

Public Information Session

Overview

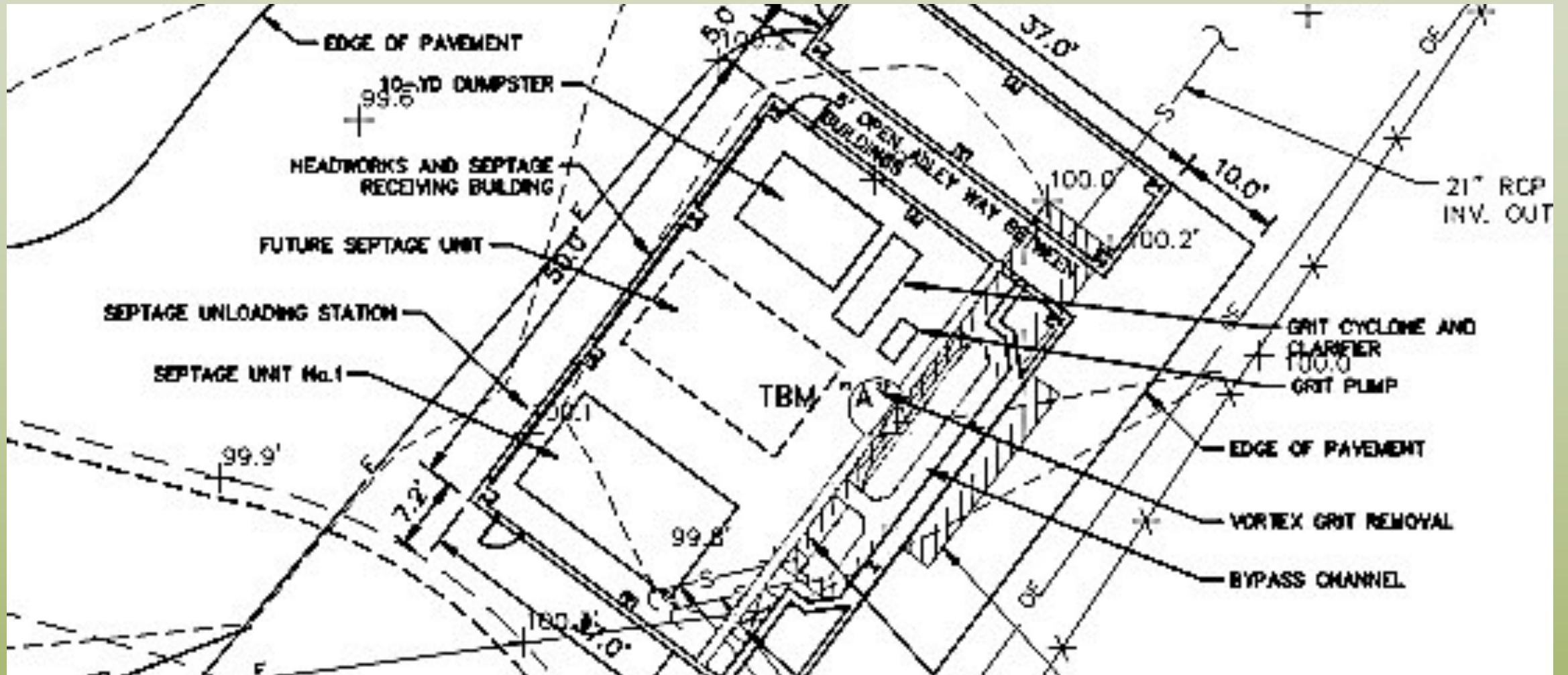
- ❖ What Was Done in 2018?
- ❖ What is the Status of the Septage Receiving Station?
- ❖ Why Are We Asking for Additional Funding for the Septage Receiving Station?
- ❖ What Will the Thompson St. Reconstruction Cost?
- ❖ What is the Status of the Asset Management Plan?
- ❖ Where Are We Financially?
- ❖ How Are Rates Set?
- ❖ What is the Future of the Water and Sewer?

