TOWN OF JAMESTOWN
TOWN COUNCIL MEETING
for
TOWN, WATER AND SEWER MATTERS

Monday, May 21, 2018

A regular meeting of the Jamestown Town Council sitting as the Board of Water and Sewer Commissioners was called to order at the Jamestown Town Hall, Council Chambers, 93 Narragansett Avenue at 6:39 PM by Commission President Kristine S. Trocki.

The following members were present:

Michael White, Vice-President
Blake A. Dickinson
Mary E. Meagher
Eugene B. Mihaly

Also present were:

Andrew Nota, Town Administrator
Peter D. Ruggiero Esq., Town Solicitor
Michael Gray PE, Public Works Director
Christina D. Collins, Finance Director
Cheryl Fernstrom, Town Clerk
Denise Jennings, Water and Sewer Clerk

READING AND APPROVAL OF MINUTES

1) 04/16/18 (regular meeting)
Motion was made by Commissioner White, seconded by Commissioner Meagher to accept the 04/16/18 regular meeting minutes. So unanimously voted.

OPEN FORUM

1) Scheduled requests to address:

(No scheduled requests)

2) Non-scheduled request to address:

(No non-scheduled requests)

REPORT OF TOWN OFFICIALS

1) **Pumping Report**:
The Public Works Director reported the following:

- Pumping was down for the month of April, compared to previous years and is at its lowest since 2008.
- JR-1 has been tested and placed into service for the season.
- Rainfall was average for the month of April.
- Transfer pumping has been placed into service and will be used on an as needed basis.

- North Reservoir @ capacity, usable storage-60MG
- South Pond is @ capacity, usable storage-6MG

2) **Town project reports**: ***(See attached Project Update Report dated May 2018)***

Distribution System:

The Public Works Director reported that the Water Department in conjunction with the Highway Department worked to replace the 6" cast iron piping water main along East Ferry project on Conanicus Avenue and the 4" cast iron piping in the Town parking lot.

Wastewater Treatment Plant:

The Public Works Director reported the following:

- A bid was advertised to replace 900 linear feet of sewer main on Grinnell Street. This portion of Grinnell Street could not be slip lined.
- He is reviewing the bids and will make recommendation at the next water and sewer meeting in June.

3) **Water Supply System Management Plan** Five-Year Update, as revised March 2018 by Pare Engineering.

The Public Works Director stated that he was prepared to make a brief presentation on the Water Supply System Management Plan Five-Year update, but due to time constraints he stated that he would like to continue his presentation to the next scheduled water and sewer meeting in June.

AWARDS, PRESENTATIONS AND ACKNOWLEDGMENTS

1) Presentation by David Bebyn of B & E Consulting

a) **General Rate Study 2018** for the Jamestown Water Division

David Bebyn of B & E Consulting, LLC made a short presentation on the General Rate Study 2018 for the Jamestown Water Division, submitted May 17, 2018

Mr. Bebyn stated that his company is a Certified Public Accounting firm that specializes in utility rate design and rate consulting work and that they represent water and sewer utilities, the electric company and the State of RI ferries.

Mr. Bebyn further stated that he was charged with reviewing and updating the rate study and that during this time he reviewed the following:

- Current usage trends
- Past usage activity
- Fire Protection charges
- FY 2019 Water Budget needs for the operating expenses and future capital project needs

Mr. Bebyn reported that upon his review, B & E noted that consumption during the FY 2017 had dropped from the previous rate study projections by approximately 9%. Mr. Bebyn stated that this drop in consumption is very important and is an approximate $50,000 drop in revenue and that following B & E's review, a 2% increase was recommended for the FY 2019 Water budget, which is a minor increase to the excess water rates. B & E also recommended relabeling the Minimum in Advance charge as a Customer Service Charge and continuing the tiered rate structure starting with no charge for usage from 0 to 5000 gallons.

Brief discussion ensued regarding sharing/shifting of funds and future funding for capital projects.

Commission President Trocki thanked Mr. Bebyn for his presentation.

