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| TO: | Daniel Finan, Veolia Albert C. Gallant, DPW Director | DATE: | 6/24/2020 |
| FROM: | Barry Yaceshyn, Neil Cheseldine | PROJECT NO.: | 20298A |
| SUBJECT: | Winchendon Water and Sewer Rate Study | | |

INTRODUCTION

The purpose of this memorandum is to summarize our evaluation of sewer and water rates for the Town of Winchendon as commissioned by Veolia North America (VNA), the Town's contract operator for water and wastewater treatment facilities. Financial data for the past three fiscal years (2017-2019) were reviewed and future projections made for the next five years (2020 – 2024). A preliminary draft of this memorandum was submitted to VNA on March 16, 2020 and the Town of Winchendon staff on March 30, 2020. Additional information including FY 2020 Retained Earnings Accounts actual values was subsequently supplied by the Town and financial projections were updated. The memorandum was presented to the Winchendon Select Board on June 22, 2020 and accepted by the Board pending addition of the Central Street Project debt costs into the financial projections.

The Town of Winchendon receives domestic water from the Ashburnham-Winchendon Joint Water Authority that owns a water treatment facility located in Ashburnham. The water filtration facility is supervised, operated and maintained by Veolia Water North America Northeast LLC (VNA). Winchendon and Ashburnham share the treatment cost pro rata based on average water consumption in each community. We understand the current cost split is approximately 65% Winchendon and 35% Ashburnham. Capital costs of the water system are split evenly by the two communities. The Town of Winchendon is responsible for operation and maintenance of the water distribution system.

The Town of Winchendon is also served by a wastewater collection system and treatment facility. The wastewater treatment facility treats and discharges effluent into the Millers River. In 2019, the town entered an agreement with VNA to also operate and maintain the wastewater treatment facility. The Town of Winchendon is responsible for operation and maintenance of the wastewater collection system.

The Town of Winchendon population is 10,300 people (2010 census) with approximately 3,450 households.

The Winchendon water distribution system is comprised of 70 miles of water mains, 2,100 service connections, fire hydrants, two booster pump stations and two 1-million-gallon water storage tanks.

The Winchendon sewer system is comprised of gravity sewer mains, manholes, two pumping stations and force mains and the wastewater treatment facility with a design capacity of 1.1 MGD. There are approximately 1,300 connections.

The scope of this evaluation included the following:

1. Kick-off meeting.
2. Collect and review available background data and financial reports from 2017 through 2019.
 - a. Three years of historical operation and maintenance budgets for 2017 through 2019.
 - b. FY 2020 operation and maintenance budget including reserve funds.
 - c. Number of water and sewer users from 2017 through 2019.
 - d. Three years of water and sewer consumption data from 2017 through 2019.
 - e. Projected future water/sewer users from 2020 through 2024. **Unknown**
 - f. Historical delinquent accounts from 2017 through 2019.
 - g. Current water and sewer user billing fees.
 - h. Historical annual water and sewer revenues from 2017 – 2019.
 - i. List of outstanding water and sewer loans, annual debt payments, payoff dates.
 - j. Any industrial pretreatment sewer user agreements. **None**
 - k. Current Capital Improvement Plans (CIP) for water/water treatment and sewer/wastewater transport and treatment facilities – **Recommended CIP plans provided by VNA.**
3. Compare Water and Sewer Rates with neighboring communities within the Commonwealth of Massachusetts
4. Sewer & Water Rate Studies
 - a. Evaluate existing water and sewer annual revenues and expenditures
 - b. Review sewer and water user fees.
 - c. Estimate future debt service requirements for five-year sewer and water capital improvement programs. **Recommended CIP plans and cost estimates provided by VNA.**
 - d. Work with VNA to estimate future water and sewer operating and maintenance costs for next five years.
 - e. Work with VNA to estimate future water and sewer users over the next five years. **No information available, assumed same number of users for next five years.**
 - f. Evaluate impacts of five-year capital and O&M cost over the next five years.
 - g. Estimate the future average annual residential water and sewer rates over the next five years.
 - h. Summarize current average annual sewer and water user fees in surrounding communities within the Commonwealth of Massachusetts.
 - i. Prepare and submit a separate draft memorandum summarizing the findings and recommendations for sewer and water rates.

- j. Communicate with VNA via telephone to discuss the draft sewer and water rate studies.
- k. Finalize and submit the sewer and water rate memorandum based on input from VNA and the Town.

EXISTING CONDITIONS

The following information and data were made available for this evaluation:

- Town Manager's Water and Sewer Proposed Budgets for Fiscal years 2017 through 2020
- Water and Sewer Enterprise Funds Audit Analysis 2017 through 2019
- Retained Earnings Account expenditures and balance (FY17 through FY20)
- Fiscal Year 2020 Debt Service
- FY20 Summary of Water and Wastewater Indirect Costs
- Munis Utility Tax Levy Reports: Summary by Code & Charges
 - FY 2017: Bills Due 6/2013 through 6/2016 (3 years)
 - FY 2018: Bills Due 7/2016 through 6/2017
 - FY 2019: Bills Due 7/2018 through 6/2019
- Munis Utility Consumption Reports
 - 1/1/2107 – 12/31/2017
 - 1/1/2018 – 12/31/2018
 - 1/1/2019 – 12/31/2019
- Munis Account Receivables Report by Categories
 - Bill Year 2017
 - Bill Year 2018
 - Bill Year 2019
 - Bill Years 2017 – 2019
- Munis Paid/Unpaid Bills
 - Bill Year 2017
 - Bill Year 2018
 - Bill Year 2019
- Excel Spreadsheet: Water & Sewer Adjustments and miscellaneous revenues by Fiscal Year
- VNA Sewer Extreme and High CIP list FY 2020 to FY 2023
- VNA Recommended Water Treatment Facility 5-year CIP Plan
- VNA Wastewater Treatment Facility 5-Year Capital Plan (November 30, 2019)
- VNA Water and Wastewater Billing Breakdown summaries
- Central Street Project debt amortization schedules

Water Consumption Trends

The Town provided water consumption reports for the past three years (2017 – 2019). The total billed water consumption is as follows:

- 2017 – 16,674,069 CF/Year
- 2018 – 17,218,255 CF/Year
- 2019 – 17,290,410 CF/Year

Billed water use increased 3.7% over three years. The majority of the increase occurred in 2018. Consumption appears to be stable or increasing slightly.

User Rates

There are presently 2,017 water and 1,300 sewer user accounts. Approximately 92% of the accounts are single or multi-family residential users. Based on the 2019 consumption report, the average water consumption is 8,538 cubic feet/year (CF/Year) per account. The single-family residential user average consumption is 6,630 CF/Year per user.

The current rates are \$5.27/100 CF and \$8.03/100 CF for water and sewer, respectively. Users are billed quarterly. All users are assessed the same usage rate regardless of consumption. There is no minimum charge. The Town also assesses a betterment fee as part of the property tax bill. The betterment fee revenue is added to the sewer enterprise fund and totaled \$277,032 in FY 2019 and \$310,000 in FY 2020. The betterment revenue will be eliminated after FY2023.

The provided AR reports provided historical data on various other miscellaneous revenues. However, the AR reports values did not match the audited Enterprise Fund Analysis values, which are not as detailed and combines all other revenues into an “Other” line item. Other items that impact total revenues including billing adjustments and delinquent payments are assumed to be reflected in the audited “User Fee” and “Other” line items. There was a considerable increase in revenues in 2017 due to more rigorous collection efforts, but revenues declined in the following two years by approximately \$200,000 and \$300,000 for water and sewer, respectively.

The last rate increase was effective July 1, 2017 and reflected a 4.17% increase over the previous rates.

Survey of User rates in Other Communities

We surveyed the current user rates for 14 other similar communities in Massachusetts

- 9 in Worcester County
- 5 in Franklin County (within similar Route 2 Corridor)

This information provides a benchmark for comparison of the current Winchendon rates. This information is summarized in the Water Rate Summary Rate Comparison to Other Communities Tables which are attached. These comparisons included rates for both 6,420 CF per year which corresponds to Winchendon's average annual residential household consumption, and the industry standard of 12,000 CF/Year, which is the basis used by MWRA to track rates over time. The lower usage value (6,420 CF/Year) is more pertinent for comparison because it corresponds to typical usage in Winchendon. The rates comparison for this usage are summarized below.

The water rates are summarized as follows:

- Average \$413/Year
- Median \$338/Year
- Maximum \$1,016/Year
- Minimum \$178/Year
- **Winchendon \$338/Year**

The sewer rates are summarized as follows:

- Average \$618/Year
- Median \$574/Year
- Maximum \$1,238/Year
- Minimum \$279/Year
- **Winchendon \$515/Year**

The current Winchendon water and sewer rates are less than the average rates of other local communities.

Budget and Revenues

The water and sewer utilities are both operated as enterprise funds, which means that the revenues collected are intended to match the budgetary expenses. Budget surpluses are deposited into Retained Earnings Accounts, and the balance in these accounts is also used to fund budget deficits.

The budget expenses used in this evaluation were provided in the Town Managers Proposed Budget for FY20. The budget line items include typical labor and indirect labor costs (transfer to General Fund), operations and maintenance expenses, vehicle leases and debt service costs. The budget also reflects the VNA contract operations costs and a contingency for unanticipated costs or capital improvement projects. The sewer revenues also include the betterment fees collected with property taxes. The budgets and revenue data were used to develop a financial model (spreadsheet) to summarize the current finances of each utility and to evaluate the impact of future rate scenarios. The model results are shown in the Current User Rates Budget and Revenue Model Results Tables which are attached.

The budgets also include direct and indirect funding for repairs and maintenance (R&M) of existing facilities and Capital Improvement Projects (CIP), which is an important consideration to

sustainably maintain the existing infrastructure. The indirect funding comes through the VNA contracts, which include an R&M allowance that also funds smaller CIP projects and financing of a vehicle. The water budget includes \$15,000 per year for water plant CIP and a variable contingency line item which can also be used for CIP projects at the plant or in the distribution system. Another \$19,500 per year is included for Winchendon's share of the VNA contract R&M line item (\$30,000 total). For this evaluation the Town's Water CIP line item was set at \$33,183 for the Town's share of the VNA water plant 5-year CIP plan. The Water Contingency line item was maintained at \$20,000 per year to account for R&M and CIP requirements in the water distribution system.

The VNA Wastewater contract includes an R&M line item of approximately \$100,000 per year which escalates in proportion to an inflation index (approximately 2.5% per year currently). This VNA indicated that this line item is likely sufficient for the current 5-year planning period, however, future CIP requirements may require increased funding.

The following observations or questions are based on review of the budgets and revenue reports:

Water

- The VNA contract cost in FY 2020 is approximately \$297,000 including \$19,500 for R&M. The operations cost is projected to increase 3% annually. We assumed the R&M budget would remain at \$19,500 per year.
- There are four outstanding loans with a total FY 2020 cost of \$236,613 and the Central Street debt payments begin in FY 2021. Currently debt service costs represent 22% of the total budget. Two of the loans mature in FY 2020, which will reduce the future debt service costs by \$145,079 to an annual cost of \$138,034 for FY 2021, which slightly declines through FY 2024 to \$135,334.
- The line item "Water Indirect (transfer to General Fund)" is for indirect labor costs (fringe benefits, payroll taxes, share of other Town staff, etc.).
- The budget does not indicate any funding of reserve accounts. The Retained Earnings Account is funded through budget surpluses and is also used to fund budget deficits. The budget includes \$15,000 for the water system CIP projects along with a \$20,000 contingency account that is also used to fund undefined R&M and CIP projects. We increased the CIP line item value to 33,183 to match the VNA CIP recommendation for the water treatment plant. It is unknown if this level of CIP funding is sustainable long-term given the magnitude of the existing infrastructure that needs to be maintained and upgraded in the future. The Town should consider developing a CIP plan for the distribution system to confirm the appropriate level of CIP for future budgets.
- The FY 2017 through 2019 revenues include adjustments for a variety of issues that are the basis of billing abatements (credits). However, these values were not verified in the audit data supplied for this study. It is assumed the audited revenue values reflect the actual adjustment values.

- The FY 2017 through 2019 AR paid/unpaid data include a loss of revenue due to delinquency, with an average of \$52,150 per year, which is approximately 5.8% of the total water billing.
- Miscellaneous revenues including connection fees averaged approximately \$44,000 or just under 5% of the total enterprise fund revenue.
- No data was provided to indicate additional supplemental revenue that may be received from delinquent charges collected through liens. It is assumed this revenue is reflected in the audited revenue values.
- The water enterprise fund does not receive any funding from the Town for hydrant rental.
- The audited data indicate the water budget had a modest surplus in 2017 and 2018 due to higher revenues generated from more aggressive collections. However, revenues decreased in FY 2019 resulting in a deficit of \$163,000, which was 15% of the budget. Based on the Retained Earnings Account expenditures report, the FY 2020 deficit was \$80,000.
- Expenditures from the Water Retained Earnings Account over the past four years totaled \$425,414. The current balance in the Water Retained Earnings Account is only \$4,000.