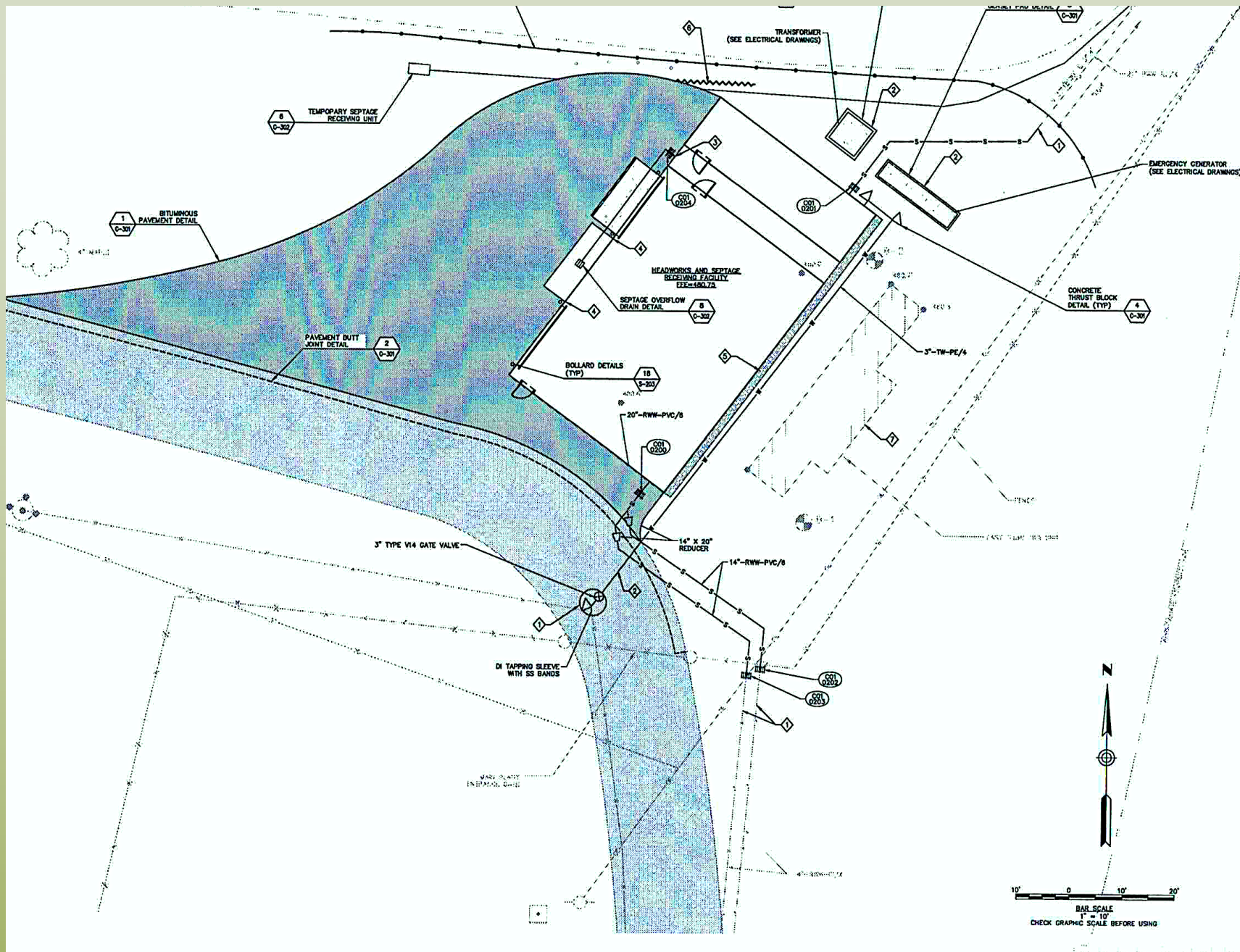
What Was Done in 2018?

- ❖ Septage Receiving Station
- ❖ Asset Management Plan
- ❖ Supervisory Control and Data Acquisition (SCADA) System Upgrade
- ❖ Sewer Pump Station Refurbishment
- ❖ Computerized Maintenance Management System (CMMS) Completion
- ❖ Leak Detection Survey
- ❖ Safety Trailer Completion
- ❖ Office and Conference Room

What is the Status of the
Septage Receiving Station?

