

**CAPITAL PROJECTS - UTILITY
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Project 206 - Details for Budget Year 2017

Manager

Patrick Pulak 729-2477

Title

College Ave Lift Station Alternate Power Supply

Department

ENGINEERING UTILITIES

Description This project is for purchase of a Generator to be installed at College Avenue Lift Station.

Comments

Budget Version Details

Budget Year 2017 **Version** 2017 Proposed

Status Council Review

Description The College Avenue Lift Station is the last lift station to be outfitted with an alternate power supply . There is a single power supply service to this station with no redundancy in the supply. There is also no source of alternate power. In the event of a power failure there is not sufficient time to respond with a temporary pumping system . To ensure continuity of service during power outages, it is necessary to complete this work in order to minimize the likelihood of sewer backups. It is proposed to install a diesel generator.

Comments

Expenses											
Account	Description	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
200	Back up power	\$350,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	Total Expenses	\$350,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Revenues											
Account	Description	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
155	Wastewater Reserve	\$350,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	Total Revenues	\$350,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Project 587 - Details for Budget Year 2017

Manager

Patrick Pulak 729-2477

Title

New Watermains

Department

ENGINEERING UTILITIES

Description

This project is for the installation of new watermains.

Comments

New watermains are required to strengthen the existing water distribution system in reaction to changing water demand due to growth and/or changes in land uses.

Budget Version Details

Budget Year

2017

Version

2017 Proposed

Status

Council Review

Description

Comments

Expenses											
Account	Description	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
200	18th Street North - PTH #1 to Braecrest	\$0	\$0	\$0	\$0	\$0	\$0	\$2,210,000	\$0	\$0	\$0
200	1st Street - Portola to south of Patricia	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$110,000
200	1st street N. - PTH #1 to Braecrest	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,900,000	\$0	\$0
200	Brandon Airport to PTH No. 1	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$900,000
200	Clare Ave, 18th St to 1st St N	\$0	\$650,000	\$0	\$1,560,000	\$0	\$0	\$0	\$0	\$0	\$0
200	Patricia Ave - Currie Blvd to Brookwood	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,900,000
200	Richmond Avenue - 34th to Wankling	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$900,000	\$0
200	Victoria East to 65th St East	\$0	\$0	\$900,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	Total Expenses	\$0	\$650,000	\$900,000	\$1,560,000	\$0	\$0	\$2,210,000	\$1,900,000	\$900,000	\$2,910,000

Revenues											
Account	Description	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
156	Water Distribution Reserve	\$0	\$650,000	\$900,000	\$1,560,000	\$0	\$0	\$2,210,000	\$1,900,000	\$900,000	\$2,910,000
	Total Revenues	\$0	\$650,000	\$900,000	\$1,560,000	\$0	\$0	\$2,210,000	\$1,900,000	\$900,000	\$2,910,000

Project 1115 - Details for Budget Year 2017

Title Wastewater Sewers (New)
Manager Patrick Pulak 729-2477
Department ENGINEERING UTILITIES

Description This project is for the installation of new sanitary sewers.

Comments As a result of growth in Brandon, new sanitary sewers and lift stations are required to be installed to service development in new growth areas. Areas identified in the 10-year capital plan include the North Hill, Industrial lands and the SW and SE sections in Brandon. There may be cost recovery on some projects as a result of developer contributions.

Budget Version Details

Budget Year 2017 **Version** 2017 Proposed

Status Council Review

Description

Comments

Expenses

Account	Description	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
200	18th St. - South Commercial to Patricia Avenue	\$0	\$605,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
200	1st Street N. - PTH #1 to Kirkaldy	\$0	\$0	\$0	\$0	\$0	\$0	\$3,750,000	\$0	\$0	\$0
200	Braecrest Ave - 18th to Pine Ridge Golf	\$0	\$0	\$0	\$0	\$0	\$540,000	\$0	\$0	\$0	\$0
200	Brandon Airport to PTH #1	\$0	\$0	\$2,550,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0
200	Clare Avenue - 1st St N to 18th St N	\$0	\$450,000	\$0	\$990,000	\$0	\$0	\$0	\$0	\$0	\$0
200	North West of 34th & Patricia Intersection (Lift Station)	\$0	\$0	\$0	\$0	\$5,000,000	\$0	\$0	\$0	\$0	\$0
200	Patricia Avenue - 34th to 1st street	\$0	\$0	\$0	\$0	\$4,000,000	\$0	\$0	\$0	\$0	\$0
200	South West of Patricia & 18th Intersection (Lift Station)	\$0	\$0	\$1,000,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	Total Expenses	\$0	\$1,055,000	\$3,550,000	\$990,000	\$9,000,000	\$540,000	\$3,750,000	\$0	\$0	\$0