Sewer

- The VNA contract cost in FY 2020 is approximately \$726,000 including \$101,000 for R&M. The contract costs are escalated annually based on an inflationary index (presently about 2.5% per year).
- The budget does not include a dedicated CIP line item. There is a variable contingency line item that has historically been used to address collection system R&M and CIP needs that has ranged between \$16,000 to \$111,000 over the past three years and budgeted for \$80,000 in FY 2020. Near term projected needs are lower and this line item has been set at \$10,000 per year in our rate model for FY 2021-2024.
- There are five outstanding loans with a total FY 2020 cost of \$618,618.51 and the Central Street debt payments begin in FY 2021. However, two of the loans are funded by the Town General Fund bringing the FY 2020 cost to sewer users to \$405,453, which increases to \$443,954 in FY 2022 with the addition of the Central Street project payment. The debt service costs represent 28% of the total FY 2020 budget. Two of the loans mature in FY 2022, which will reduce the future debt service costs by \$393,620 to an annual cost of \$48,083 for FY 2024.
- The line item “Sewer Indirect (transfer to General Fund)” is for indirect labor costs (fringe benefits, payroll taxes, share of other Town staff, etc.). The FY 2020 budget indicates a 20% reduction due to shifting of operational labor costs and associated indirect costs to the VNA contract.
- The FY 2020 budget does not indicate any funding of reserve accounts nor CIP projects. This approach is not sustainable long-term because eventually funding will be necessary to maintain and upgrade the existing infrastructure. VNA initially estimated the extreme and high priority CIP items over the next four years require an annual investment of up to \$125,000. The VNA contract R&M allowance is approximately \$100,000 per year. The VNA 5-year Capital Plan (see Attachment 6) recommends longer term CIP investment of

up to \$500,000 per year for the wastewater treatment facility, although it is understood that this level of investment is not affordable at this time. It should be noted that this recommendation does not appear to include the sewer collection system, which will have additional CIP needs in the future as noted above. Longer term CIP needs should be reassessed in 2023 when the debt costs are due to be significantly reduced and when it may be more economically feasible to increase CIP investment. The Town should also consider evaluating the longer-term CIP needs of the sewer collection system.

- The budget includes line items for electricity (\$45,000) and chemicals (\$55,000), so these items are presumably not included in the VNA contract.
- The sewer budget includes a contingency line item for \$80,000 in FY 2020, however, the Town estimates the FY 2021-2024 R&M and CIP needs will be lower, so this line item value is reduced to \$10,000 per year in our rates model for these years.
- The FY 2017 through 2019 revenues include adjustments for a variety of issues that are the basis of billing abatements (credits). However, these values were not verified in the audit data supplied for this study. It is assumed the audited revenue values reflect the actual adjustment values.
- The betterment revenues declined 10% per year between FY 2017 through 2019, presumably due to delinquent property tax payments. The FY 2019 betterment revenue was \$277,032. The betterment revenue rebounded to \$310,000 in FY 2020. The betterment revenue will be eliminated after FY 2023. We assumed the FY 2020 betterment revenue level would be maintained through FY 2023.
- The FY 2017 through 2019 revenues include loss of revenue due to delinquency, with an average of \$53,954 per year, which is approximately 6.4% of the total sewer billing.
- Miscellaneous revenues including connection fees averaged approximately \$46,000 per year or just over 3% of the total budget. However, FY 2019 miscellaneous revenues declined to under \$20,000.
- Additional supplemental revenue is also received from delinquent charges collected through liens. It is assumed this revenue is reflected in the audited revenue values.
- Septage is not accepted at the Winchendon WWTF, so no additional revenue is generated from this source.
- The audited data indicate a \$111,000 surplus in the FY 2017 budget primarily due to higher user fee revenue and lower sewer expenses. However, FY 2018 and 2019 experienced deficits of \$116,000 and \$288,000, respectively. The FY 2019 deficit was approximately 21% of the budget. Based on the Retained Earnings Account expenditures report, the FY 2020 deficit is approximately \$178,000. Expenditures from the Sewer Retained Earnings Account over the past four years totaled \$584,300. The current balance in the Sewer Retained Earnings Account is only \$41,599.

Reserve Accounts

Evaluation of reserve accounts was not included in this analysis. We are not aware of reserve funds that may be available to fund CIP projects. The Retained Earnings Accounts are intended to fund

future budget deficits and these accounts are funded by surpluses from previous years. Current balances in these accounts are low in comparison to the annual budgets.

Future Projections

The following assumptions have been used to project future budgets and revenues:

- Consumption and number of users remains at current levels
- The basis of future user fee and miscellaneous revenue estimates is FY 2019 revenues and the assumed rate increases of each rate scenario that would take effect in FY 2021.
- Enterprise expenses and labor inflation is 3%
- VNA contract operations costs estimated to increase 3% per year for Water and 2.5% for Wastewater
- VNA contract Water R&M allowance remains at the current levels of approximately \$19,500 based on Winchendon water consumption being 65% of total. The Sewer R&M allowance of approximately \$100,000 per year increases approximately 2.5% per year and excess proceeds are maintained in the R&M account. The Sewer R&M allowance is assumed to be sufficient to fund the short-term (5 years) R&M, CIP and existing vehicle financing obligations.
- Water CIP budget is increased to \$33,183 to match the VNA recommended 5-year CIP plan for the treatment plant. The Water contingency line item is maintained at \$20,000 per year to fund R&M and CIP needs.
- The Sewer contingency line item is reduced to \$10,000 per year after FY 2020 in order to reduce existing budget pressures. This funding level is assumed adequate to address R&M needs in the sewer collection system. Near term CIP needs will have to be postponed until after FY 2023 when the debt service costs are reduced.
- Betterment fees continue at FY 2020 level for the next 4 years, through FY 2023
- No enterprise fund revenues will be realized from septage tipping fees, hydrant rental fees, or past due collections beyond the current rate of collections as reflected in the audited user fee revenue values.
- Water and sewer bill adjustments and delinquencies will continue at current levels and as reflected in the FY 2019 user fee and miscellaneous revenue line items.

Maintaining the current rates would result in continued deficits in the budgets over the next 4 years (FY 2021 – 2024) with cumulative 4-year deficit values approximately as follows:

- Water (\$653,000)
- Sewer (\$1,350,000)

The projected deficit levels far exceed the available balances in the Retained Earnings Accounts. Rates will have to be increased to achieve balanced budgets under the current spending level. Several different budget and revenue scenarios were developed with various rate increases evaluated to achieve balanced budgets. As noted previously, the evaluated scenarios assume the current budgeted level of water CIP investment is increased by approximately \$18,000 per year

for the next five years to match the VNA recommended treatment plant CIP plan. The sewer CIP investments will have to be funded out of the VNA R&M line item for the next 5 years. This approach may be sustainable for the water system but falls short of the VNA recommended long term investment levels for the wastewater system. The recommended wastewater treatment facility CIP in future years (FY 2024 and beyond) is estimated to be up to \$500,000 per year. Additional CIP investment will also be required for the sewer collection system, but specific collection system requirements have not yet been identified. However, the future recommended sewer CIP investment may not be affordable given the current level of budget deficit. For this evaluation we have assumed that future sewer CIP could be financed with a 20-year loan or bond with the annual payment equivalent to the existing loans that are scheduled to mature in FY 2023, with an annual payment of \$394,000, which would finance a capital investment of \$6 million. It is assumed that if the Town chooses to implement this level of investment it would occur more than five years in the future, which is beyond the planning period of this evaluation.

It should also be noted that the recommended levels of CIP investment are intended only to maintain the existing infrastructure. The recommendations do not include any additional funding to address potential regulatory drivers that could necessitate more significant upgrades of the facilities in the future.

Each scenario is described as follows. The model results are shown in the Rates Increase Budget and Revenues Scenarios Model Results Tables (attached).

Scenario 1 – Single rate increase to immediately balance the first year (FY 2021) budget

Immediate increases of 14.23% for water and 38.98% for sewer would be needed. The reduction of future debt service costs will reduce water budget pressures; however, this scenario would still result in a 4-year water budget net deficit of \$143,399 due to inflationary cost increases. The sewer budget would also benefit from debt costs that mature in 2023 but would lose the betterment revenue resulting in a \$71,709 net 4-year deficit. The average FY 2021 single-family residential user rates would increase as follows:

| | <u>Current Rate</u> | <u>Potential New Rate</u> |
|---------|---------------------|---------------------------|
| • Water | \$338 per year | \$386 per year |
| • Sewer | \$515 per year | \$716 per year |

Scenario 2 – Single rate increase to achieve a net 4-year balanced budget

Immediate increases of 18.24% for water and 41.17% for sewer would be needed. The water annual budgets would run a surplus in FY 2021 and FY 2022 and then return to deficit in FY 2023 and 2024. The sewer annual budgets would run a surplus in FY 2021 and FY 2024 and deficits in FY 2022 and FY 2023. The average FY 2021 single-family residential user rates would increase as follows:

| | <u>Current Rate</u> | <u>Potential New Rate</u> |
|---------|---------------------|---------------------------|
| • Water | \$338 per year | \$400 per year |
| • Sewer | \$515 per year | \$727 per year |

Scenario 3 – Annual incremental equal rate increases each year to achieve a net 4-year balanced budget

Immediate incremental annual increases of 6.82% per year for water and 14.28% per year for sewer would be needed. The water annual budget would remain in deficit in FY 2021 (-\$66,261) and FY 2022 (-\$24,509) and then surplus for the next two years, largely due to the reduced debt service costs after FY 2020, with the FY 2024 annual budget surplus reaching \$70,425. The sewer annual budgets would remain in deficit in FY 2021 (-\$202,738) and FY 2022 (-\$94,214) with the cumulative deficit reaching \$296,952 and then run in surplus in FY 2023 and 2024 with a final year (FY 2024) annual surplus of \$264,479. It is important to note that the initial year deficits significantly exceed the available balances in the Retained Earnings Accounts, so the Town would need to identify alternative sources of short-term financing for the FY 2021 and 2022 budgets. If alternative financing is not available, the Town will need to consider higher initial year rate increases.

The average single-family residential user rates would increase as follows:

Water

- FY 2020 \$338 (current rate)
- FY 2021 \$361
- FY 2022 \$386
- FY 2023 \$412
- FY 2024 \$440

Sewer

- FY 2020 \$515 (current rate)
- FY 2021 \$589
- FY 2022 \$673
- FY 2023 \$769
- FY 2024 \$878

The sewer enterprise is subject to more severe financial pressures than the water enterprise. The results of the evaluation of various rate scenarios show that significant rate increases will be necessary to achieve a balanced sewer budget. The majority of the sewer budget expenses are non-discretionary and cannot be reduced. Debt servicing and contract operations expenses account for over 80% of the total sewer budget. The evaluated sewer rate scenarios assume that discretionary CIP and contingency line items will be reduced to very low levels, which are not sustainable long term, but necessary to address immediate budget shortfalls.

The results of all the evaluated rate scenarios are summarized in the following tables.

TABLE 1

**TOWN OF WINCHENDON
WATER
BUDGET & REVENUE 2017 - 2024 MODEL RESULTS
RATE INCREASE SCENARIOS SUMMARY**

| SCENARIO | RATE INCREASE % | AVG. USER RATE \$/YEAR | BUDGET DEFICIT / SURPLUS | |
|--|-----------------|------------------------|--------------------------|--------------|
| | | | FY 2021 | NET 4-YR |
| | | | | |
| Current User Rates | - | \$338 | \$ (127,295) | \$ (652,799) |
| Scenario 1 - Single Increase, Balanced Budget by FY 2021 | 14.23% | \$386 | \$ 54 | \$ (143,399) |
| Scenario 2 - Single Increase, Balanced Net 4-year Budget | 18.24% | \$400 | \$ 35,942 | \$ 149 |
| Scenario 3 - Multiple Incremental Increases, Balanced Net 4-year Budget | | | | |
| FY 2020 | 0.00% | \$338 | N/A | |
| FY 2021 | 6.82% | \$361 | \$ (66,261) | |
| FY 2022 | 6.82% | \$386 | \$ (24,509) | |
| FY 2023 | 6.82% | \$412 | \$ 20,959 | |
| FY 2024 | 6.82% | \$440 | \$ 70,425 | \$ 615 |

TABLE 2

**TOWN OF WINCHENDON
SEWER
BUDGET & REVENUE 2017 - 2024 MODEL RESULTS
RATE INCREASE SCENARIOS SUMMARY**

| SCENARIO | BUDGET DEFICIT / SURPLUS | | | |
|---|--------------------------|------------------------|--------------------------|----------------|
| | RATE INCREASE % | AVG. USER RATE \$/YEAR | BUDGET DEFICIT / SURPLUS | |
| | | | FY 2021 | NET 4-YR |
| Current User Rates | - | \$515 | \$ (319,957) | \$ (1,351,594) |
| Scenario 1 - Single Increase, Balanced Budget by FY 2021 | 38.98% | \$716 | \$ 15 | \$ (71,709) |
| Scenario 2 - Single Increase, Balanced Net 4-year Budget | 41.17% | \$727 | \$ 17,992 | \$ 199 |
| Scenario 3 - Multiple Incremental Increases, Balanced Net 4-year Budget | | | | |
| FY 2020 | 0.00% | \$515 | N/A | |
| FY 2021 | 14.28% | \$589 | \$ (202,738) | |
| FY 2022 | 14.28% | \$673 | \$ (94,214) | |
| FY 2023 | 14.28% | \$769 | \$ 32,747 | |
| FY 2024 | 14.28% | \$878 | \$ 264,479 | \$ 275 |

CONCLUSIONS AND RECOMMENDATIONS

Based on our review of the available data the most significant conclusion is that both the water and sewer enterprise funds are presently operating at significant deficits and the current balances of the Retained Earnings Accounts are too low to fund the projected future deficits at the current levels of user rates. At the current spending levels adjusted for modest inflation the budgets will remain in deficit unless the current user rates are increased. The existing rates are less than the average rates of other local communities. Almost half of the existing water budget and over 80% of the sewer budget are for debt service and contract operations costs that are fixed, which limits the Town's ability to reduce costs. **Rate increases will be necessary to achieve balanced budgets.** The following recommendations are offered for the Town's and VNA's consideration.