LETTERS AND COMMUNICATIONS

1) Memorandum of Katherine Maxwell re: Initiative to Create of Modify a Line Item to Effect a Transfer of Funds from the General Fund to the Water and Sewer Fund
Commission President Trocki stated that Ms. Maxwell was not able to attend this evenings meeting due to a family matter. Commission consensus: To continue this matter to the next scheduled water and sewer meeting in June.

NEW BUSINESS

1) **Proposed FY 2019 Water and Sewer Commission Budgets** (July 1, 2018 to June 30, 2019); review and discussion and /or potential action and/or vote
   a) Proposed FY 2019 Water Budget
   b) Proposed FY 2019 Sewer Budget

The Public Works Director reported that the proposed Water and Sewer Budgets for FY2018/2019 are pretty straight forward and he outlined the details as follows:

- There is an increase in the proposed Water Budget due to additional expenses in the amount of $14,973., which includes personnel, operating expenses and equipment maintenance. This increase is slightly offset by additional revenue with the Minimum in advance charge from the additional hookups this year.
- The proposed Water Budget will require an increase of 2% on the metered excess water charges for the upcoming fiscal year.
- There is an increase in the proposed Sewer Budget due to additional expenses in the amount of $14,275., which includes personnel and operating expenses.
- The proposed Sewer Budget will require an increase of 5% on the sewer usage rate ($13.19 to $13.85) for the upcoming fiscal year.

The Public Works Director stated the following:
He is currently working on an update to the Town's Clean Water Infrastructure Replacement Plan and an asset plan for the Water Department and that the infrastructure replacement plan will include a 5-year and a 20-year plan for proposed improvements. ***(For details, see attached Memorandum from Michael Gray, Public Works Director dated 05/21/18)***

The Public Works Director further stated that the proposed Water Budget includes $100,000 for capital improvements and the projects identified for the next fiscal year are as follows:

- Additional improvements at the South Pond pretreatment facility with roof replacement, trim and doors
- Inspection and cleaning of the water towers
- Replacement of the Finial Vent on water tank #1
- Design/Permitting for tank, pump and controls for recycling and reclaiming discharge water from plant operations
- Purchase of a sludge transfer pump
- Permitting for eradication of phragmites at North and South reservoir.

The Public Director also stated that the proposed Sewer Budget includes $50,000 for capital improvements and the projects identified for the next fiscal year are as follows:

- Rebuilding of the second pump at pump station #1
- Replace aerator paddle that has been in place since the plant was constructed

The Public Works Director stated that these are under-funded, as many capital projects need attention.

Administrator Nota briefly outlined the current water and sewer debt and their retirement dates, specifically 2028 for water and 2023 for sewer. Administrator Nota stated that he is currently working with the Public Works Director and the Finance Director on investigating funding options for the upcoming capital improvement projects, for both the Water and Sewer Departments.

Commissioner President Trocki asked the Public Works Director, if the Commission could review the proposed budgets and continue discussion to the next water and sewer meeting in June. The Public Works Director and the Finance Director stated that this was fine and discussion could be continued to the next meeting in June. Commission consensus: To continue discussion on the proposed FY 2019 Water and Sewer Commission Budgets (July 1, 2018 to June 30, 2019) to the next water and sewer meeting on 06/18/18.

UNFINISHED BUSINESS

(None)

TOWN BUSINESS

(None)

ADJOURNMENT

There being no further business before the Commission, motion was made by Commissioner White seconded by Commissioner Meagher to adjourn the Water and Sewer meeting at 7:29 PM. So unanimously voted.

Attest:

Denise Jennings
Water and Sewer Clerk

xc: Commission Members (5)
Town Administrator
Town Solicitor
Public Works Director
Town Clerk

Project Update
May 2018

WELLS
JR-1, JR-3

- JR-1 has been tested and placed into service for the season. The well provides 50 gpm of flow directly into the transmission main below the dam to supplement our water supply from the reservoir. The 50 gpm withdrawal rate is the maximum allowed by the RIDEM Freshwater wetlands permit.

TREATMENT PLANT

- The water department Staff have been working on general equipment maintenance at the plant.
- A field trip of the treatment facility and reservoir has been scheduled for June 1st with the 5th grade class at Melrose School.