Revenues

Account	Description	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
155	Wastewater Reserve - 1557	\$0	\$1,055,000	\$3,550,000	\$990,000	\$0	\$540,000	\$3,750,000	\$0	\$0	\$0
21.2608	Debenture	\$0	\$0	\$0	\$0	\$9,000,000	\$0	\$0	\$0	\$0	\$0
	Total Revenues	\$0	\$1,055,000	\$3,550,000	\$990,000	\$9,000,000	\$540,000	\$3,750,000	\$0	\$0	\$0

Project 1109 - Details for Budget Year 2017

Title Wastewater Treatment Facilities Upgrades
Manager Patrick Pulak 729-2477
Department ENGINEERING UTILITIES

Description This project is for upgrades to the wastewater treatment facility.

Comments Even though the major upgrade to the wastewater treatment facilities was completed in 2014, there will be circumstances going forward where process equipment that predates the upgrade will need to be upgraded itself. This may include pump replacement and membrane unit renewals.

This is part of the ongoing process of finding efficiencies in the treatment facilities .

Budget Version Details

Budget Year 2017 **Version** 2017 Proposed

Status Council Review

Description

Comments

Expenses

Account	Description	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
0019	Detailed Design for Maintenance Building	\$40,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
0410	HVAC and Roof repair at Main Lift	\$150,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
0410	Membrane Replacement - 3 tanks	\$0	\$1,000,000	\$0	\$0	\$0	\$0	\$0	\$2,000,000	\$0	\$0
0410	New Aerator and parts	\$400,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
200	Maintenance Building at WRF	\$2,000,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	Total Expenses	\$2,590,000	\$1,000,000	\$0	\$0	\$0	\$0	\$0	\$2,000,000	\$0	\$0

Revenues

Account	Description	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
155	Wastewater Collection Reserve	\$2,590,000	\$1,000,000	\$0	\$0	\$0	\$0	\$0	\$2,000,000	\$0	\$0
	Total Revenues	\$2,590,000	\$1,000,000	\$0	\$0	\$0	\$0	\$0	\$2,000,000	\$0	\$0

Project 1083 - Details for Budget Year 2017

Title Water Reclamation Facility (WRF) - Anaerobic Basin Cover Replacement
Manager Patrick Pulak 729-2477 **Department** ENGINEERING UTILITIES

Description This project is for the replacement of the anaerobic basin cover at the water reclamation facility.
Comments The anaerobic basis along with the rest of the IWWTP was constructed in 1999. The cover over the basin was estimated to have a lifespan of 10 years. Through an aggressive preventative maintenance program on the cover, that lifespan has been extended significantly. An inspection in 2010 by GTI, the original supplier, recommended that the cover be replaced no later than 2014. After several years of delay in getting project started, the basin cover is proposed to be replaced in 2017

Budget Version Details

Budget Year 2017 **Version** 2017 Proposed
Status Council Review
Description
Comments

Expenses											
Account	Description	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
210	Anaerobic Basin Cover	\$1,496,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	Total Expenses	\$1,496,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Revenues											
Account	Description	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
154	IWWTF Equipment Reserve	\$318,935	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
155	Wastewater Reserve	\$1,177,065	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	Total Revenues	\$1,496,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Project 1110 - Details for Budget Year 2017

Manager Patrick Pulak 729-2477 **Title** Water Treatment Facility Upgrades
Department ENGINEERING UTILITIES

Description The Water Treatment Facility (WTF) is made up of components that vary greatly in age. As such, through a scheduled basis, these assets are required to be replaced or upgraded to keep up with or meet future standards in water treatment quality. These are typically items which cannot be accommodated through the operating account.