1. We developed the scenarios to bracket the possible approaches to rate hikes that the Town may elect to implement from a single one-time increase to smaller incremental annual increases. We also considered two budgeting goals to either balance the budget immediately in the first year or to reach a balance in the net 4-year accounting. The Town should consider which approach would be most acceptable to the users and its own financial capacity. Our intention was to illustrate the results of each of these approaches. However, a combination of these two approaches could also be developed and might be most appropriate for the Town. It is likely that a combination of these approaches may be the preferred alternative for the Town.
2. The existing water and sewer rates are lower than the average rates of other similar communities in the region.
3. The sewer enterprise is under more significant financial pressure than the water enterprise. Even at lower than recommended levels of CIP investment, the necessary rate increases to balance the budget are significant and may not be affordable, particularly given the present economic conditions. We have assumed Sewer CIP and contingency budget line items will be reduced to very low levels in order to address the more immediate budget concerns. However, the Town should also be aware that higher levels of CIP investment will be required in future years.
4. The intent of this evaluation was to illustrate the financial impacts of a range of possible approaches that the Town could take to address budget concerns. The Town needs to determine its goals, preferences and financial constraints in order to decide on the best approach. The evaluated scenarios each assume a singular approach over the 5-year planning period including the current fiscal year. It is possible and likely that the selected approach for the Town of Winchendon may be a combination of these approaches that could also be adjusted each year depending on the actual financial outcomes. Following input from the Town, it may be appropriate to modify the evaluated scenarios or develop new scenarios to better match to the Town's goals and preferences.
5. Consideration of alternative rate structures was outside the scope of this study. The Existing rates are based entirely on usage, which may result in increased revenue variability due to changes in consumption. Many communities include minimum charges in their rate structures, which are intended to reduce revenue variability and also to address fixed costs that should be assessed to each account regardless of use. The Town

and VNA may wish to consider expanding this study to evaluate the impacts of alternative rate structures.

Attachments:

1. Water and Sewer Rate Comparison to Other Communities
2. Current User Rates Budget and Revenue Model Results Tables
3. Rate Increases Budget and Revenue Scenarios Model Results Tables
4. Enterprise Funds Audit Reports FY 2017-2019
5. Retained Earnings Accounts Expenditures and Status FY 2017-2020
6. Summary of Indirect Costs FY2020
7. Town of Winchendon Wastewater Treatment Facility 5-Year Capital Plan (Veolia, November 30, 2019)

Attachment 1
Water and Sewer Rates Comparison to Other
Communities



| Annual Water Rate Comparison ⁽¹⁾ | | | | | |
|---|---|----------|--|---------|--|
| | Winchendon Average Residential @ 535 CF/Month ⁽²⁾ \$/100 CF | | Industry Standard @ 1,003 CF/Month ⁽³⁾ \$/100 CF | | |
| (Worcester County) | | | | | |
| Winchendon | \$ 338.16 | \$ 5.27 | \$ 634.08 | \$ 5.27 | |
| Ashburnham | \$ 1,016.28 | \$ 15.83 | \$ 1,138.80 | \$ 9.46 | |
| Templeton | \$ 608.64 | \$ 9.48 | \$ 967.80 | \$ 8.04 | |
| Gardner | \$ 337.56 | \$ 5.26 | \$ 632.88 | \$ 5.26 | |
| Westminster | \$ 454.56 | \$ 7.08 | \$ 852.36 | \$ 7.08 | |
| Barre | \$ 449.16 | \$ 7.00 | \$ 842.16 | \$ 7.00 | |
| Leominster | \$ 271.44 | \$ 4.23 | \$ 477.48 | \$ 3.97 | |
| Lunenburg | \$ 384.60 | \$ 5.99 | \$ 586.92 | | |
| Rutland | \$ 329.64 | \$ 5.13 | \$ 589.56 | \$ 4.90 | |
| Holden | \$ 399.12 | \$ 6.22 | \$ 531.84 | \$ 4.42 | |
| (Franklin County) | | | | | |
| Athol | \$ 299.64 | \$ 4.67 | \$ 539.88 | \$ 4.49 | |
| Orange | \$ 307.80 | \$ 4.79 | \$ 523.20 | \$ 4.35 | |
| Gill | - | | - | | |
| Greenfield | \$ 178.44 | \$ 2.78 | \$ 334.44 | \$ 2.78 | |
| Montague | - | | - | | |

(1) UNC School of Government Environmental Finance Center Water and Wastewater Rates Dashboard

(2) Equivalent to Winchendon's FY17-20 Average Single Family water Consumption

(3) Industry Standard of 120 Hundred Cubic Feet (12,000CF per year)

| Annual Sewer Rate Comparison ⁽¹⁾ | | | | | |
|---|---|----------|--|-------|----------------------|
| | Winchendon Average Residential @ 535 CF/Month ⁽²⁾ \$/100 CF | | Industry Standard @ 1,003 CF/Month ⁽³⁾ \$/100 CF | | |
| (Worcester County) | | | | | |
| Winchendon | \$ | 515.28 | \$ | 8.03 | \$ 966.12 \$ 8.03 |
| Ashburnham | \$ | 946.44 | \$ | 14.74 | \$ 1,774.56 \$ 14.74 |
| Templeton | | - | | - | - - |
| Gardner | \$ | 320.88 | \$ | 5.00 | \$ 601.56 \$ 5.00 |
| Westminster | \$ | 824.16 | \$ | 12.84 | \$ 1,545.36 \$ 12.84 |
| Barre | \$ | 641.64 | \$ | 9.99 | \$ 1,203.12 \$ 10.00 |
| Leominster | \$ | 342.48 | \$ | 5.33 | \$ 572.04 \$ 4.75 |
| Lunenburg | \$ | 737.88 | \$ | 11.49 | \$ 1,383.60 \$ 11.50 |
| Rutland | \$ | 582.84 | \$ | 9.08 | \$ 930.96 \$ 7.73 |
| Holden | \$ | 564.24 | \$ | 8.79 | \$ 960.24 \$ 7.98 |
| (Franklin County) | | | | | |
| Athol | \$ | 456.84 | \$ | 7.12 | \$ 834.72 \$ 6.94 |
| Orange | \$ | 343.32 | \$ | 5.35 | \$ 643.68 \$ 5.35 |
| Gill | \$ | 1,238.40 | \$ | 19.29 | \$ 2,322.00 \$ 19.29 |
| Greenfield | \$ | 279.12 | \$ | 4.35 | \$ 523.32 \$ 4.35 |
| Montague | \$ | 855.96 | \$ | 13.33 | \$ 1,203.72 \$ 10.00 |

(1) UNC School of Government Environmental Finance Center Water and Wastewater Rates Dashboard

(2) Equivalent to Winchendon's FY17-20 Average Single Family water Consumption

(3) Industry Standard of 120 Hundred Cubic Feet (12,000CF per year)

Attachment 2
Current User Rates Budget and Revenue Model
Results Tables



TOWN OF WINCHENDON
WATER
BUDGET & REVENUE 2017 - 2024 MODEL RESULTS
CURRENT USER RATES

| Budget Items | | | | Average Annual Increase (%) | Assumed Annual Increase (%) | PROJECTED VALUES | | | | |
|--|--------------------|------------------|---------------------|-----------------------------|-----------------------------|-------------------------------------|--------------------|--------------------|--------------------|--------------------|
| | 2017 | 2018 | 2019 ⁽¹⁾ | | | 2020 | 2021 | 2022 | 2023 | 2024 |
| Water Personnel ⁽⁵⁾ | \$172,821 | \$176,285 | \$193,068 | 5% | 3% | \$216,014 | \$222,495 | \$229,170 | \$236,045 | \$243,126 |
| Water Enterprise Expenses ⁽⁵⁾ | \$99,977 | \$112,165 | \$181,307 | 25% | 3% | \$163,550 | \$168,456 | \$173,510 | \$178,715 | \$184,077 |
| Water Enterprise Expenses contingency ⁽²⁾ | \$18,516 | \$8,531 | \$15,000 | -37% | 0% | \$20,000 | \$20,000 | \$20,000 | \$20,000 | \$20,000 |
| Water Enterprise Debt Service | \$214,898 | \$213,077 | \$243,588 | 6% | | See below individual loans listings | | | | |
| Water Indirect (transfer to Gen Fund) ⁽⁶⁾ | \$212,854 | \$166,245 | \$117,943 | -34% | 3% | \$130,895 | \$134,822 | \$138,867 | \$143,033 | \$147,324 |
| Water CIP ⁽²⁾ | \$0 | \$0 | \$0 | | 0% | \$33,183 | \$33,183 | \$33,183 | \$33,183 | \$33,183 |
| Veolia Contract Operations ⁽⁷⁾ | \$279,216 | \$275,995 | \$287,300 | 1% | 3% | \$277,423 | \$285,746 | \$294,318 | \$303,148 | \$312,242 |
| Veolia Contract R&M ⁽⁷⁾ | \$19,500 | \$19,500 | \$19,500 | 0% | 0% | \$19,500 | \$19,500 | \$19,500 | \$19,500 | \$19,500 |
| Dept Service FY20 | | | | | | | | | | |
| Central Street Project | | | | | | \$0 | \$46,500 | \$45,600 | \$44,700 | \$43,800 |
| Ashburnham: DW99-20 | | | | | | \$130,940 | \$0 | \$0 | \$0 | \$0 |
| Ash-Win DW99-20A | | | | | | \$14,139 | \$0 | \$0 | \$0 | \$0 |
| USDA-Water Improvement | | | | | | \$54,384 | \$54,384 | \$54,384 | \$54,384 | \$54,384 |
| Rte 140 Project | | | | | | \$37,150 | \$37,150 | \$37,150 | \$37,150 | \$37,150 |
| Actuals Adjustment (audited values) | | | | | | -\$122,238 | | | | |
| Total | \$1,017,782 | \$971,798 | \$1,057,706 | Total | | \$974,940 | \$1,022,235 | \$1,045,681 | \$1,069,857 | \$1,094,785 |
| Revenue Sources | | | | | | | | | | |
| No Bills per FY | 8,049.00 | 8,138.00 | 8,100.00 | 0% | | | | | | |
| Water Users | 2,002 | 2,027 | 2,017 | 0% | | | | | | |
| Volume (cubic feet) | 16,759,006 | 17,298,321 | 17,331,188 | 2% | | | | | | |
| Water User Fee ⁽⁴⁾ | \$1,041,411 | \$929,758 | \$851,239 | -11% | 0% | \$851,239 | \$851,239 | \$851,239 | \$851,239 | \$851,239 |
| Misc. Revenues ⁽³⁾ | \$41,235 | \$62,992 | \$43,701 | -5% | 0% | \$43,701 | \$43,701 | \$43,701 | \$43,701 | \$43,701 |
| Water Adjustments ⁽⁶⁾ | \$0 | \$0 | \$0 | | 0% | \$0 | \$0 | \$0 | \$0 | \$0 |
| Unpaid Bills (Delinquent) ⁽⁸⁾ | \$0 | \$0 | \$0 | | 0% | \$0 | \$0 | \$0 | \$0 | \$0 |
| Past Due Collections ⁽⁸⁾ | \$0 | \$0 | \$0 | | 0% | \$0 | \$0 | \$0 | \$0 | \$0 |
| Total | \$1,082,646 | \$992,750 | \$894,940 | Total | | \$894,940 | \$894,940 | \$894,940 | \$894,940 | \$894,940 |
| | \$64,864 | \$20,952 | -\$162,766 | Surplus/Deficit | | -\$80,000 | -\$127,295 | -\$150,741 | -\$174,917 | -\$199,845 |
| | | | | | | | | | Net 4-year | \$ (652,799) |