Receiving Station Plan



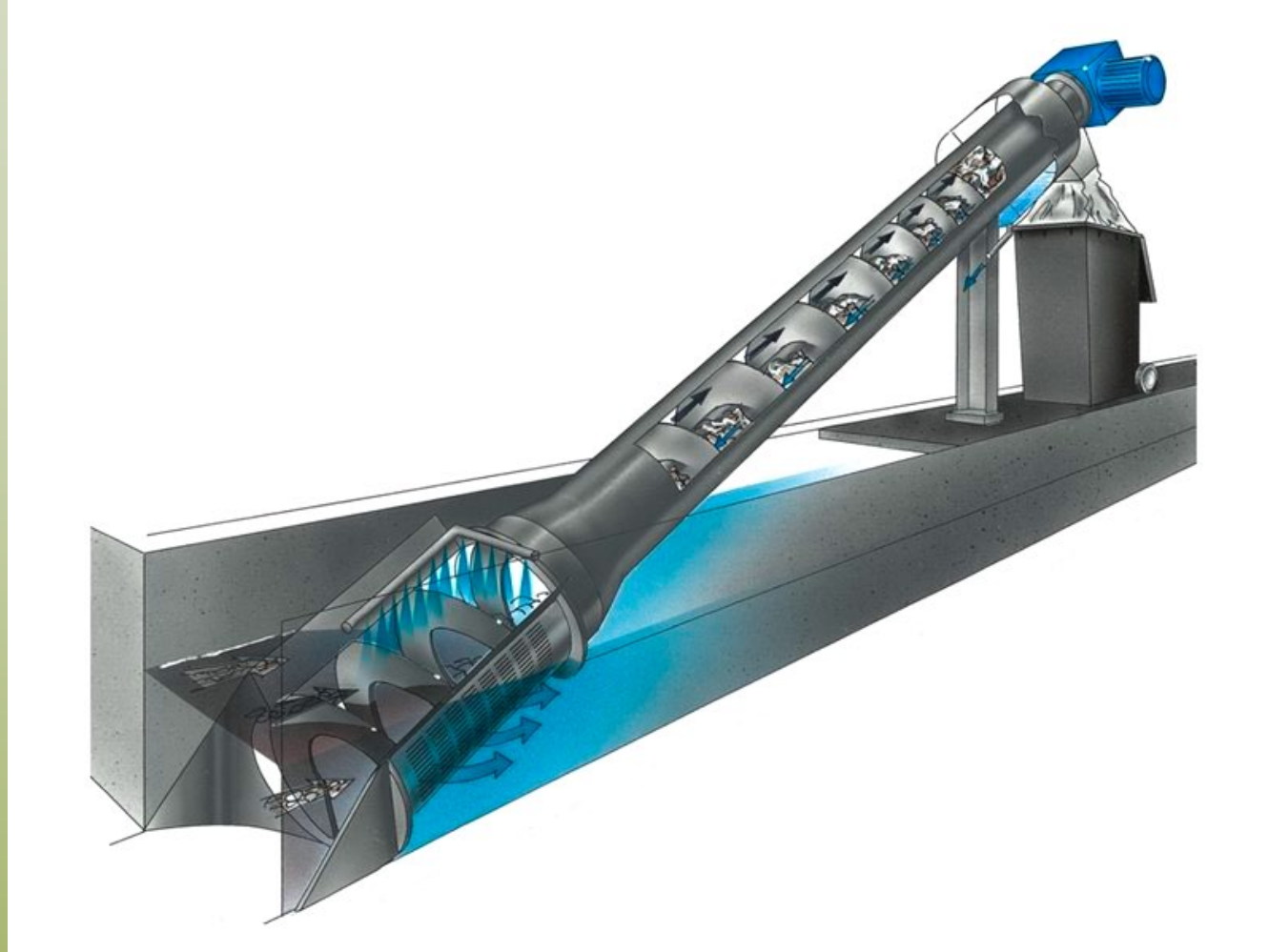


Site Plan

Steel Building Rendering



Town Sewage Screening

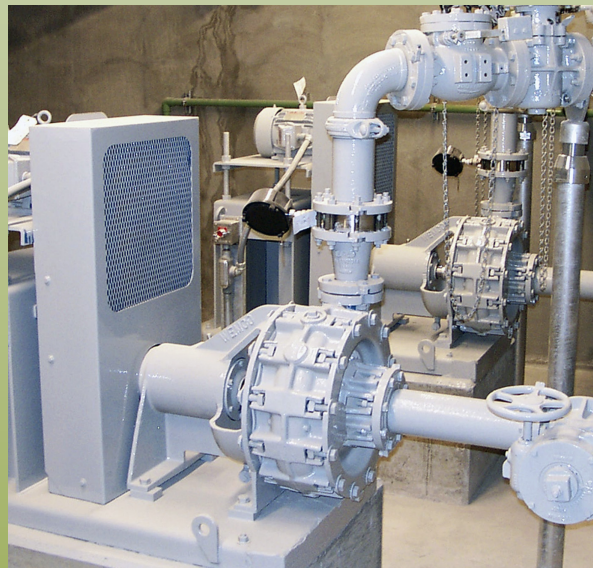
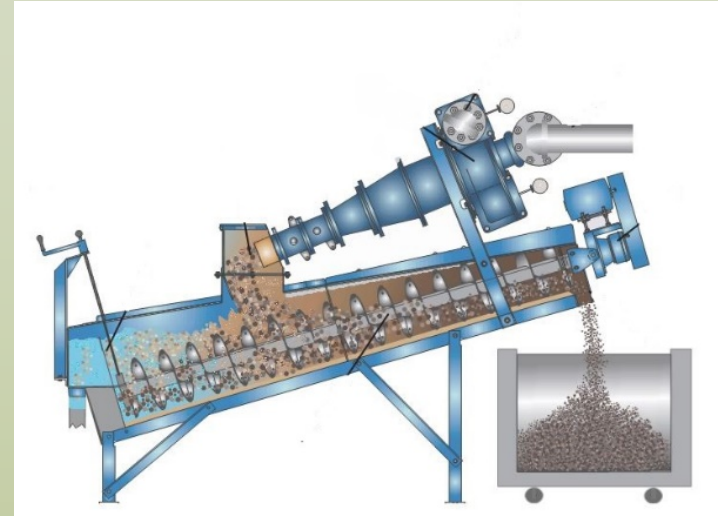


Septage Screening Equipment



“The Beast”

Grit Removal Equipment



PortaLogic Dump Station



PortaLogic Dump Station



What Was Done in 2018?

- ❖ Steel Building Purchased and Delivered
- ❖ Mechanical Screening Device for Septage Under Contract
- ❖ Mechanical Screening Device for Town Sewage Under Contract
- ❖ Grit Chamber Under Contract
- ❖ Construction RFP Issued

Project Schedule

- DES Review Complete February 22, 2019
- Advertise February 25, 2019
- Pre-bid Meeting March 6, 2019
- Bid Opening March 27, 2019
- DES Review and Approval April 2, 2019
- **Contract Award April 9, 2019**
- Septage Equipment Delivery April 2019
- Screening and Grit Equipment Delivery. June 2019
- Substantial Completion November 2, 2019
- **Final Completion November 30, 2019**

Why Are We Asking
for Additional Funding?

Additional Project Costs

- ❖ SCADA Upgrade \$146,000
- ❖ Engineering Services - \$50,000
- ❖ Steel Building \$25,000
- ❖ Contract/Construction Delays
5%
- ❖ Removal of the Old Grit Chamber
on Collins St. - No Estimate

Cash Flow Analysis

- ❖ Determine the need for additional funding by analyzing the cash required make monthly payments during construction of the Receiving Station and Development of the Asset Management Plans for Water and Sewer.
- ❖ Net Income from Septage and Sewer + Cash Reserves + Reimbursements (NBRC Grant, DW and CW Grants, loan disbursements)
- ❖ - Water and Sewer Operating Expenses + Construction Expenses (Construction, Engineering, Equipment, Steel Building)