Comments Beginning in 2016, the Maintenance section of the utility began compiling a long term schedule of minor upgrades or replacement scenarios for the WTF. As the priorities are established, we will begin to fill in the 10 year capital outlook. Most of this work is dependent on the future status of the funding application to the Federal and Provincial agencies for a \$60M major upgrade to the facility.

Budget Version Details

Budget Year 2017 **Version** 2017 Proposed

Status Council Review

Description

Comments

Expenses

Account	Description	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
0019	Reservoir Roof Assessment	\$50,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
0019	Turtle Crossing Well Rehabilitation - Engineering	\$100,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
230	Reservoir Roof Repair	\$250,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
230	SCADA / PLC Maintenance	\$540,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
230	Turtle Crossing Rehabilitation	\$600,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	Total Expenses	\$1,540,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Revenues

Account	Description	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
156	Water Distribution Reserve	\$1,540,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	Total Revenues	\$1,540,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Project 1106 - Details for Budget Year 2017

Manager

Patrick Pulak 729-2477

Title

Water, Wastewater and Storm Sewer Modelling

Department

ENGINEERING UTILITIES

Description

This project is for the establishment and maintenance of comprehensive models of the wastewater collection, water distribution and storm sewer networks.

Comments

Beginning in 2017, modelling of the water, wastewater, and storm networks will all occur under one consulting firm rather than one for each system as is the current situation. By doing so, it is anticipated that level of service and response times will drastically improve. In turn, this will ensure that development applications are dealt with in a timelier fashion, while safe guarding the integrity of the service networks.
Water, wastewater and storm sewer modeling is necessary in order to ensure there are sufficient service capacities required for growth .

Budget Version Details

Budget Year

2017

Version

2017 Proposed

Status

Council Review

Description

Prior 2017, modeling of the water, wastewater, and storm networks was completed by separate consultants. In 2017, an RFP will be issued looking to combine all the modeling work under one consultant. By streamlining the process, the desire is to reduce the amount of time it takes to approve developments in Brandon.

Comments

Expenses											
Account	Description	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
0019	Annual updates to models.	\$0	\$42,000	\$42,000	\$42,000	\$45,000	\$45,000	\$45,000	\$48,000	\$48,000	\$48,000
0019	Reassessment of Wastewater, Water, and Storm systems models.	\$240,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	Total Expenses	\$240,000	\$42,000	\$42,000	\$42,000	\$45,000	\$45,000	\$45,000	\$48,000	\$48,000	\$48,000
Revenues											
Account	Description	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
132	Storm Sewer Reserve	\$80,000	\$14,000	\$14,000	\$14,000	\$15,000	\$15,000	\$15,000	\$16,000	\$16,000	\$16,000
155	Wastewater Reserve	\$80,000	\$14,000	\$14,000	\$14,000	\$15,000	\$15,000	\$15,000	\$16,000	\$16,000	\$16,000
156	Water Distribution Reserve	\$80,000	\$14,000	\$14,000	\$14,000	\$15,000	\$15,000	\$15,000	\$16,000	\$16,000	\$16,000
	Total Revenues	\$240,000	\$42,000	\$42,000	\$42,000	\$45,000	\$45,000	\$45,000	\$48,000	\$48,000	\$48,000

Project 282 - Details for Budget Year 2017

Title Watermain Replacement Program
Manager Patrick Pulak 729-2477
Department ENGINEERING UTILITIES

Description This project is for watermain replacements.

Comments The funding for the replacement of watermain falls under one of two categories depending if the watermain replacement is associated with reconstruction of the over lying road. If the road is scheduled to be replaced then the watermain replacement is budgeted through the street reconstruction project (Project 12), if the street is not replaced but simply repaired then the funds are budgeted through this project.