TRANSFER PUMPING/RESERVOIR

- Transfer pumping has been placed into service and will be used as needed to pump water to North Reservoir.
- Staff have been completing maintenance of the grounds at both reservoir properties.

DISTRIBUTION SYSTEM

South Pond @ 6 MG
Usable Storage, 6 Million Gallons

North Pond @ 60 MG
Usable Storage 60 Million Gallons

- Staff completed hydrant flushing for our annual maintenance program
- The water department worked with the highway department to replace the 6" cast iron water main along the East Ferry project on Conanicus Avenue and the 4" cast iron piping in the Town parking lot. The main was completed before the May 4th deadline on the East Ferry Project. The watermain has been tested and approved for use. Two services from the building at East Ferry will be connected to the new main next week before Memorial Day weekend so that we can remove the temporary piping and steel plates from the parking lot. In the fall the water department will replace the main between East Ferry and Lincoln Street to complete the project.

WASTEWATER TREATMENT PLANT

- The monthly average daily flow at the treatment plant for April was 0.45 million gallons per day. The peak daily flow was 0.83 million gallons. The permitted monthly average flow is 0.73 million gallons per day.
- A Bid was advertised to replace 900 linear feet of sewer main on Grinnell Street that could not be slip lined with our last project. I am currently reviewing the bids and will have a recommendation at our next meeting.

Town of
Jamestown, Rhode Island

PO Box 377
Jamestown, RI 02835- 1509
Phone: (401) 423-7220
Fax: (401) 423-7229

Date: May 21, 2018

To: Board of Water and Sewer Commissioners

From: Michael Gray
Public Works Director

RE: FY 18/19 Water and Sewer Budget

The water and sewer budgets for the FY 18/19 have been prepared for your review and approval. The proposed budgets have been prepared based upon the costs for operating both facilities and a maintenance of effort for capital that include $100,000 for water and $50,000 for sewer.

WATER CAPITAL

I am currently working on an update to our Clean Water Infrastructure Replacement Plan and an asset management plan for the Water Department. The infrastructure replacement plan will include a 5-year and 20-year plan for proposed improvements.

The water department is currently in the process of completing upgrades to the South Pond Pre-Treatment facility, replacing the 6" cast iron main in Conanicus Avenue, and preparing to begin the improvements to the South Pond Dam.

In this next fiscal year, we have the following projects identified for the water department capital program.

- Continue with improvements at the South Pond Pretreatment facility with roof replacement, trim, and doors.
- Inspection and cleaning of the water towers
- Replacement of the Finial Vent on Water Tank #1
- Design and permitting for tank, pump, and controls for recycling and reclaiming discharge water from the treatment plant operations.
- Purchase of a sludge transfer pump
- Permitting for eradicating phragmites at South and North Reservoir

SEWER CAPITAL

I have attached a copy of the Asset Management summary for the wastewater department. The Asset Management summary includes a schedule for the major components and equipment for all 4 pump stations and the Wastewater Treatment Facility. The summary tables provide budget level estimates and a schedule for repairing or replacing the major pieces of equipment based upon their existing condition and anticipated life cycle.

The capital budget for fiscal year 2018/2019 will be used to rebuild the second Pump at Pump Station #1 and to replace an aerator paddle that has been in service since the plant was constructed.

The Asset Management Plan has identified the total capital investment needed for the next 20 years at more than 3 million dollars to maintain the operation of the wastewater facilities.