Need for Additional SRF Funds

- ❖ Short falls could occur, especially in May, June, or November if one or more of the following occur:
 - ❖ Sewer and Septage income and expenses are lower than estimated
 - ❖ Septage income slower than expected due to construction
 - ❖ Septage income needed for other expenses or emergencies
 - ❖ Reimbursements from NBRC and CW and DW do not meet the schedule (\$255,000 total)

Cash Flow Analysis

	Septage Projected Income	Sewer Projected Income	Total Sewer Income	Sewer Expenses	Sewer Net Income	Total Contract Expenses	Reimburse ments	Net Contract Expenses	Contract. Expenses - Sewer Income	Cash Required from Reserves
January	\$12,704	\$16,171	\$28,875	\$22,584	\$6,291	\$69,312	\$25,437	\$43,875	\$37,584	\$1,062,416
February	\$8,957	\$20,003	\$28,960	\$19,129	\$9,831	\$55,297	\$20,866	\$34,431	\$24,600	\$1,037,816
March	\$9,790	\$20,695	\$30,485	\$17,513	\$12,972	\$194,300	\$168,825	\$25,475	\$12,503	\$1,025,313
April	\$27,749	\$19,183	\$46,932	\$13,351	\$33,581	\$194,400	\$159,882	\$34,518	\$937	\$1,024,376
May	\$59,309	\$41,141	\$100,450	\$15,165	\$85,285	\$423,287	\$199,856	\$223,431	\$138,146	\$886,230
June	\$59,198	\$21,338	\$80,536	\$11,077	\$69,459	\$674,694	\$402,700	\$271,994	\$202,535	\$683,695
July	\$59,258	\$34,855	\$94,113	\$25,125	\$68,988	\$243,400	\$201,700	\$41,700	-\$27,288	\$710,983
August	\$58,353	\$22,930	\$81,283	\$25,818	\$55,465	\$251,138	\$203,700	\$47,438	-\$8,027	\$719,010
September	\$58,011	\$16,792	\$74,803	\$20,647	\$54,156	\$246,000	\$203,000	\$43,000	-\$11,156	\$730,166
October	\$75,015	\$17,519	\$92,534	\$8,088	\$84,446	\$266,000	\$197,834	\$68,166	-\$16,280	\$746,446
November	\$66,082	\$19,667	\$85,749	\$19,965	\$65,784	\$216,800	\$1,200	\$215,600	\$149,816	\$596,630
December	\$27,686	\$19,511	\$47,197	\$17,434	\$29,763	\$2,000	\$0	\$2,000	-\$27,763	\$624,393
Total	\$522,112	\$269,805	\$791,917	\$215,896	\$576,021	\$2,836,628	\$1,785,000	\$1,051,628	\$475,607	

Cash Flow Overview (1)

	Septage/Sewer Net Income	Net Contract Expenses	Contract. Exp. - Sewer Income	Cash Required from Reserves
January	\$6,291	\$43,875	\$37,584	\$6,291
February	\$9,831	\$34,431	\$24,600	\$9,831
March	\$12,972	\$25,475	\$12,503	\$12,972
April	\$33,581	\$34,518	\$937	\$33,581
May	\$85,285	\$223,431	\$138,146	\$85,285
June	\$69,459	\$271,994	\$202,535	\$69,459
July	\$68,988	\$41,700	-\$27,288	\$68,988
August	\$55,465	\$47,438	-\$8,027	\$55,465
September	\$54,156	\$43,000	-\$11,156	\$54,156
October	\$84,446	\$68,166	-\$16,280	\$84,446
November	\$65,784	\$215,600	\$149,816	\$65,784
December	\$29,763	\$2,000	-\$27,763	\$29,763
Total	\$576,021	\$1,051,628	\$475,607	\$576,021

Cash Flow Overview (2)

	Septage Sewer Net Income	Net Contract Expenses	Reserves - Contract Exp.	Cash Remaining
Reserves			\$1,100,000	
January	\$6,291	\$43,875	\$1,056,125	\$1,062,416
February	\$9,831	\$34,431	\$1,021,694	\$1,031,525
March	\$12,972	\$25,475	\$996,219	\$1,009,191
April	\$33,581	\$34,518	\$961,701	\$995,282
May	\$85,285	\$223,431	\$738,270	\$823,555
June	\$69,459	\$271,994	\$466,276	\$535,735
July	\$68,988	\$41,700	\$424,576	\$493,564
August	\$55,465	\$47,438	\$377,138	\$432,603
September	\$54,156	\$43,000	\$334,138	\$388,294
October	\$84,446	\$68,166	\$265,972	\$350,418
November	\$65,784	\$215,600	\$50,372	\$116,156
December	\$29,763	\$2,000	\$48,372	\$78,135
Total	\$576,021	\$1,051,628		\$576,021