- (1) Used Town Managers FY2019 Budget Values or Audited actual value due to labor transfer of Town & Veolia that skewed the actual YTD 12/31/2019 values.
 - (2) Assume historical CIP costs included in Water Enterprise Expenses contingency line item. Future Distribution system CIP levels per Town Manager Proposed Budget and Water Plant based on VNA recommendation
 - (3) 2017-2019 values based on audit "other" line item. Future revenues assumed to equal 2019 value with rate increases as shown.
 - (4) Based on Audit Values. Future estimates assumed to be equal to FY 2019 value with rate increases as shown
 - (5) 2017-2019 values based on audit. 2020 value based on Town Manager Budget. Future values include inflationary increases as shown
 - (6) FY 2020 value from "Summary of Water Indirect Costs" with inflationary increases in future years
 - (7) VNA Water contract costs prorated based on consumption. Winchendon assumed to be 65% of total consumption
 - (8) AR Reports do not agree with audited values. Assume Adjustments are reflected in the audited water user fee revenue value
- Red values are assumed

TOWN OF WINCHENDON
SEWER
BUDGET & REVENUE 2017 - 2024 MODEL RESULTS
CURRENT USER RATES

| Budget Items | | | | Average Annual Increase (%) | Assumed Annual Increase (%) | PROJECTED VALUES | | | | |
|--|--------------------|--------------------|---------------------|-----------------------------|-----------------------------|------------------------------------|--------------------|---------------------------|--------------------|---------------------------|
| | 2017 | 2018 | 2019 ⁽¹⁾ | | | 2020 | 2021 | 2022 | 2023 | 2024 |
| Sewer Personnel ⁽⁵⁾ | \$194,328 | \$203,503 | \$142,037 | -19% | 3% | \$11,500 | \$11,845 | \$12,200 | \$12,566 | \$12,943 |
| Sewer Enterprise Expenses ⁽⁵⁾ | \$450,928 | \$514,347 | \$572,432 | 11% | 3% | \$100,000 | \$103,000 | \$106,090 | \$109,273 | \$112,551 |
| Sewer Enterprise Expenses Contingency ⁽⁹⁾ | \$16,216 | \$111,569 | \$96,000 | 35% | 0% | \$80,000 | \$10,000 | \$10,000 | \$10,000 | \$10,000 |
| Sewer Enterprise Debt Service | \$398,381 | \$403,966 | \$407,565 | 1% | | See below individual loan listings | | | | |
| Sewer Indirect Enterprise (Trsrfr to Gen. Fund) ⁽⁶⁾ | \$230,435 | \$185,568 | \$167,948 | -17% | 3% | \$133,516 | \$137,522 | \$141,647 | \$145,897 | \$150,274 |
| Sewer Capital Improvement Program ⁽⁹⁾ | \$0 | \$0 | \$0 | | 0% | \$0 | \$0 | \$0 | \$0 | \$0 |
| Veolia Contract Operations ⁽²⁾ | \$0 | \$0 | \$0 | | 2.50% | \$625,091 | \$640,718 | \$656,736 | \$673,154 | \$689,983 |
| Veolia Contract R&M ⁽²⁾ | \$0 | \$0 | \$0 | | 2.50% | \$101,247 | \$103,778 | \$106,373 | \$109,032 | \$111,758 |
| Dept-FY20 (principal & Interest) | | | | | | | | | | |
| Central Street Project | | | | | | \$0 | \$38,500 | \$37,750 | \$37,000 | \$36,250 |
| MWPat-Sewer 02-05 | | | | | | \$175,985 | \$175,985 | \$175,985 | \$175,985 | \$0 |
| MWPat-Sewer 01-22 | | | | | | \$217,635 | \$217,635 | \$217,635 | \$217,635 | \$0 |
| USDA Sewer-Pump St | | | | | | \$11,833 | \$11,833 | \$11,833 | \$11,833 | \$11,833 |
| MWPat-Sewer CW 03-04 | | | | | | | | Paid through General Fund | | |
| MWPat-Sewer CW 03-04A | | | | | | | | Paid through General Fund | | |
| Actuals Adjustment (audited values) | | | | | | -\$147,948 | | | | |
| Total | \$1,290,288 | \$1,418,953 | \$1,385,982 | Total | | \$1,308,860 | \$1,450,817 | \$1,476,250 | \$1,502,376 | \$1,135,592 |
| Revenue Sources | | | | | | | | | | |
| No. Bills per FY | 8,081 | 8,170 | 8,119 | 0% | | | | | | |
| Sewer Users | 1,251 | 1,298 | 1,300 | 2% | | | | | | |
| Water Volume (cubic feet) | 16,759,006 | 17,298,321 | 17,331,188 | 2% | | | | | | |
| Billed Consumption (munis AR reports) | 839,443 | 882,529 | 858,495 | | | | | | | |
| Variance (Billed - Revenue Collected) | (175,190) | (29,463) | 57,171 | | | | | | | |
| Sewer User Fee ⁽⁴⁾ | \$1,014,633 | \$911,992 | \$801,324 | -13% | 0% | \$801,324 | \$801,324 | \$801,324 | \$801,324 | \$801,324 |
| Sonly User Fees ⁽⁴⁾ | \$0 | \$0 | \$0 | | 0% | \$0 | \$0 | \$0 | \$0 | \$0 |
| Misc. Revenues ⁽³⁾ | \$55,595 | \$64,195 | \$19,536 | | 0% | \$19,536 | \$19,536 | \$19,536 | \$19,536 | \$19,536 |
| Betterments ⁽⁷⁾ | \$331,305 | \$326,447 | \$277,032 | -10% | 0% | \$310,000 | \$310,000 | \$310,000 | \$310,000 | \$0 |
| Sewer Adjustments ⁽⁶⁾ | \$0 | \$0 | \$0 | | 0% | \$0 | \$0 | \$0 | \$0 | \$0 |
| Sonly Adjustments ⁽⁶⁾ | \$0 | \$0 | \$0 | | 0% | \$0 | \$0 | \$0 | \$0 | \$0 |
| Unpaid Bills (Delinquent) ⁽⁸⁾ | \$0 | \$0 | \$0 | | 0% | \$0 | \$0 | \$0 | \$0 | \$0 |
| Past Due Collections ⁽⁸⁾ | \$0 | \$0 | \$0 | | 0% | \$0 | \$0 | \$0 | \$0 | \$0 |
| Total | \$1,401,533 | \$1,302,634 | \$1,097,892 | Total | | \$1,130,860 | \$1,130,860 | \$1,130,860 | \$1,130,860 | \$820,860 |
| | \$111,245 | -\$116,319 | -\$288,090 | | | Surplus/Deficit | -\$178,000 | -\$319,957 | -\$345,390 | -\$371,516 |
| | | | | | | | | | | Net 4-year \$ (1,351,594) |

- (1) Used Town Managers FY2019 Budget Values due to labor transfer of Town & Veolia that skewed the actual YTD 12/31/2019 values.
- (2) VNA contract costs escalate by CPI, assumed to be 2.5% in future. Repair and Maintenance (R&M) line item allowance also covers CIP and vehicle financing costs
- (3) Miscellaneous revenues based on audited "other" line item. Future revenues assumed to equal 2019 value with rate increases as shown
- (4) Based on Audit Values. Includes Sewer and Sonly users. Future estimates assumed to be equal to FY 2019 value with rate increases as shown
- (5) 2017-2019 values based on audit. 2020 value based on Town Manager Budget. Future values include inflationary increases as shown
- (6) FY 2020 value from "Summary of Wastewater Indirect Costs with inflationary increases in future years
- (7) Audit value. Future values assumed equal to 2020 value. No Betterment payments after 2023
- (8) AR Reports do not agree with audited values. Assume Adjustments are reflected in audited Sewer User Fee revenue value.
- (9) Historically, R&M and CIP costs have been funded with contingency.

Red values are assumed

Attachment 3
Rate Increases Budget and Revenue Scenarios
Model Results Tables



TOWN OF WINCHENDON
WATER
BUDGET & REVENUE 2017 - 2024 MODEL RESULTS
SCENARIO 1 - SINGLE USER RATE INCREASE TO BALANCE BUDGET IN 2021

| Budget Items | 2017 | | | Average Annual Increase (%) | Assumed Annual Increase (%) | PROJECTED VALUES | | | | | |
|--|--------------------|------------------|---------------------|-----------------------------|-----------------------------|------------------|-------------------------------------|--------------------|--------------------|--------------------|-----------|
| | 2017 | 2018 | 2019 ⁽¹⁾ | | | 2020 | 2021 | 2022 | 2023 | 2024 | |
| Water Personnel ⁽⁵⁾ | \$172,821 | \$176,285 | \$193,068 | 5% | 3% | \$216,014 | \$222,495 | \$229,170 | \$236,045 | \$243,126 | |
| Water Enterprise Expenses ⁽⁵⁾ | \$99,977 | \$112,165 | \$181,307 | 25% | 3% | \$163,550 | \$168,456 | \$173,510 | \$178,715 | \$184,077 | |
| Water Enterprise Expenses contingency ⁽²⁾ | \$18,516 | \$8,531 | \$15,000 | -37% | 0% | \$20,000 | \$20,000 | \$20,000 | \$20,000 | \$20,000 | |
| Water Enterprise Debt Service | \$214,898 | \$213,077 | \$243,588 | 6% | | | See below individual loans listings | | | | |
| Water Indirect (transfer to Gen Fund) ⁽⁶⁾ | \$212,854 | \$166,245 | \$117,943 | -34% | 3% | \$130,895 | \$134,822 | \$138,867 | \$143,033 | \$147,324 | |
| Water CIP ⁽²⁾ | \$0 | \$0 | \$0 | | 0% | \$33,183 | \$33,183 | \$33,183 | \$33,183 | \$33,183 | |
| Veolia Contract Operations ⁽⁷⁾ | \$279,216 | \$275,995 | \$287,300 | 1% | 3% | \$277,423 | \$285,746 | \$294,318 | \$303,148 | \$312,242 | |
| Veolia Contract R&M ⁽⁷⁾ | \$19,500 | \$19,500 | \$19,500 | 0% | 0% | \$19,500 | \$19,500 | \$19,500 | \$19,500 | \$19,500 | |
| Dept Service FY20 | | | | | | | | | | | |
| Central Street Project | | | | | | \$0 | \$46,500 | \$45,600 | \$44,700 | \$43,800 | |
| Ashburnham: DW99-20 | | | | | | \$130,940 | \$0 | \$0 | \$0 | \$0 | |
| Ash-Win DW99-20A | | | | | | \$14,139 | \$0 | \$0 | \$0 | \$0 | |
| USDA-Water Improvement | | | | | | \$54,384 | \$54,384 | \$54,384 | \$54,384 | \$54,384 | |
| Rte 140 Project | | | | | | \$37,150 | \$37,150 | \$37,150 | \$37,150 | \$37,150 | |
| Actuals Adjustment (audited values) | | | | | | -\$122,238 | | | | | |
| Total | \$1,017,782 | \$971,798 | \$1,057,706 | Total | | \$974,940 | \$1,022,235 | \$1,045,681 | \$1,069,857 | \$1,094,785 | |
| Revenue Sources | | | | | | | | | | | |
| No. Bills per FY | 8,049.00 | 8,138.00 | 8,100.00 | 0% | | | | | | | |
| Water Users | 2,002 | 2,027 | 2,017 | 0% | | | | | | | |
| Volume (cubic feet) | 16,759,006 | 17,298,321 | 17,331,188 | 2% | | | | | | | |
| Water User Fee ⁽⁴⁾ | \$1,041,411 | \$929,758 | \$851,239 | -11% | 14.23% | \$851,239 | \$972,370 | \$972,370 | \$972,370 | \$972,370 | |
| Misc. Revenues ⁽³⁾ | \$41,235 | \$62,992 | \$43,701 | -5% | 14.23% | \$43,701 | \$49,920 | \$49,920 | \$49,920 | \$49,920 | |
| Water Adjustments ⁽⁸⁾ | \$0 | \$0 | \$0 | | 0% | \$0 | \$0 | \$0 | \$0 | \$0 | |
| Unpaid Bills (Delinquent) ⁽⁸⁾ | \$0 | \$0 | \$0 | | 0% | \$0 | \$0 | \$0 | \$0 | \$0 | |
| Past Due Collections | \$0 | \$0 | \$0 | | 0% | \$0 | \$0 | \$0 | \$0 | \$0 | |
| Total | \$1,082,646 | \$992,750 | \$894,940 | Total | | \$894,940 | \$1,022,290 | \$1,022,290 | \$1,022,290 | \$1,022,290 | |
| | \$64,864 | \$20,952 | -\$162,766 | | | Surplus/Deficit | -\$80,000 | \$54 | -\$23,391 | -\$47,567 | -\$72,495 |
| | | | | | | | | | Net 4-year | \$ (143,399) | |

- (1) Used Town Managers FY2019 Budget Values or Audited actual value due to labor transfer of Town & Veolia that skewed the actual YTD 12/31/2019 values.
- (2) Assume historical CIP costs included in Water Enterprise Expenses contingency line item. Future Distribution system CIP levels per Town Manager Proposed Budget and Water Plant based on VNA recommendations.
- (3) 2017-2019 values based on audit "other" line item. Future revenues assumed to equal 2019 value with rate increases as shown.
- (4) Based on Audit Values. Future estimates assumed to be equal to FY 2019 value with rate increases as shown.
- (5) 2017-2019 values based on audit. 2020 value based on Town Manager Budget. Future values include inflationary increases as shown.
- (6) FY 2020 value from "Summary of Water Indirect Costs" with inflationary increases in future years.
- (7) VNA Water contract costs prorated based on consumption. Winchendon assumed to be 65% of total consumption.
- (8) AR Reports do not agree with audited values. Assume Adjustments are reflected in the audited water user fee revenue value.