Locaction	Asset	Asset Type	Condition	Risk	Estimated Effective Life	Recommended Action	Replacement Cost	Replacement Date
Plant	Aerator #2	Treatment Equipment	Very Poor	High Risk – Immediate Attention	30	Replace	$80,000.00	2/1/2017
	Paddle, Aerator 2	Treatment Equipment	Very Poor	High Risk – Immediate Attention	20	Replace	$22,691.00	2/1/2017
	Probe, Level Sensing	Sensors	Excellent	High Risk – Immediate Attention	10	Replace	$3,000.00	2/1/2017
	Pump, froth, Golf Course	Pumping Equipment	Excellent	Medium Risk – Aggressive Monitoring	8	Replace	$18,000.00	2/1/2017
	Sampler, S-5, Isco 3710	Sampler	Good	Medium Risk – Aggressive Monitoring	10	Replace	$2,800.00	2/1/2017
	Tank, Hypo 1	Disinfection Equipment	Good	Medium Risk – Aggressive Monitoring	10	Replace	$10,344.00	2/1/2017
	Tank, Hypo 2	Disinfection Equipment	Good	Medium Risk – Aggressive Monitoring	10	Replace	$10,344.00	2/1/2017
	Truck	Transportation Equipment	Poor	High Risk – Immediate Attention	10	Replace	$50,000.00	2/1/2017

Locaction	Asset	Asset Type	Condition	Risk	Estimated Effective Life	Recommended Action	Replacement Cost	Replacement Date
Pump Station 1								
	Dehumidifier, PS #1	Dehumidfiers	Good	Medium Risk – Aggressive Monitoring	12	Replace	$2,280.00	2/1/2017
	Fan, Exhaust, EF-22-PS-1	Ventilation System	Excellent	Medium Risk – Aggressive Monitoring	10	Replace	$6,000.00	2/1/2017
	Fan, Exhaust, EF-23-PS-1	Ventilation System	Excellent	Medium Risk – Aggressive Monitoring	10	Replace	$6,000.00	2/1/2017
	Fan, Supply, SF-20-PS-1	Ventilation System	Excellent	Medium Risk – Aggressive Monitoring	10	Replace	$6,000.00	2/1/2017

Locaction	Asset	Asset Type	Condition	Risk	Estimated Effective Life	Recommended Action	Replacement Cost	Replacement Date
Pump Station 3								
	Dehumidifier, PS #3	Dehumidfiers	Good	Medium Risk – Aggressive Monitoring	12	Replace	$2,280.00	2/1/2017
							$219,739.00	

List of Capital Improvement Projects (Record 1 - 126 of 126)