\$1.5M SRF Loan Repayment Schedule

Year	Beginning Balance	Principal	Interest	Principal Forgiveness	Admin Fee	Payment
2020	\$1,500,000	\$125,000	\$5,759	\$250,000	\$30,000	\$160,759
2021	\$1,125,000	\$125,000	\$0		\$22,500	\$147,500
2022	\$1,000,000	\$125,000	\$0		\$20,000	\$145,000
2023	\$875,000	\$125,000	\$0		\$17,500	\$142,500
2024	\$750,000	\$125,000	\$0		\$15,000	\$140,000
2025	\$625,000	\$125,000	\$0		\$12,500	\$137,500
2026	\$500,000	\$125,000	\$0		\$10,000	\$135,000
2027	\$375,000	\$125,000	\$0		\$7,500	\$132,500
2028	\$250,000	\$125,000	\$0		\$5,000	\$130,000
2029	\$125,000	\$125,000	\$0		\$2,500	\$127,500
Totals		\$1,250,000	\$5,759	\$250,000	\$142,500	\$1,398,259

\$2M SRF Loan Repayment Schedule

Year	Beginning Balance	Principal	Interest	Forgiveness	Admin Fee	Payment
2020	\$2,000,000	\$170,000	\$7,679	\$300,000	\$40,000	\$217,679
2021	\$1,530,000	\$170,000	\$0		\$30,600	\$200,600
2022	\$1,360,000	\$170,000	\$0		\$27,200	\$197,200
2023	\$1,190,000	\$170,000	\$0		\$23,800	\$193,800
2024	\$1,020,000	\$170,000	\$0		\$20,400	\$190,400
2025	\$850,000	\$170,000	\$0		\$17,000	\$187,000
2026	\$680,000	\$170,000	\$0		\$13,600	\$183,600
2027	\$510,000	\$170,000	\$0		\$10,200	\$180,200
2028	\$340,000	\$170,000	\$0		\$6,800	\$176,800
2029	\$170,000	\$170,000	\$0		\$3,400	\$173,400
Totals		\$1,700,000	\$7,679	\$300,000	\$193,000	\$1,900,679

Loan Comparison

	Principal	Interest	Principal Forgiveness	Admin Fee	Payment
\$2M	\$1,700,000	\$7,679	\$300,000	\$193,000	\$1,900,679
\$1.5M	\$1,250,000	\$5,759	\$250,000	\$142,500	\$1,398,259
Totals	\$450,000	\$1,920	\$50,000	\$50,500	\$502,420

What Will Thompson St.
Reconstruction Cost?