Red values are assumed

TOWN OF WINCHENDON
WATER
BUDGET & REVENUE 2017 - 2024 MODEL RESULTS
SCENARIO 2 - SINGLE USER RATE INCREASE TO BALANCE BUDGET IN 2024 (NET)

| Budget Items | 2017 2018 2019 ⁽¹⁾ | | | Average Annual Increase (%) | Assumed Annual Increase (%) | PROJECTED VALUES | | | | | |
|--|-------------------------------|------------------|---------------------|-----------------------------|-----------------------------|------------------|-------------------------------------|--------------------|--------------------|--------------------|--|
| | 2017 | 2018 | 2019 ⁽¹⁾ | | | 2020 | 2021 | 2022 | 2023 | 2024 | |
| Water Personnel ⁽⁵⁾ | \$172,821 | \$176,285 | \$193,068 | 5% | 3% | \$216,014 | \$222,495 | \$229,170 | \$236,045 | \$243,126 | |
| Water Enterprise Expenses ⁽⁵⁾ | \$99,977 | \$112,165 | \$181,307 | 25% | 3% | \$163,550 | \$168,456 | \$173,510 | \$178,715 | \$184,077 | |
| Water Enterprise Expenses contingency ⁽²⁾ | \$18,516 | \$8,531 | \$15,000 | -37% | 0% | \$20,000 | \$20,000 | \$20,000 | \$20,000 | \$20,000 | |
| Water Enterprise Debt Service | \$214,898 | \$213,077 | \$243,588 | 6% | | | See below individual loans listings | | | | |
| Water Indirect (transfer to Gen Fund) ⁽⁶⁾ | \$212,854 | \$166,245 | \$117,943 | -34% | 3% | \$130,895 | \$134,822 | \$138,867 | \$143,033 | \$147,324 | |
| Water CIP ⁽²⁾ | \$0 | \$0 | \$0 | | 0% | \$33,183 | \$33,183 | \$33,183 | \$33,183 | \$33,183 | |
| Veolia Contract Operations ⁽⁷⁾ | \$279,216 | \$275,995 | \$287,300 | 1% | 3% | \$277,423 | \$285,746 | \$294,318 | \$303,148 | \$312,242 | |
| Veolia Contract R&M ⁽⁷⁾ | \$19,500 | \$19,500 | \$19,500 | 0% | 0% | \$19,500 | \$19,500 | \$19,500 | \$19,500 | \$19,500 | |
| Dept Service FY20 | | | | | | | | | | | |
| Central Street Project | | | | | | \$0 | \$46,500 | \$45,600 | \$44,700 | \$43,800 | |
| Ashburnham: DW99-20 | | | | | | \$130,940 | \$0 | \$0 | \$0 | \$0 | |
| Ash-Win DW99-20A | | | | | | \$14,139 | \$0 | \$0 | \$0 | \$0 | |
| USDA-Water Improvement | | | | | | \$54,384 | \$54,384 | \$54,384 | \$54,384 | \$54,384 | |
| Rte 140 Project | | | | | | \$37,150 | \$37,150 | \$37,150 | \$37,150 | \$37,150 | |
| Actuals Adjustment (audited values) | | | | | | -\$122,238 | | | | | |
| Total | \$1,017,782 | \$971,798 | \$1,057,706 | Total | | \$974,940 | \$1,022,235 | \$1,045,681 | \$1,069,857 | \$1,094,785 | |
| Revenue Sources | | | | | | | | | | | |
| No. Bills per FY | 8,049.00 | 8,138.00 | 8,100.00 | 0% | | | | | | | |
| Water Users | 2,002 | 2,027 | 2,017 | 0% | | | | | | | |
| Volume (cubic feet) | 16,759,006 | 17,298,321 | 17,331,188 | 2% | | | | | | | |
| Water User Fee ⁽⁴⁾ | \$1,041,411 | \$929,758 | \$851,239 | -11% | 18.24% | \$851,239 | \$1,006,505 | \$1,006,505 | \$1,006,505 | \$1,006,505 | |
| Misc. Revenues ⁽³⁾ | \$41,235 | \$62,992 | \$43,701 | -5% | 18.24% | \$43,701 | \$51,672 | \$51,672 | \$51,672 | \$51,672 | |
| Water Adjustments ⁽⁸⁾ | \$0 | \$0 | \$0 | | 0% | \$0 | \$0 | \$0 | \$0 | \$0 | |
| Unpaid Bills (Delinquent) ⁽⁸⁾ | \$0 | \$0 | \$0 | | 0% | \$0 | \$0 | \$0 | \$0 | \$0 | |
| Past Due Collections | \$0 | \$0 | \$0 | | 0% | \$0 | \$0 | \$0 | \$0 | \$0 | |
| Total | \$1,082,646 | \$992,750 | \$894,940 | Total | | \$894,940 | \$1,058,177 | \$1,058,177 | \$1,058,177 | \$1,058,177 | |
| | \$64,864 | \$20,952 | -\$162,766 | | Surplus/Deficit | -\$80,000 | \$35,942 | \$12,496 | -\$11,680 | -\$36,608 | |
| | | | | | | | | | Net 4-year | \$ 149 | |

- (1) Used Town Managers FY2019 Budget Values or Audited actual value due to labor transfer of Town & Veolia that skewed the actual YTD 12/31/2019 values.
 - (2) Assume historical CIP costs included in Water Enterprise Expenses contingency line item. Future Distribution system CIP levels per Town Manager Proposed Budget and Water Plant based on VNA recommendation
 - (3) 2017-2019 values based on audit "other" line item. Future revenues assumed to equal 2019 value with rate increases as shown.
 - (4) Based on Audit Values. Future estimates assumed to be equal to FY 2019 value with rate increases as shown
 - (5) 2017-2019 values based on audit. 2020 value based on Town Manager Budget. Future values include inflationary increases as shown
 - (6) FY 2020 value from "Summary of Water Indirect Costs" with inflationary increases in future years
 - (7) VNA Water contract costs prorated based on consumption. Winchendon assumed to be 65% of total consumption
 - (8) AR Reports do not agree with audited values. Assume Adjustments are reflected in the audited water user fee revenue value
- Red values are assumed

TOWN OF WINCHENDON
WATER
BUDGET & REVENUE 2017 - 2024 MODEL RESULTS
SCENARIO 3 - INCREMENTAL ANNUAL USER RATE INCREASES TO BALANCE BUDGET IN 2024 (NET)

| Budget Items | 2017 | | | Average Annual Increase (%) | Assumed Annual Increase (%) | PROJECTED VALUES | | | | |
|--|--------------------|------------------|---------------------|-----------------------------|-----------------------------|-------------------------------------|--------------------|--------------------|--------------------|--------------------|
| | 2017 | 2018 | 2019 ⁽¹⁾ | | | 2020 | 2021 | 2022 | 2023 | 2024 |
| Water Personnel ⁽⁵⁾ | \$172,821 | \$176,285 | \$193,068 | 5% | 3% | \$216,014 | \$222,495 | \$229,170 | \$236,045 | \$243,126 |
| Water Enterprise Expenses ⁽⁵⁾ | \$99,977 | \$112,165 | \$181,307 | 25% | 3% | \$163,550 | \$168,456 | \$173,510 | \$178,715 | \$184,077 |
| Water Enterprise Expenses contingency ⁽²⁾ | \$18,516 | \$8,531 | \$15,000 | -37% | 0% | \$20,000 | \$20,000 | \$20,000 | \$20,000 | \$20,000 |
| Water Enterprise Debt Service | \$214,898 | \$213,077 | \$243,588 | 6% | | See below individual loans listings | | | | |
| Water Indirect (transfer to Gen Fund) ⁽⁶⁾ | \$212,854 | \$166,245 | \$117,943 | -34% | 3% | \$130,895 | \$134,822 | \$138,867 | \$143,033 | \$147,324 |
| Water CIP ⁽²⁾ | \$0 | \$0 | \$0 | | 0% | \$33,183 | \$33,183 | \$33,183 | \$33,183 | \$33,183 |
| Veolia Contract Operations ⁽⁷⁾ | \$279,216 | \$275,995 | \$287,300 | 1% | 3% | \$277,423 | \$285,746 | \$294,318 | \$303,148 | \$312,242 |
| Veolia Contract R&M ⁽⁷⁾ | \$19,500 | \$19,500 | \$19,500 | 0% | 0% | \$19,500 | \$19,500 | \$19,500 | \$19,500 | \$19,500 |
| Dept Service FY20 | | | | | | | | | | |
| Central Street Project | | | | | | \$0 | \$46,500 | \$45,600 | \$44,700 | \$43,800 |
| Ashburnham: DW99-20 | | | | | | \$130,940 | \$0 | \$0 | \$0 | \$0 |
| Ash-Win DW99-20A | | | | | | \$14,139 | \$0 | \$0 | \$0 | \$0 |
| USDA-Water Improvement | | | | | | \$54,384 | \$54,384 | \$54,384 | \$54,384 | \$54,384 |
| Rte 140 Project | | | | | | \$37,150 | \$37,150 | \$37,150 | \$37,150 | \$37,150 |
| Actuals Adjustment (audited values) | | | | | | -\$122,238 | | | | |
| Total | \$1,017,782 | \$971,798 | \$1,057,706 | Total | | \$974,940 | \$1,022,235 | \$1,045,681 | \$1,069,857 | \$1,094,785 |
| Revenue Sources | | | | | | | | | | |
| No.Bills per FY | 8,049.00 | 8,138.00 | 8,100.00 | 0% | | | | | | |
| Water Users | 2,002 | 2,027 | 2,017 | 0% | | | | | | |
| Volume (cubic feet) | 16,759,006 | 17,298,321 | 17,331,188 | 2% | | | | | | |
| Water User Fee ⁽⁴⁾ | \$1,041,411 | \$929,758 | \$851,239 | -11% | 6.82% | \$851,239 | \$909,293 | \$971,307 | \$1,037,550 | \$1,108,311 |
| Misc. Revenues ⁽³⁾ | \$41,235 | \$62,992 | \$43,701 | -5% | 6.82% | \$43,701 | \$46,681 | \$49,865 | \$53,266 | \$56,899 |
| Water Adjustments ⁽⁸⁾ | \$0 | \$0 | \$0 | | 0% | \$0 | \$0 | \$0 | \$0 | \$0 |
| Unpaid Bills (Delinquent) ⁽⁸⁾ | \$0 | \$0 | \$0 | | 0% | \$0 | \$0 | \$0 | \$0 | \$0 |
| Past Due Collections ⁽⁸⁾ | \$0 | \$0 | \$0 | | 0% | \$0 | \$0 | \$0 | \$0 | \$0 |
| Total | \$1,082,646 | \$992,750 | \$894,940 | Total | | \$894,940 | \$955,975 | \$1,021,172 | \$1,090,816 | \$1,165,210 |
| | \$64,864 | \$20,952 | -\$162,766 | | | Surplus/Deficit | -\$80,000 | -\$66,261 | -\$24,509 | \$20,959 |
| | | | | | | | | | Net 4-year | \$ 615 |

(1) Used Town Managers FY2019 Budget Values or Audited actual value due to labor transfer of Town & Veolia that skewed the actual YTD 12/31/2019 values.
(2) Assume historical CIP costs included in Water Enterprise Expenses contingency line item. Future Distribution system CIP levels per Town Manager Proposed Budget and Water Plant based on VNA recommendati
(3) 2017-2019 values based on audit "other" line item. Future revenues assumed to equal 2019 value with rate increases as shown.
(4) Based on Audit Values. Future estimates assumed to be equal to FY 2019 value with rate increases as shown
(5) 2017-2019 values based on audit. 2020 value based on Town Manager Budget. Future values include inflationary increases as shown
(6) FY 2020 value from "Summary of Water Indirect Costs" with inflationary increases in future years
(7) VNA Water contract costs prorated based on consumption. Winchendon assumed to be 65% of total consumption
(8) AR Reports do not agree with audited values. Assume Adjustments are reflected in the audited water user fee revenue value