Locaction	Asset	Asset Type	Condition	Risk	Estimated Effective Life	Recommended Action	Replacement Cost	Replacement Date
Plant	Aerator #4	Treatment Equipment	Very Poor	High Risk – Immediate Attention	30	Replace	$80,000.00	2/1/2016
	Analyzer, Chlorine 1200	Lab / Monitoring Equipment	Good	Low Risk – Routine Maintenance	10	Replace	$423.00	2/1/2016
	Analyzer, Chlorine Smart 2	Lab / Monitoring Equipment	Good	Low Risk – Routine Maintenance	10	Replace	$1,050.00	2/1/2016
	Blower, Septage	Blowers	Excellent	Low Risk – Routine Maintenance	20	Replace	$5,300.00	2/1/2016
	Pump, froth, hydrants	Pumping Equipment	Fair (Average)	High Risk – Immediate Attention	20	Replace	$25,000.00	2/1/2016
	Pump, Trash	Pumping Equipment	Good	High Risk – Immediate Attention	10	Replace	$5,000.00	2/1/2016
	Aerator #2	Treatment Equipment	Very Poor	High Risk – Immediate Attention	30	Replace	$80,000.00	2/1/2017
	Paddle, Aerator 2	Treatment Equipment	Very Poor	High Risk – Immediate Attention	20	Replace	$22,691.00	2/1/2017
	Probe, Level Sensing	Sensors	Excellent	High Risk – Immediate Attention	10	Replace	$3,000.00	2/1/2017
	Pump, froth, Golf Course	Pumping Equipment	Excellent	Medium Risk – Aggressive Monitoring	8	Replace	$18,000.00	2/1/2017
	Sampler, S-5, Isco 3710	Sampler	Good	Medium Risk – Aggressive Monitoring	10	Replace	$2,800.00	2/1/2017
	Tank, Hypo 1	Disinfection Equipment	Good	Medium Risk – Aggressive Monitoring	10	Replace	$10,344.00	2/1/2017
	Tank, Hypo 2	Disinfection Equipment	Good	Medium Risk – Aggressive Monitoring	10	Replace	$10,344.00	2/1/2017
	Truck	Transportation Equipment	Poor	High Risk – Immediate Attention	10	Replace	$50,000.00	2/1/2017
	Furnace	Heating System	Fair (Average)	High Risk – Immediate Attention	20	Repair	$15,000.00	2/1/2020
	Heater, Water	Heating System	Good	Medium Risk – Aggressive Monitoring	20	Replace	$1,000.00	2/1/2020
	Meter, Flow, Plant, Hydra SX40	Meters	Excellent	High Risk – Immediate Attention	15	Repair	$6,000.00	2/1/2020
	GRAPHIC DISPLAY TERMINAL, Altivar® 61 Unit C	Motor Controls / Drives	Excellent	Low Risk – Routine Maintenance	10	Replace	$250.00	2/1/2022
	GRAPHIC DISPLAY TERMINAL, Altivar® 61, Unit A	Motor Controls / Drives	Excellent	Low Risk – Routine Maintenance	10	Replace	$250.00	2/1/2022
	GRAPHIC DISPLAY TERMINAL, Altivar® 61, UNIT B	Motor Controls / Drives	Excellent	Low Risk – Routine Maintenance	10	Replace	$250.00	2/1/2022
	Motor, Blower 1	Treatment Equipment	Excellent	Low Risk – Routine Maintenance	12	Replace	$1,000.00	2/1/2022
	Analyzer, Ph	Lab / Monitoring Equipment	Excellent	Medium Risk – Aggressive Monitoring	10	Repair	$782.00	2/1/2024
	Clarifier #1	Treatment Equipment	Good	Medium Risk – Aggressive Monitoring	20	Repair	$200,000.00	2/1/2025
	Clarifier #2	Treatment Equipment	Good	Medium Risk – Aggressive Monitoring	20	Repair	$200,000.00	2/1/2025
	Paddle, Aerator 1	Treatment Equipment	Good	High Risk – Immediate Attention	20	Repair	$22,691.00	2/1/2025
	Paddle, Aerator 3	Treatment Equipment	Good	High Risk – Immediate Attention	20	Repair	$22,691.00	2/1/2025
	Paddle, Aerator 4	Treatment Equipment	Good	High Risk – Immediate Attention	20	Repair	$22,691.00	2/1/2025
	Controller, Dissolved Oxygen	Lab / Monitoring Equipment	Excellent	Low Risk – Routine Maintenance	10	Repair	$1,700.00	2/1/2026
	Filter, Aqua-Aerobic	Treatment Equipment	Excellent	Medium Risk – Aggressive Monitoring	20	Repair	$212,000.00	2/1/2026
	MCC-1 Plant	Transformers / Switchgears / Wiring	Excellent	High Risk – Immediate Attention	20	Repair	$90,000.00	2/1/2026
	Microscope	Lab / Monitoring Equipment	Excellent	Low Risk – Routine Maintenance	10	Repair	$1,565.00	2/1/2026
	Monitor Chlorine, ATI	Disinfection Equipment	Excellent	Medium Risk – Aggressive Monitoring	10	Repair	$5,000.00	2/1/2026
	PLC Control Cabinet	Motor Controls / Drives	Excellent	High Risk – Immediate Attention	20	Repair	$12,000.00	2/1/2026
	RAS Pump 43	Pumping Equipment	Excellent	Medium Risk – Aggressive Monitoring	20	Rehab	$15,240.00	2/1/2026
	RAS Pump 44	Pumping Equipment	Excellent	Medium Risk – Aggressive Monitoring	20	Rehab	$15,240.00	2/1/2026
	RAS Pump 45	Pumping Equipment	Excellent	Medium Risk – Aggressive Monitoring	20	Rehab	$15,240.00	2/1/2026
	Sampler, S-3, Sigma 900 Influent	Sampler	Good	Medium Risk – Aggressive Monitoring	20	Repair	$5,800.00	2/1/2026
	Sludge/Septage Pump 1	Pumping Equipment	Excellent	Low Risk – Routine Maintenance	20	Repair	$23,749.00	2/1/2026
	Sludge/Septage Pump 2	Pumping Equipment	Excellent	Low Risk – Routine Maintenance	20	Repair	$23,749.00	2/1/2026
	VFD-RAS-1	Motor Controls / Drives	Excellent	Medium Risk – Aggressive Monitoring	20	Replace	$10,000.00	2/1/2026
	VFD-RAS-2	Motor Controls / Drives	Excellent	Medium Risk – Aggressive Monitoring	20	Replace	$10,000.00	2/1/2026
	VFD-RAS-3	Motor Controls / Drives	Excellent	Medium Risk – Aggressive Monitoring	20	Replace	$10,000.00	2/1/2026
	Pump, CL2-1	Pumping Equipment	Good	Low Risk – Routine Maintenance	20	Repair	$1,500.00	2/1/2027
	Pump, CL2-2	Pumping Equipment	Good	Low Risk – Routine Maintenance	20	Repair	$1,500.00	2/1/2027
	Pump, CL2-3	Pumping Equipment	Good	Low Risk – Routine Maintenance	20	Repair	$1,500.00	2/1/2027
	Pump, CL2-4	Pumping Equipment	Good	Low Risk – Routine Maintenance	20	Repair	$1,500.00	2/1/2027
	Pump, CL2-5	Pumping Equipment	Good	Low Risk – Routine Maintenance	20	Repair	$1,500.00	2/1/2027
	Sampler, Teledyne ISCO, 5800 Refrigerated	Sampler	Excellent	Medium Risk – Aggressive Monitoring	10	Repair	$6,700.00	2/1/2027
	Allen-Bradley Panelview Plus 2711PC 6" Graphic	Motor Controls / Drives	Excellent	Medium Risk – Aggressive Monitoring	10	Replace	$2,500.00	2/1/2028
	Gas Meter (Scott) 6	Meters	Excellent	Low Risk – Routine Maintenance	12	Rehab	$600.00	2/1/2028
	Gas Meter (Scott) 8	Meters	Excellent	Low Risk – Routine Maintenance	12	Rehab	$600.00	2/1/2028
	Sawzall, Milwaukee	Tools and Shop Equipment	Excellent	Low Risk – Routine Maintenance	12	Repair	$250.00	2/1/2028
	Probe, Dissolved Oxygen	Treatment Equipment	Excellent	Low Risk – Routine Maintenance	12	Repair	$1,210.00	2/1/2029
	Probe, Dissolved Oxygen	Treatment Equipment	Excellent	Low Risk – Routine Maintenance	12	Repair	$1,210.00	2/1/2029
	Aerator #1	Treatment Equipment	Excellent	Medium Risk – Aggressive Monitoring	20	Repair	$44,958.00	2/1/2030

