUDGET JUSTIFICATION

ACCOUNT #

DIVISION: Public Works	3. PROJECT DETAIL & JUSTIFICATION: In order to facilitate further development in Cobourg, the Wastewater Treatment Plants must have sufficient capacity. Adding a second Primary Clarifier would likely double the capacity of Plant #1, allowing thousands of new homes to be constructed.		
DEPARTMENT: Environmental Services			
1. PROJECT NAME & DESCRIPTION Capacity Upgrades - Plant #1	Public Consultation Process No		
2. COMMITMENTS MADE:	4. EFFECTS ON FUTURE OPERATING BUDGETS:		
	2021	2022	2023
5. EXPENDITURES CONTRACTUAL CAPS BASED ON \$ DIRECT REVENUES GRANTS & SUBSIDIES OTHER			1,000,000
6. NET REQUIREMENTS:	0	0	1,000,000
TO BE FINANCED FROM: DEBENTURES OWNERS RESERVES - Sewer OTHER			-1,000,000
7. ANNUAL TAX REQUIREMENT	0	0	0