Red values are assumed

TOWN OF WINCHENDON
SEWER
BUDGET & REVENUE 2017 - 2024 MODEL RESULTS
SCENARIO 1 - SINGLE USER RATE INCREASE TO BALANCE BUDGET IN 2021

| Budget Items | 2017-2019 | | | Average Annual Increase (%) | Assumed Annual Increase (%) | PROJECTED VALUES | | | | |
|---|--------------------|--------------------|---------------------|-----------------------------|-----------------------------|------------------------------------|--------------------|--------------------|--------------------|--------------------|
| | 2017 | 2018 | 2019 ⁽¹⁾ | | | 2020 | 2021 | 2022 | 2023 | 2024 |
| Sewer Personnel ⁽⁵⁾ | \$194,328 | \$203,503 | \$142,037 | -19% | 3% | \$11,500 | \$11,845 | \$12,200 | \$12,566 | \$12,943 |
| Sewer Enterprise Expenses ⁽⁵⁾ | \$450,928 | \$514,347 | \$572,432 | 11% | 3% | \$100,000 | \$103,000 | \$106,090 | \$109,273 | \$112,551 |
| Sewer Enterprise Expenses Contingency ⁽⁹⁾ | \$16,216 | \$111,569 | \$96,000 | 35% | 0% | \$80,000 | \$10,000 | \$10,000 | \$10,000 | \$10,000 |
| Sewer Enterprise Debt Service | \$398,381 | \$403,966 | \$407,565 | 1% | | See below individual loan listings | | | | |
| Sewer Indirect Enterprise (Trsfr to Gen. Fund) ⁽⁶⁾ | \$230,435 | \$185,568 | \$167,948 | -17% | 3% | \$133,516 | \$137,522 | \$141,647 | \$145,897 | \$150,274 |
| Sewer Capital Improvement Program ⁽⁹⁾ | \$0 | \$0 | \$0 | | 0% | \$0 | \$0 | \$0 | \$0 | \$0 |
| Veolia Contract Operations ⁽²⁾ | \$0 | \$0 | \$0 | | 2.50% | \$625,091 | \$640,718 | \$656,736 | \$673,154 | \$689,983 |
| Veolia Contract R&M ⁽²⁾ | \$0 | \$0 | \$0 | | 2.50% | \$101,247 | \$103,778 | \$106,373 | \$109,032 | \$111,758 |
| Dept-FY20 (principal & Interest) | | | | | | | | | | |
| Central Street Project | | | | | | \$0 | \$38,500 | \$37,750 | \$37,000 | \$36,250 |
| MWPat-Sewer 02-05 | | | | | | \$175,985 | \$175,985 | \$175,985 | \$175,985 | \$0 |
| MWPat-Sewer 01-22 | | | | | | \$217,635 | \$217,635 | \$217,635 | \$217,635 | \$0 |
| USDA Sewer-Pump St | | | | | | \$11,833 | \$11,833 | \$11,833 | \$11,833 | \$11,833 |
| MWPat-Sewer CW 03-04 | | | | | | | | | | |
| MWPat-Sewer CW 03-04A | | | | | | | | | | |
| Actuals Adjustment (audited values) | | | | | | -\$147,948 | | | | |
| Total | \$1,290,288 | \$1,418,953 | \$1,385,982 | Total | | \$1,308,860 | \$1,450,817 | \$1,476,250 | \$1,502,376 | \$1,135,592 |
| Revenue Sources | | | | | | | | | | |
| No. Bills per FY | 8,081 | 8,170 | 8,119 | 0% | | | | | | |
| Sewer Users | 1,251 | 1,298 | 1,300 | 2% | | | | | | |
| Water Volume (cubic feet) | 16,759,006 | 17,298,321 | 17,331,188 | 2% | | | | | | |
| Sewer User Fee ⁽⁴⁾ | \$1,014,633 | \$911,992 | \$801,324 | -13% | 38.98% | \$801,324 | \$1,113,680 | \$1,113,680 | \$1,113,680 | \$1,113,680 |
| Sonly User Fees ⁽⁴⁾ | \$0 | \$0 | \$0 | | 38.98% | \$0 | \$0 | \$0 | \$0 | \$0 |
| Misc. Revenues ⁽³⁾ | \$55,595 | \$64,195 | \$19,536 | | 38.98% | \$19,536 | \$27,151 | \$27,151 | \$27,151 | \$27,151 |
| Betterments ⁽⁷⁾ | \$331,305 | \$326,447 | \$277,032 | | 0% | \$310,000 | \$310,000 | \$310,000 | \$310,000 | \$0 |
| Sewer Adjustments ⁽⁸⁾ | \$0 | \$0 | \$0 | | 0% | \$0 | \$0 | \$0 | \$0 | \$0 |
| Sonly Adjustments ⁽⁸⁾ | \$0 | \$0 | \$0 | | 0% | \$0 | \$0 | \$0 | \$0 | \$0 |
| Unpaid Bills (Delinquent) ⁽⁸⁾ | \$0 | \$0 | \$0 | | 0% | \$0 | \$0 | \$0 | \$0 | \$0 |
| Past Due Collections ⁽⁸⁾ | \$0 | \$0 | \$0 | | 0% | \$0 | \$0 | \$0 | \$0 | \$0 |
| Total | \$1,401,533 | \$1,302,634 | \$1,097,892 | Total | | \$1,130,860 | \$1,450,831 | \$1,450,831 | \$1,450,831 | \$1,140,831 |
| | \$111,245 | -\$116,319 | -\$288,090 | Surplus/Deficit | | -\$178,000 | \$15 | -\$25,419 | -\$51,545 | \$5,239 |
| | | | | | | | | | Net 4-year | \$ (71,709) |

- (1) Used Town Managers FY2019 Budget Values due to labor transfer of Town & Veolia that skewed the actual YTD 12/31/2019 values.
- (2) VNA contract costs escalate by CPI, assumed to be 2.5% in future. Repair and Maintenance (R&M) line item allowance also covers CIP and vehicle financing costs
- (3) Miscellaneous revenues based on audited "other" line item. Future revenues assumed to equal 2019 value with rate increases as shown
- (4) Based on Audit Values. Includes Sewer and Sonly users. Future estimates assumed to be equal to FY 2019 value with rate increases as shown
- (5) 2017-2019 values based on audit. 2020 value based on Town Manager Budget. Future values include inflationary increases as shown
- (6) FY 2020 value from "Summary of Wastewater Indirect Costs with inflationary increases in future years
- (7) Audit value. Future values assumed equal to 2020 value. No Betterment payments after 2023
- (8) AR Reports do not agree with audited values. Assume Adjustments are reflected in audited Sewer User Fee revenue value.
- (9) Historically, R&M and CIP costs have been funded with contingency.

TOWN OF WINCHENDON
SEWER
BUDGET & REVENUE 2017 - 2024 MODEL RESULTS
SCENARIO 2 - SINGLE USER RATE INCREASE TO BALANCE BUDGET IN 2024 (NET)

| Budget Items | | | | Average Annual Increase (%) | Assumed Annual Increase (%) | PROJECTED VALUES | | | | |
|--|--------------------|--------------------|---------------------|-----------------------------|-----------------------------|--|--------------------|--------------------|--------------------|--------------------|
| | 2017 | 2018 | 2019 ⁽¹⁾ | | | 2020 | 2021 | 2022 | 2023 | 2024 |
| Sewer Personnel ⁽⁵⁾ | \$194,328 | \$203,503 | \$142,037 | -19% | 3% | \$11,500 | \$11,845 | \$12,200 | \$12,566 | \$12,943 |
| Sewer Enterprise Expenses ⁽⁵⁾ | \$450,928 | \$514,347 | \$572,432 | 11% | 3% | \$100,000 | \$103,000 | \$106,090 | \$109,273 | \$112,551 |
| Sewer Enterprise Expenses Contingency ⁽⁹⁾ | \$16,216 | \$111,569 | \$96,000 | 35% | 0% | \$80,000 | \$10,000 | \$10,000 | \$10,000 | \$10,000 |
| Sewer Enterprise Debt Service | \$398,381 | \$403,966 | \$407,565 | 1% | | See below individual loan listings | | | | |
| Sewer Indirect Enterprise (Trsrfr to Gen. Fund) ⁽⁶⁾ | \$230,435 | \$185,568 | \$167,948 | -17% | 3% | \$133,516 | \$137,521 | \$141,647 | \$145,897 | \$150,273 |
| Sewer Capital Improvement Program ⁽⁹⁾ | \$0 | \$0 | \$0 | | 0% | \$0 | \$0 | \$0 | \$0 | \$0 |
| Veolia Contract Operations ⁽²⁾ | \$0 | \$0 | \$0 | | 2.50% | \$625,091 | \$640,718 | \$656,736 | \$673,154 | \$689,983 |
| Veolia Contract R&M ⁽²⁾ | \$0 | \$0 | \$0 | | 2.50% | \$101,247 | \$103,778 | \$106,373 | \$109,032 | \$111,758 |
| Dept-FY20 (principal & Interest) | | | | | | | | | | |
| Central Street Project | | | | | | \$0 | \$38,500 | \$37,750 | \$37,000 | \$36,250 |
| MWPat-Sewer 02-05 | | | | | | \$175,985 | \$175,985 | \$175,985 | \$175,985 | \$0 |
| MWPat-Sewer 01-22 | | | | | | \$217,635 | \$217,635 | \$217,635 | \$217,635 | \$0 |
| USDA Sewer-Pump St | | | | | | \$11,833 | \$11,833 | \$11,833 | \$11,833 | \$11,833 |
| MWPat-Sewer CW 03-04 | | | | | | | | | | |
| MWPat-Sewer CW 03-04A | | | | | | | | | | |
| Actuals Adjustment (audited values) | | | | | | Paid through General Fund Paid through General Fund | | | | |
| | | | | | | -\$147,948 | | | | |
| Total | \$1,290,288 | \$1,418,953 | \$1,385,982 | Total | | \$1,308,859 | \$1,450,816 | \$1,476,250 | \$1,502,376 | \$1,135,592 |
| Revenue Sources | | | | | | | | | | |
| No Bills per FY | 8,081 | 8,170 | 8,119 | 0% | | | | | | |
| Sewer Users | 1,251 | 1,298 | 1,300 | 2% | | | | | | |
| Water Volume (cubic feet) | 16,759,006 | 17,298,321 | 17,331,188 | 2% | | | | | | |
| Sewer User Fee ⁽⁴⁾ | \$1,014,633 | \$911,992 | \$801,324 | -13% | 41.17% | \$801,324 | \$1,131,229 | \$1,131,229 | \$1,131,229 | \$1,131,229 |
| Sonly User Fees ⁽⁴⁾ | \$0 | \$0 | \$0 | | 41.17% | \$0 | \$0 | \$0 | \$0 | \$0 |
| Misc. Revenues ⁽³⁾ | \$55,595 | \$64,195 | \$19,536 | | 41.17% | \$19,536 | \$27,579 | \$27,579 | \$27,579 | \$27,579 |
| Betterments ⁽⁷⁾ | \$331,305 | \$326,447 | \$277,032 | | 0% | \$310,000 | \$310,000 | \$310,000 | \$310,000 | \$0 |
| Sewer Adjustments ⁽⁸⁾ | \$0 | \$0 | \$0 | | 0% | \$0 | \$0 | \$0 | \$0 | \$0 |
| Sonly Adjustments ⁽⁸⁾ | \$0 | \$0 | \$0 | | 0% | \$0 | \$0 | \$0 | \$0 | \$0 |
| Unpaid Bills (Delinquent) ⁽⁸⁾ | \$0 | \$0 | \$0 | | 0% | \$0 | \$0 | \$0 | \$0 | \$0 |
| Past Due Collections ⁽⁸⁾ | \$0 | \$0 | \$0 | | 0% | \$0 | \$0 | \$0 | \$0 | \$0 |
| Total | \$1,401,533 | \$1,302,634 | \$1,097,892 | Total | | \$1,130,860 | \$1,468,808 | \$1,468,808 | \$1,468,808 | \$1,158,808 |
| | \$111,245 | -\$116,319 | -\$288,090 | Surplus/Deficit | | -\$177,999 | \$17,992 | -\$7,442 | -\$33,567 | \$23,216 |
| | | | | | | | | | Net 4-year | \$ 199 |

- (1) Used Town Managers FY2019 Budget Values due to labor transfer of Town & Veolia that skewed the actual YTD 12/31/2019 values.
- (2) VNA contract costs escalate by CPI, assumed to be 2.5% in future. Repair and Maintenance (R&M) line item allowance also covers CIP and vehicle financing costs
- (3) Miscellaneous revenues based on audited "other" line item. Future revenues assumed to equal 2019 value with rate increases as shown
- (4) Based on Audit Values. Includes Sewer and Sonly users. Future estimates assumed to be equal to FY 2019 value with rate increases as shown
- (5) 2017-2019 values based on audit. 2020 value based on Town Manager Budget. Future values include inflationary increases as shown
- (6) FY 2020 value from "Summary of Wastewater Indirect Costs with inflationary increases in future years
- (7) Audit value. Future values assumed equal to 2020 value. No Betterment payments after 2023
- (8) AR Reports do not agree with audited values. Assume Adjustments are reflected in audited Sewer User Fee revenue value.
- (9) Historically, R&M and CIP costs have been funded with contingency.