Locaction	Asset	Asset Type	Condition	Risk	Estimated Effective Life	Recommended Action	Replacement Cost	Replacement Date
Pump Station 1								
	Dehumidifier, PS #1	Dehumidfiers	Good	Medium Risk – Aggressive Monitoring	12	Replace	$2,280.00	2/1/2017
	Fan, Exhaust, EF-22-PS-1	Ventilation System	Excellent	Medium Risk – Aggressive Monitoring	10	Replace	$6,000.00	2/1/2017
	Fan, Exhaust, EF-23-PS-1	Ventilation System	Excellent	Medium Risk – Aggressive Monitoring	10	Replace	$6,000.00	2/1/2017
	Fan, Supply, SF-20-PS-1	Ventilation System	Excellent	Medium Risk – Aggressive Monitoring	10	Replace	$6,000.00	2/1/2017
	Sump Pump	Pumping Equipment	Good	Medium Risk – Aggressive Monitoring	10	Replace	$211.00	2/1/2017
	Fan, Supply, EF-21-PS-1	Ventilation System	Excellent	Medium Risk – Aggressive Monitoring	15	Replace	$6,000.00	2/1/2020
	VFD, Powerflex 753 AC drive 2	Motor Controls / Drives	Excellent	Medium Risk – Aggressive Monitoring	10	Replace	$11,900.00	2/1/2024
	VFD, Powerflex 753 AC drive-1	Motor Controls / Drives	Excellent	Medium Risk – Aggressive Monitoring	10	Replace	$11,900.00	2/1/2024
	Probe, Level Sensing	Sensors	Good	High Risk – Immediate Attention	20	Replace	$3,000.00	2/1/2025
	Probe, Level Sensing	Sensors	Good	High Risk – Immediate Attention	20	Replace	$3,000.00	2/1/2025
	Generator 2	Generators	Excellent	Medium Risk – Aggressive Monitoring	20	Repair	$80,000.00	2/1/2026
	Multitrode, 12	Motor Controls / Drives	Excellent	Medium Risk – Aggressive Monitoring	20	Replace	$4,000.00	2/1/2026
	Pump, Flygt, PS-1 A	Pumping Equipment	Excellent	Medium Risk – Aggressive Monitoring	20	Repair	$33,000.00	2/1/2026
	Pump, Flygt, PS-1 B	Pumping Equipment	Excellent	Medium Risk – Aggressive Monitoring	20	Repair	$33,000.00	2/1/2026
	Pump, Flygt, PS-1 C	Pumping Equipment	Excellent	Medium Risk – Aggressive Monitoring	20	Repair	$34,000.00	2/1/2026
	Pump Station 1	Buildings	Fair (Average)	Low Risk – Routine Maintenance	25	Repair	$65,000.00	2/1/2030
	CR 1 Valve	Valves	Excellent	Medium Risk – Aggressive Monitoring	30	Replace	$250.00	2/1/2038
	MCC1-PS#1	Motor Controls / Drives	Excellent	Medium Risk – Aggressive Monitoring	30	Repair	$60,000.00	2/1/2038
							$365,541.00	