Thompson St. SRF Loan Schedule

Year	Beginning	Principal	Forgiveness	Interest	Rate	Fees	Payment	Ending
2020	\$1,799,420	\$80,974	\$179,942	\$15,346	1.000%	\$35,667	\$131,998	\$1,538,504
2021	\$1,538,504	\$80,974		\$10,831	0.704%	\$30,770	\$122,575	\$1,457,530
2022	\$1,457,530	\$80,974		\$10,261	0.704%	\$29,151	\$120,386	\$1,376,556
2023	\$1,376,556	\$80,974		\$9,691	0.704%	\$27,531	\$118,196	\$1,295,582
2024	\$1,295,582	\$80,974		\$9,121	0.704%	\$25,912	\$116,006	\$1,214,609
2025	\$1,214,609	\$80,974		\$8,551	0.704%	\$24,292	\$113,817	\$1,133,635
2026	\$1,133,635	\$80,974		\$7,981	0.704%	\$22,673	\$111,627	\$1,052,661
2027	\$1,052,661	\$80,974		\$7,411	0.704%	\$21,053	\$109,438	\$971,687
2028	\$971,687	\$80,974		\$6,841	0.704%	\$19,434	\$107,248	\$890,713
2029	\$890,713	\$80,974		\$6,271	0.704%	\$17,814	\$105,059	\$809,739
2030	\$809,739	\$80,974		\$5,701	0.704%	\$16,195	\$102,869	\$728,765
2031	\$728,765	\$80,974		\$5,131	0.704%	\$14,575	\$100,680	\$647,791
2032	\$647,791	\$80,974		\$4,560	0.704%	\$12,956	\$98,490	\$566,817
2033	\$566,817	\$80,974		\$3,990	0.704%	\$11,336	\$96,301	\$485,843
2034	\$485,843	\$80,974		\$3,420	0.704%	\$9,717	\$94,111	\$404,870
2035	\$404,870	\$80,974		\$2,850	0.704%	\$8,097	\$91,922	\$323,896
2036	\$323,896	\$80,974		\$2,280	0.704%	\$6,478	\$89,732	\$242,922
2037	\$242,922	\$80,974		\$1,710	0.704%	\$4,858	\$87,543	\$161,948
2038	\$161,948	\$80,974		\$1,140	0.704%	\$3,239	\$85,353	\$80,974
2039	\$80,974	\$80,974		\$570	0.704%	\$1,619	\$83,163	\$0
Totals		\$1,619,478		\$123,657		\$343,368	\$2,086,513	

SRF Loan Payment/Tax Impact

Year	Town	Water	Sewer	Payment	Tax
2020	\$84,478	\$19,800	\$5,280	\$131,998	\$0.34
2021	\$73,323	\$16,770	\$4,555	\$122,575	\$0.29
2022	\$72,013	\$16,470	\$4,474	\$120,386	\$0.29
2023	\$70,703	\$16,171	\$4,392	\$118,196	\$0.28
2024	\$69,394	\$15,871	\$4,311	\$116,006	\$0.28
2025	\$68,084	\$15,572	\$4,229	\$113,817	\$0.27
2026	\$66,774	\$15,272	\$4,148	\$111,627	\$0.27
2027	\$65,464	\$14,973	\$4,067	\$109,438	\$0.26
2028	\$64,155	\$14,673	\$3,985	\$107,248	\$0.26
2029	\$62,845	\$14,373	\$3,904	\$105,059	\$0.25
2030	\$61,535	\$14,074	\$3,823	\$102,869	\$0.25
2031	\$60,225	\$13,774	\$3,741	\$100,680	\$0.24
2032	\$58,916	\$13,475	\$3,660	\$98,490	\$0.24
2033	\$57,606	\$13,175	\$3,579	\$96,301	\$0.23
2034	\$56,296	\$12,876	\$3,497	\$94,111	\$0.23
2035	\$54,831	\$12,541	\$3,406	\$91,922	\$0.22
2036	\$53,677	\$12,277	\$3,334	\$89,732	\$0.21
2037	\$52,367	\$11,977	\$3,253	\$87,543	\$0.21
2038	\$51,057	\$11,677	\$3,172	\$85,353	\$0.20
2039	\$51,057	\$11,677	\$3,172	\$83,163	\$0.20
Totals	\$1,254,798	\$287,468	\$77,982	\$2,086,513	

What is the Status of the
Asset Management Plan?

What is Asset Management?

Asset Management is a systematic process of operating, maintaining, upgrading and disposing of assets cost-effectively while maintaining a level of service that is acceptable to the customers. It involves developing a written Asset Management Plan and using a computer program to analyze data on assets and develop a long-term plan for replacing and funding assets.

GIS

- ❖ **List of assets**
- ❖ **Maps asset location**
- ❖ **Provides specifications for assets**



Ashland Sewer System Map

CMMS



- ❖ Lists assets
- ❖ Schedule, track, and document maintenance
- ❖ Track maintenance costs
- ❖ Provide maintenance procedures
- ❖ Order parts
- ❖ Manage inventory
- ❖ Audit and certify completed maintenance

Steps in Developing the Plan

- ❖ Asset Inventory and Mapping
- ❖ Critical Asset Condition Assessment
- ❖ Life Cycle Cost Analysis
- ❖ Prioritization of Assets Criticality Assessment
- ❖ Defined Level Service
- ❖ Capital Improvement Plan
- ❖ Cost of Service and Rate Analysis
- ❖ Financial Plan and Funding

Where are We Financially?