Budget Version Details

Budget Year 2017 **Version** 2017 Proposed

Status Council Review

Description

Comments

Expenses

Account	Description	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
200	1st St at Pacific Ave.	\$110,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
200	3rd Street	\$0	\$0	\$0	\$0	\$0	\$0	\$300,000	\$0	\$0	\$0
200	Airport Distribution	\$0	\$0	\$0	\$300,000	\$0	\$0	\$0	\$0	\$0	\$0
200	Airport Reservoir	\$0	\$0	\$0	\$0	\$0	\$1,000,000	\$0	\$0	\$0	\$0
200	Airport Supply Line	\$0	\$0	\$0	\$0	\$1,000,000	\$0	\$0	\$0	\$0	\$0
200	Canada Crescent	\$0	\$600,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
200	Elmdale Blvd	\$530,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
200	Garwood Dr	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$300,000
200	Hazlewood Cres	\$0	\$300,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
200	Inglewood Cres	\$0	\$0	\$300,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0
200	Neepawa Dr - Wakoma	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$300,000	\$0	\$0
200	Princess Ave - 13th to 18th	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$300,000	\$0
200	PTH #1 to Airport	\$0	\$0	\$1,000,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0
200	Russell Street at Pacific Ave	\$210,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
200	Wescott Bay	\$0	\$600,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	Total Expenses	\$850,000	\$1,500,000	\$1,300,000	\$300,000	\$1,000,000	\$1,000,000	\$300,000	\$300,000	\$300,000	\$300,000

Revenues

Account	Description	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
156	Water Distribution Reserve	\$850,000	\$1,500,000	\$1,300,000	\$300,000	\$1,000,000	\$1,000,000	\$300,000	\$300,000	\$300,000	\$300,000
	Total Revenues	\$850,000	\$1,500,000	\$1,300,000	\$300,000	\$1,000,000	\$1,000,000	\$300,000	\$300,000	\$300,000	\$300,000

Project 210 - Details for Budget Year 2017

Manager

Ian Broome

729-2292

Title

Commercial Water Meter Replacement

Department

OPERATIONS UTILITIES

Description

This project is for the replacement of automated water meters.

Comments

The City of Brandon originally implemented a Water Meter Change-Out and Automatic Meter Reading System in 2002. At that time approximately 12,000 accounts were converted to the new system.

Budget Version Details

Budget Year

2017

Version

2017 Proposed

Status

Council Review

Description

Comments

Expenses											
Account	Description	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
0410	Water Meters	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,255,000	\$0	\$0
	Total Expenses	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,255,000	\$0	\$0

Revenues											
Account	Description	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
156	Water Distribution Reserve	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,255,000	\$0	\$0
	Total Revenues	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,255,000	\$0	\$0

Project 1041 - Details for Budget Year 2017

Manager Ian Broome 729-2292 **Title** Utility Equipment replacement
Department OPERATIONS UTILITIES

Description This project is for the purchase and replacement of equipment for the Utilities section.

Comments The Utilities section uses various pieces of equipment to support their day to day operations. Some of these pieces include, sewer cameras, safety trench cages, gas monitors, hydrant pressure recorders, a hydraulic chainsaw, storage shed for materials and a truck mounted valve operator.

Budget Version Details

Budget Year 2017 **Version** 2017 Proposed

Status Council Review

Description This project covers equipment in aiding the Sewer and Water department on equipment needed to continue maintenance within the section.

Comments

Expenses

Account	Description	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
0410	Emergency Response Trailer	\$7,500	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
0410	Equipment Storage Bldg	\$0	\$550,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
0410	Fire Cabinet	\$5,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
0410	Irrigation Pipes	\$50,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
0410	Leak Detection Equipment	\$40,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
0410	Meter reading laptop	\$5,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
0410	Mezzanine - Storage Bldg	\$30,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
0410	Portable lighting	\$25,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
0410	Safety Trench Cage and Trailer	\$0	\$0	\$0	\$0	\$0	\$0	\$50,000	\$0	\$0	\$0
0410	Small Camera	\$0	\$0	\$0	\$25,000	\$0	\$0	\$0	\$0	\$0	\$0
0410	Steel Racking for storage shed	\$10,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
0410	Suction hoses	\$15,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
0410	Utility laptops/tablets	\$15,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	Total Expenses	\$202,500	\$550,000	\$0	\$25,000	\$0	\$0	\$50,000	\$0	\$0	\$0

Revenues

Account	Description	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
155	Wastewater Reserve	\$0	\$0	\$0	\$25,000	\$0	\$0	\$0	\$0	\$0	\$0
156	Water Distribution Reserve	\$202,500	\$550,000	\$0	\$0	\$0	\$0	\$50,000	\$0	\$0	\$0
	Total Revenues	\$202,500	\$550,000	\$0	\$25,000	\$0	\$0	\$50,000	\$0	\$0	\$0