TOWN OF WINCHENDON
SEWER
BUDGET & REVENUE 2017 - 2024 MODEL RESULTS
SCENARIO 3 - INCREMENTAL ANNUAL USER RATE INCREASES TO BALANCE BUDGET IN 2024 (NET)

| Budget Items | 2017 | | | 2018 | | | 2019 ⁽¹⁾ | | | Average Annual Increase (%) | Assumed Annual Increase (%) | PROJECTED VALUES | | | | |
|---|--------------------|--------------------|---------------------|--------------|--------|------------------------------------|---------------------|--------------------|---------------------|-----------------------------|-----------------------------|------------------|------|------|------|------|
| | 2017 | 2018 | 2019 ⁽¹⁾ | 2017 | 2018 | 2019 ⁽¹⁾ | 2017 | 2018 | 2019 ⁽¹⁾ | | | 2020 | 2021 | 2022 | 2023 | 2024 |
| Sewer Personnel ⁽⁵⁾ | \$194,328 | \$203,503 | \$142,037 | -19% | 3% | \$11,500 | \$11,845 | \$12,200 | \$12,566 | \$12,943 | | | | | | |
| Sewer Enterprise Expenses ⁽⁵⁾ | \$450,928 | \$514,347 | \$572,432 | 11% | 3% | \$100,000 | \$103,000 | \$106,090 | \$109,273 | \$112,551 | | | | | | |
| Sewer Enterprise Expenses Contingency ⁽⁹⁾ | \$16,216 | \$111,569 | \$96,000 | 35% | 0% | \$80,000 | \$10,000 | \$10,000 | \$10,000 | \$10,000 | | | | | | |
| Sewer Enterprise Debt Service | \$398,381 | \$403,966 | \$407,565 | 1% | | See below individual loan listings | | | | | | | | | | |
| Sewer Indirect Enterprise (Trsfr to Gen. Fund) ⁽⁶⁾ | \$230,435 | \$185,568 | \$167,948 | -17% | 3% | \$133,516 | \$137,522 | \$141,647 | \$145,897 | \$150,274 | | | | | | |
| Sewer Capital Improvement Program ⁽⁹⁾ | \$0 | \$0 | \$0 | | 0% | \$0 | \$0 | \$0 | \$0 | \$0 | | | | | | |
| Veolia Contract Operations ⁽²⁾ | \$0 | \$0 | \$0 | | 2.50% | \$625,091 | \$640,718 | \$656,736 | \$673,154 | \$689,983 | | | | | | |
| Veolia Contract R&M ⁽²⁾ | \$0 | \$0 | \$0 | | 2.50% | \$101,247 | \$103,778 | \$106,373 | \$109,032 | \$111,758 | | | | | | |
| Dept-FY20 (principal & Interest) | | | | | | | | | | | | | | | | |
| Central Street Project | | | | | | \$0 | \$38,500 | \$37,750 | \$37,000 | \$36,250 | | | | | | |
| MWPat-Sewer 02-05 | | | | | | \$175,985 | \$175,985 | \$175,985 | \$175,985 | \$0 | | | | | | |
| MWPat-Sewer 01-22 | | | | | | \$217,635 | \$217,635 | \$217,635 | \$217,635 | \$0 | | | | | | |
| USDA Sewer-Pump St | | | | | | \$11,833 | \$11,833 | \$11,833 | \$11,833 | \$11,833 | | | | | | |
| MWPat-Sewer CW 03-04 | | | | | | | | | | | Paid through General Fund | | | | | |
| MWPat-Sewer CW 03-04A | | | | | | | | | | | Paid through General Fund | | | | | |
| Actuals Adjustment (audited values) | | | | | | -\$147,948 | | | | | | | | | | |
| Total | \$1,290,288 | \$1,418,953 | \$1,385,982 | Total | | \$1,308,860 | \$1,450,817 | \$1,476,250 | \$1,502,376 | \$1,135,592 | | | | | | |
| Revenue Sources | | | | | | | | | | | | | | | | |
| No. Bills per FY | 8,081 | 8,170 | 8,119 | 0% | | | | | | | | | | | | |
| Sewer Users | 1,251 | 1,298 | 1,300 | 2% | | | | | | | | | | | | |
| Water Volume (cubic feet) | 16,759,006 | 17,298,321 | 17,331,188 | 2% | | | | | | | | | | | | |
| Sewer User Fee ⁽⁴⁾ | \$1,014,633 | \$911,992 | \$801,324 | -13% | 14.28% | \$801,324 | \$915,753 | \$1,046,523 | \$1,195,966 | \$1,366,750 | | | | | | |
| Sonly User Fees ⁽⁴⁾ | \$0 | \$0 | \$0 | | 14.28% | \$0 | \$0 | \$0 | \$0 | \$0 | | | | | | |
| Misc. Revenues ⁽³⁾ | \$55,595 | \$64,195 | \$19,536 | | 14.28% | \$19,536 | \$22,326 | \$25,514 | \$29,157 | \$33,321 | | | | | | |
| Betterments ⁽⁷⁾ | \$331,305 | \$326,447 | \$277,032 | -10% | 0% | \$310,000 | \$310,000 | \$310,000 | \$310,000 | \$0 | | | | | | |
| Sewer Adjustments ⁽⁸⁾ | \$0 | \$0 | \$0 | | 0% | \$0 | \$0 | \$0 | \$0 | \$0 | | | | | | |
| Sonly Adjustments ⁽⁸⁾ | \$0 | \$0 | \$0 | | 0% | \$0 | \$0 | \$0 | \$0 | \$0 | | | | | | |
| Unpaid Bills (Delinquent) ⁽⁸⁾ | \$0 | \$0 | \$0 | | 0% | \$0 | \$0 | \$0 | \$0 | \$0 | | | | | | |
| Past Due Collections ⁽⁸⁾ | \$0 | \$0 | \$0 | | 0% | \$0 | \$0 | \$0 | \$0 | \$0 | | | | | | |
| Total | \$1,401,533 | \$1,302,634 | \$1,097,892 | Total | | \$1,130,860 | \$1,248,079 | \$1,382,036 | \$1,535,123 | \$1,400,071 | | | | | | |
| | \$111,245 | -\$116,319 | -\$288,090 | | | Surplus/Deficit | -\$178,000 | -\$202,738 | -\$94,214 | \$32,747 | \$264,479 | | | | | |
| | | | | | | | | | | | Net 4-year | \$ | 275 | | | |

- (1) Used Town Managers FY2019 Budget Values due to labor transfer of Town & Veolia that skewed the actual YTD 12/31/2019 values.
- (2) VNA contract costs escalate by CPI, assumed to be 2.5% in future. Repair and Maintenance (R&M) line item allowance also covers CIP and vehicle financing costs
- (3) Miscellaneous revenues based on audited "other" line item. Future revenues assumed to equal 2019 value with rate increases as shown
- (4) Based on Audit Values. Includes Sewer and Sonly users. Future estimates assumed to be equal to FY 2019 value with rate increases as shown
- (5) 2017-2019 values based on audit. 2020 value based on Town Manager Budget. Future values include inflationary increases as shown
- (6) FY 2020 value from "Summary of Wastewater Indirect Costs with inflationary increases in future years
- (7) Audit value. Future values assumed equal to 2020 value. No Betterment payments after 2023
- (8) AR Reports do not agree with audited values. Assume Adjustments are reflected in audited Sewer User Fee revenue value.
- (9) Historically, R&M and CIP costs have been funded with contingency.

Attachment 4
Enterprise Funds Audit Reports FY 2017-2019



WINCHENDON - ENTERPRISE FUND ANALYSIS

| | Water | | | Sewer | | |
|-------------------|--------------|------------|--------------|--------------|--------------|--------------|
| | 2017 | 2018 | 2019 | 2017 | 2018 | 2019 |
| Revenues | | | | | | |
| User fees | \$ 1,041,411 | \$ 929,758 | \$ 851,239 | \$ 1,014,633 | \$ 911,992 | \$ 801,324 |
| Betterments | - | - | - | 331,305 | 326,447 | 277,032 |
| Other | 41,235 | 62,992 | 43,701 | 55,595 | 64,195 | 19,536 |
| Total Revenues | 1,082,646 | 992,750 | 894,940 | 1,401,533 | 1,302,634 | 1,097,892 |
| Expenses | | | | | | |
| Payroll costs | 172,821 | 176,285 | 193,068 | 194,328 | 203,503 | 142,037 |
| Other | 417,209 | 416,191 | 503,107 | 467,144 | 625,916 | 668,432 |
| Debt service | 214,898 | 213,077 | 243,588 | 398,381 | 403,966 | 407,565 |
| Total Expenses | 804,928 | 805,553 | 939,763 | 1,059,853 | 1,233,385 | 1,218,034 |
| Transfers | (212,854) | (166,245) | (117,943) | (230,435) | (185,568) | (167,948) |
| Surplus/(Deficit) | \$ 64,864 | \$ 20,952 | \$ (162,766) | \$ 111,245 | \$ (116,319) | \$ (288,090) |

Per our notes, collection activity in fiscal 2017 became much more aggressive which caused a one year spike in revenue as amounts billed and outstanding at the end of 2016 were much lower at the end of 2017.

Per our notes, 2018 was a seasonally good year for water usage due to less precipitation and more demand and 2019 was opposite.

Attachment 5
Retained Earnings Accounts Expenditures and
Status FY2017-2020

Bal 4079,00

| | FY 17 | FY 18 | FY 19 | FY 20 |
|------------|---|--------------------------------|--------------------------------|--------------------------------|
| Water | Retained Spent \$ 202,000.00 | \$ 26,501.00 | \$ 116,913.00 | \$ 80,000.00 |
| | | | | \$ 425,414.00 |
| Wastewater | Retained Spent \$ 100,000.00 \$ 270,000.00 | \$ 129,099.00 \$ 303,250.00 | \$ 177,201.00 \$ 272,200.00 | \$ 178,000.00 \$ 310,000.00 |
| | | | | betterments |
| | | | | betterments |
| | | | | \$ 584,300.00 |

Bal 41559.90

Spent

Attachment 6
Summary of Indirect Costs FY 2020



Town of Winchendon
Summary of Wastewater Indirect Costs
FY20

Enterprise Fund: WASTEWATER

| | | |
|--------------------|--------------------------|----------|
| TOWN BUDGET | DEPARTMENT BUDGET | % |
| \$ 16,342,538.85 | \$ 1,458,552.60 | 8.9% |

Departmental Indirect Cost Analysis

| | <u>FY20 Indirect Allocation</u> | <u>FY20 Total Budget</u> | <u>FY20 % of Budget</u> |
|-------------------------------|-------------------------------------|------------------------------|-----------------------------|
| HEALTH INSURANCE | | | ACTUAL |
| PENSION (Per WRRS) | | \$ - | ACTUAL |
| SHARED EMPLOYEES | | | |
| Accountant | \$ 11,890.58 | \$ 133,229.52 | 8.9% |
| Assessors | \$ 8,357.89 | \$ 93,647.00 | 8.9% |
| Treasurer Collector | \$ 14,632.50 | \$ 163,951.70 | 8.9% |
| Law | \$ 4,462.44 | \$ 50,000.00 | 8.9% |
| Information Technology | \$ 6,374.88 | \$ 71,428.10 | 8.9% |
| Community Development | \$ 10,667.56 | \$ 119,526.07 | 8.9% |
| Dept of Public Works Admin | \$ 49,034.10 | \$ 148,588.20 | 33.0% |
| Dept of Public Works Fleet | \$ 8,806.31 | \$ 98,671.42 | 8.9% |
| TOTAL SHARED EMPLOYEES | \$ 114,226.26 | \$ 879,042.01 | |
| OTHER | | | |
| Accrual | | | ACTUAL |
| General Insurance | \$ 17,290.00 | | ACTUAL |
| Workmens Comp | | | ACTUAL |
| Medicare | | \$ 202,074.71 | 2.45% |
| Audit | \$ 2,000.00 | \$ 40,000.00 | ACTUAL |
| TOTAL OTHER | \$ 19,290.00 | \$ 242,074.71 | |
| TOTAL | \$ 133,516.26 | \$ 1,121,116.72 | |