Water and Sewer Accounting

- ❖ Water and Sewer are enterprise funds
- ❖ Water and Sewer are separate accounts
 - ❖ Water rates must cover water operational expenses
 - ❖ Sewer rates must cover sewer operational expenses
 - ❖ Septage receiving is part of sewer
- ❖ Some net income from sewer can be used for water capital expenses because sewer revenue is dependent on the amount of water consumed

2018 Cash Assets

Bank Accounts	\$1,515,679
Receivables	\$56,149
Grant	\$250,000
Liabilities	\$236,264
Total Cash	\$1,585,564

2018 Profit & Loss

	Sewer	Water	Total
Income	\$702,225.66	\$166,099.11	\$868,324.77
Expenses	\$1,016,466.62	\$207,947.47	\$1,224,414.09
Net Income	-\$314,240.96	-\$41,848.36	-\$356,089.32
Capital Expenses	\$591,876.88	\$40,243.86	\$632,120.74
Operational Income	\$277,635.92	-\$1,604.50	\$276,031.42

Why Do Water and Sewer Rates Need to Be Increased?

How Rates Are Set?

- ❖ Rates must cover the cost of providing water and sewer services
 - ❖ Operating Costs (salaries, benefits, maintenance, repair, utilities, fuel, office expenses, software, billing, etc.)
 - ❖ Capital Expenses (buildings, equipment, vehicles, infrastructure)
 - ❖ Inflation
- ❖ Rates in Ashland
 - ❖ Water and Sewer rates cover operating costs
 - ❖ Septage receiving revenues cover septage operations sewer capital expenses, and some water capital expenses
- ❖ Rate Increases
 - ❖ Goal: Incremental increases to cover the cost of inflation, capital improvements, and additional NHDES and EPA requirements

Rates

	Water		Sewer	
	Actual	3% Inflation	Actual	3% Inflation
1999	\$5.85		\$7.70	\$7.93
2000	\$2.00	\$6.03		\$8.93
2004		\$6.21		\$8.93
2010	\$3.85	\$8.10		\$10.66
2014	\$4.20	\$9.11		\$12.00
2017	\$4.40	\$9.96		\$13.11
2018	\$4.75	\$10.26		\$13.50
2019	\$5.85	\$10.57	\$7.70	\$13.91
Income				
	Water		Sewer	
	Actual	3% Inflation	Actual	3% Inflation
2018	\$166,099	\$358,774	\$194,213	\$340,503

What is the Future of the Water and Sewer Department?

What Has Been Done So Far?

- ❖ Geographical Information System (GIS)
- ❖ Computerized Maintenance Management System (CMMS)
- ❖ Asset Management Plans (Second Phase In-Progress)
- ❖ Septage Receiving Station (In-Progress)
- ❖ Focus on planned maintenance and upgrading assets
- ❖ Replacement strategies for vehicles, meters, hydrants, and scoping sewer lines
- ❖ Remote Meter Reading
- ❖ Safety Trailer
- ❖ Office and Conference Room (Almost complete)

What Will Be Needed in the Future?

- ❖ Water Treatment Plant (\$2 - \$3M)
- ❖ Waste Water Treatment Plant (\$8 - \$10M)
- ❖ Replace Sewer 3 Pumping Stations (\$500K - \$750K)
- ❖ Replace Old Water and Sewer Lines \$1.5 - \$2M)
- ❖ Additional Water Tower/Replace Old Water Tower (\$2 - \$3M)
- ❖ Total Estimated Capital Expenses \$14M - \$18.75M

How Should We Manage the Department?

- ❖ Our goal: to ensure that management of the department is stable so that we can provide efficient operations, complete necessary capital projects, comply with regulatory requirements, and adjust to changes in town government structure.
- ❖ Qualified Operations and Management Staff
- ❖ Engineering, Administrative, Legal, and Financial Support Services
- ❖ Regulatory and Safety Compliance
- ❖ Asset Management Planning