Locaction	Asset	Asset Type	Condition	Risk	Estimated Effective Life	Recommended Action	Replacement Cost	Replacement Date
Pump Station 2								
	Pump, sump	Pumping Equipment	Good	Medium Risk – Aggressive Monitoring	10	Replace	$211.00	2/1/2017
	Dehumidifier, PS #2	Dehumidifiers	Good	Medium Risk – Aggressive Monitoring	15	Replace	$2,280.00	2/1/2020
	Fan, Supply, SF-24-PS-2	Ventilation System	Excellent	Medium Risk – Aggressive Monitoring	20	Replace	$6,000.00	2/1/2025
	Generator 3	Generators	Good	Medium Risk – Aggressive Monitoring	20	Repair	$70,000.00	2/1/2025
	Probe, Level Sensing	Sensors	Good	High Risk – Immediate Attention	20	Replace	$3,000.00	2/1/2025
	Probe, Level Sensing	Sensors	Good	High Risk – Immediate Attention	20	Replace	$3,000.00	2/1/2025
	Fan, Exhaust, EF-23-PS-2	Ventilation System	Excellent	Medium Risk – Aggressive Monitoring	20	Replace	$6,000.00	2/1/2026
	Fan, Exhaust, EF-25-PS-2	Ventilation System	Excellent	Medium Risk – Aggressive Monitoring	20	Replace	$6,000.00	2/1/2026
	MCC1-PS2	Motor Controls / Drives	Excellent	High Risk – Immediate Attention	20	Repair	$45,000.00	2/1/2026
	Multitrode, 10	Motor Controls / Drives	Excellent	Medium Risk – Aggressive Monitoring	20	Replace	$4,000.00	2/1/2026
	Pump, Flygt, PS-2 A	Pumping Equipment	Excellent	Medium Risk – Aggressive Monitoring	20	Repair	$30,000.00	2/1/2026
	Pump, Flygt, PS-2 B	Pumping Equipment	Excellent	Medium Risk – Aggressive Monitoring	20	Repair	$30,000.00	2/1/2026
	Pump, Flygt, PS-2 C	Pumping Equipment	Excellent	Medium Risk – Aggressive Monitoring	20	Repair	$30,000.00	2/1/2026
	Pump Station 2	Buildings	Good	Low Risk – Routine Maintenance	37	Repair	$40,000.00	2/1/2043
							$275,491.00	

Locaction	Asset	Asset Type	Condition	Risk	Estimated Effective Life	Recommended Action	Replacement Cost	Replacement Date
Pump Station 3								
	MCC1-PS3	Motor Controls / Drives	Excellent	High Risk – Immediate Attention	20	Repair	$35,000.00	2/1/2026
	Dehumidifier, PS #3	Dehumidfiers	Good	Medium Risk – Aggressive Monitoring	12	Replace	$2,280.00	2/1/2017
	Fan, EF-1-PS-3	Ventilation System	Excellent	Medium Risk – Aggressive Monitoring	20	Replace	$6,000.00	2/1/2025
	Generator 4	Generators	Excellent	Medium Risk – Aggressive Monitoring	20	Repair	$65,000.00	2/1/2026
	Multitrode, 11	Motor Controls / Drives	Excellent	Medium Risk – Aggressive Monitoring	20	Replace	$4,000.00	2/1/2026
	Probe, Level Sensing	Sensors	Good	High Risk – Immediate Attention	20	Replace	$3,000.00	2/1/2025
	Pump Station 3	Buildings	Good	Low Risk – Routine Maintenance	37	Repair	$40,000.00	2/1/2043
	Pump, Flygt, PS-3 A	Pumping Equipment	Excellent	Medium Risk – Aggressive Monitoring	20	Repair	$12,000.00	2/1/2027
	Pump, Flygt, PS-3 B	Pumping Equipment	Excellent	Medium Risk – Aggressive Monitoring	20	Repair	$12,000.00	2/1/2027
	Pump, Flygt, PS-3 C	Pumping Equipment	Excellent	Medium Risk – Aggressive Monitoring	20	Repair	$12,000.00	2/1/2027
	Pump, sump	Pumping Equipment	Good	Medium Risk – Aggressive Monitoring	20	Replace	$211.00	2/1/2025
							$191,491.00	

Locaction	Asset	Asset Type	Condition	Risk	Estimated Effective Life	Recommended Action	Replacement Cost	Replacement Date
Pump Station 4								
	Generator, Trailer	Generators	Excellent	High Risk – Immediate Attention	20	Repair	$85,000.00	2/1/2026
	MCC1-PS4	Motor Controls / Drives	Excellent	High Risk – Immediate Attention	20	Repair	$25,000.00	2/1/2026
	Probe, Level Sensing	Sensors	Good	High Risk – Immediate Attention	20	Replace	$3,000.00	2/1/2025
	Pump Station 4	Buildings	Good	Medium Risk – Aggressive Monitoring	37	Repair	$40,000.00	2/1/2044
	Pump, Flygt, PS-4 A	Pumping Equipment	Excellent	Medium Risk – Aggressive Monitoring	20	Replace	$3,500.00	2/1/2026
	Pump, Flygt, PS-4 B	Pumping Equipment	Excellent	Medium Risk – Aggressive Monitoring	20	Replace	$3,350.00	2/1/2026
	Pump, Flygt, PS-4 D	Pumping Equipment	Excellent	Medium Risk – Aggressive Monitoring	20	Replace	$3,500.00	2/1/2026
							$163,350.00	

Replacement/Repair Cost for Facilities up to 2047

Plant	PS 1	PS 2	PS 3	PS 4	TOTAL
$2,380,946.00	$365,541.00	$275,491.00	$191,491.00	$163,350.00	$3,376,819.00

Cost of Replacement of Equipment by year: ******NOTE: There are numerous less important pieces***

Year	Cost
2017	$174,817.00
2018	$0.00
2019	$0.00
2020	$30,280.00
2021	$0.00
2022	$1,750.00
2023	$0.00
2024	$27,932.00
2025	$595,284.00
2026	$1,020,893.00
2027	$50,200.00
2028	$3,950.00
2029	$2,420.00
2030	$245,552.00
2031	$13,600.00
2032	$0.00
2033	$0.00
2034	$800.00
2035	$0.00
2036	$6,900.00
2037	$0.00
2038	$870,250.00
2039	$0.00
2040	$0.00