**Town of Winchendon
Summary of Water Indirect Costs
FY20**

Enterprise Fund: WATER

| | | | |
|--|--------------------|--------------------------|----------|
| | TOWN BUDGET | DEPARTMENT BUDGET | % |
| | \$ 16,342,538.85 | \$ 1,106,799.52 | 6.8% |

Departmental Indirect Cost Analysis

| | <u>FY20 Indirect Allocation</u> | <u>FY20 Total Budget</u> | <u>FY20 % of Budget</u> |
|---|-------------------------------------|------------------------------|-----------------------------|
| HEALTH INSURANCE | \$ - | | ACTUAL |
| PENSION (Per WRRS) | \$ 21,257.00 | | ACTUAL |
| SHARED EMPLOYEES | | | |
| Accountant | \$ 9,022.98 | \$ 133,229.52 | 6.8% |
| Assessors | \$ 6,342.25 | \$ 93,647.00 | 6.8% |
| Treasurer Collector | \$ 11,103.64 | \$ 163,951.70 | 6.8% |
| Law | \$ 3,386.25 | \$ 50,000.00 | 6.8% |
| Information Technology | \$ 4,837.47 | \$ 71,428.10 | 6.8% |
| Community Development | \$ 8,094.91 | \$ 119,526.07 | 6.8% |
| Dept of Public Works Dir. & Support Staff | \$ 49,034.10 | \$ 148,588.20 | 33.0% |
| Dept of Public Works Fleet | \$ 6,682.53 | \$ 98,671.42 | 6.8% |
| TOTAL SHARED EMPLOYEES | \$ 98,504.14 | \$ 879,042.01 | |
| OTHER | | | |
| Accrual | | | ACTUAL |
| General Insurance | \$ 6,015.00 | | ACTUAL |
| Workmens Comp | \$ 3,119.00 | | ACTUAL |
| Medicare | | \$ 203,410.84 | 2.45% |
| Audit | \$ 2,000.00 | \$ 40,000.00 | ACTUAL |
| TOTAL OTHER | \$ 11,134.00 | \$ 243,410.84 | |
| TOTAL | \$ 130,895.14 | \$ 1,122,452.85 | |

Attachment 7
Town of Winchendon Wastewater Treatment
Facility 5-Year Capital Plan (Veolia, November
30, 2019)





November 30, 2019

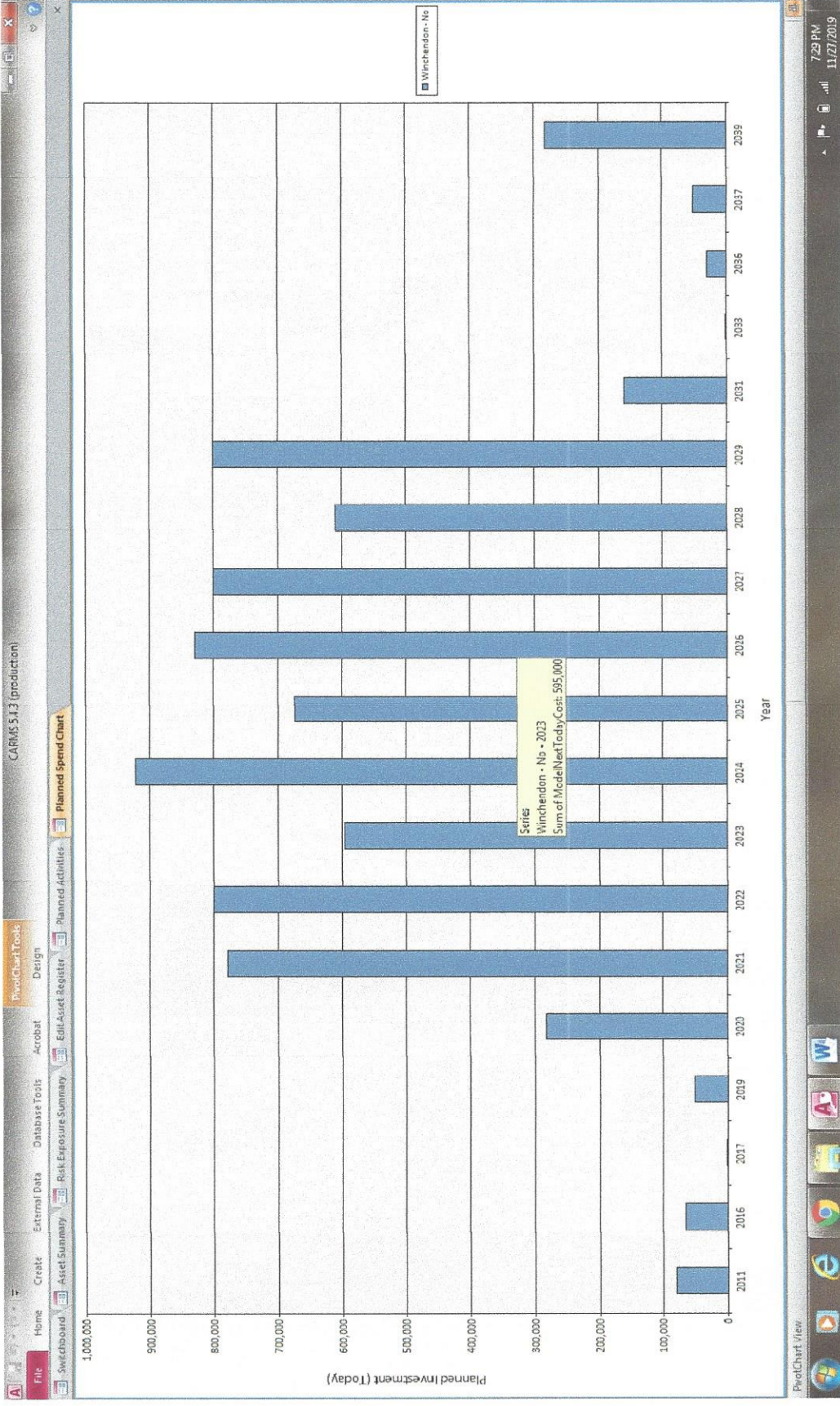
Town of Winchendon
Dept. of Public Works
109 Front Street
Winchendon, MA 01475
Attn: Al Gallant

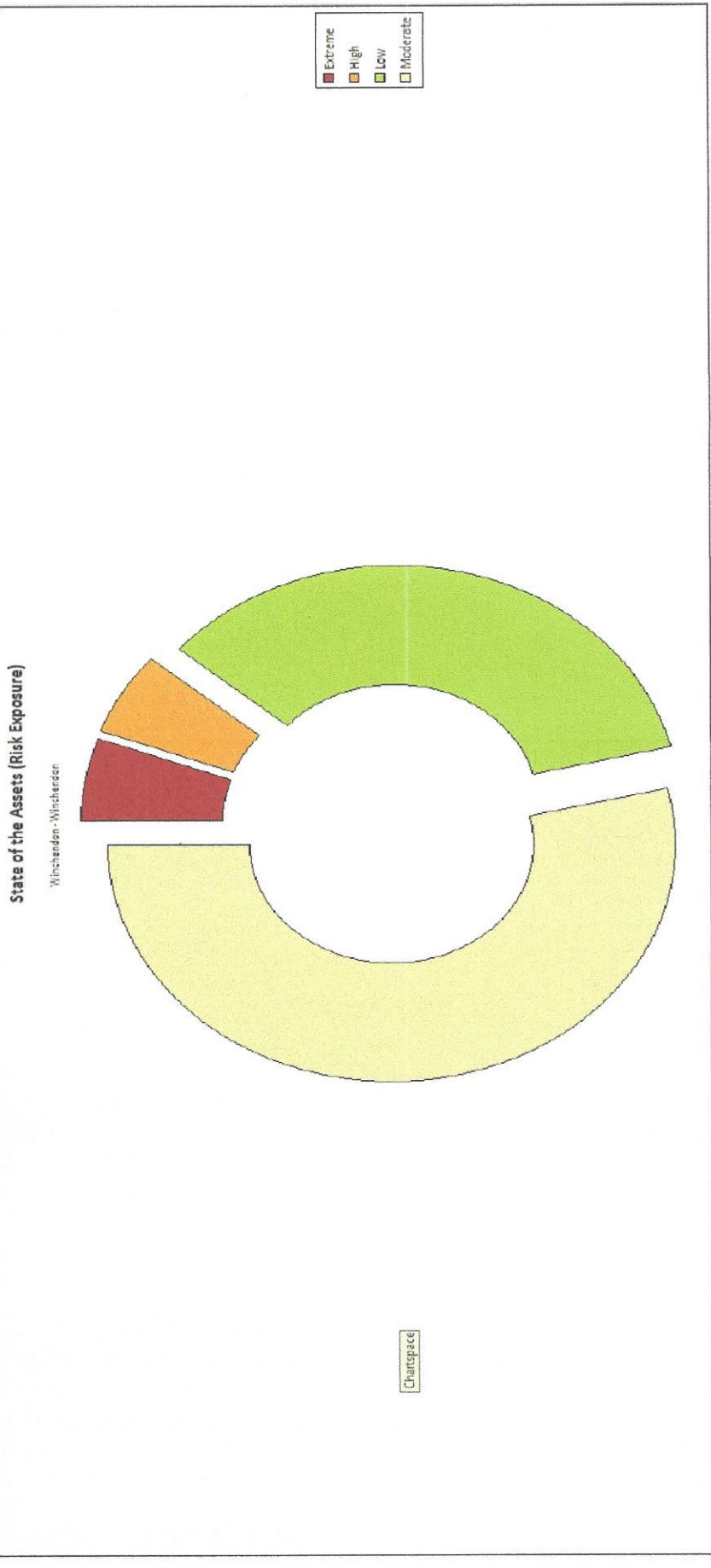
Re: Town of Winchendon, MA
5 Year Capital Plan

This letter presents the 5 Year Capital Plan required under Item #11, in the Scope of Services for the Agreement to Operate and Maintain the Wastewater Treatment Facility for the Town of Winchendon. The 5-year Capital Improvement Plan will aid the Town in identifying and budgeting for major repairs and capital expenditures that will be necessary at the FACILITY to restore, maintain, replace or upgrade the FACILITY or equipment for efficiency, safety, function and/or compliance with current and anticipated regulatory requirements. It is intended that this program will be updated every year throughout the term of the agreement between Veolia and the Town for the O&M of the wastewater plant.

Veolia utilized our Contract Asset Renewal Management System (CARMS) model, a proprietary asset model that was used as the Capital Planning tool for the AWJWA water facility. Matt Johnson, Veolia's Project Manager with our Capital Program Management Group, in the Northeast, spent some time at the Winchendon wastewater plant, meeting with staff to discuss the plant process and needs, as well as completing an asset inventory list and condition assessment. He loaded this information into the CARMS model which produced a 10 year capital plan. The overall outputs of the model recommend a capital budget of \$650,000 per year, however Matt has suggested \$500,000 per year based on how well the plant has been taken care of and the low run hours. Matt has provided screen shots of the capital plan model for Winchendon and those screen shots are included below as well as the asset inventory list.

| System | Asset | Code | Asset Type | Criticality | Condition | Exposure | Risk Control Comments | CMMS Tag | Resid Life | Interv Slay | Due (no adjust) | Activity |
|--------------------------|--|------|------------------------|---------------------|-------------|----------|-----------------------|----------|------------|-------------|-----------------|-----------|
| Instrumentation | PLC 1 | | Unspecified Asset Type | 3 - Critical | 4 - Fair | Extreme | | | 8.2 | Not defined | 1/1/2025 | REPLACE |
| Headworks | Sewage Grincer 3 | | Unspecified Asset Type | 2 - Low criticality | 4 - Fair | High | | | 4.2 | Not defined | 1/1/2024 | REPLACE |
| Solids Processing | FAS Pump 3 | | Unspecified Asset Type | 2 - Low criticality | 4 - Fair | High | | | 3.2 | Not defined | 1/1/2023 | REPLACE |
| Solids Processing | Gravity Thickener Mixer | | Unspecified Asset Type | 3 - Critical | 4 - Fair | Extreme | | | 0.0 | Not defined | 1/1/2011 | REPLACE |
| Instrumentation | SCADA System | | Unspecified Asset Type | 3 - Critical | 4 - Fair | Extreme | | | 8.2 | Not defined | 1/1/2025 | REPLACE |
| Instrumentation | PLC 3 | | Unspecified Asset Type | 3 - Critical | 4 - Fair | Extreme | | | 8.2 | Not defined | 1/1/2025 | REPLACE |
| Instrumentation | PLC 2 | | Unspecified Asset Type | 3 - Critical | 4 - Fair | Extreme | | | 8.2 | Not defined | 1/1/2025 | REPLACE |
| Solids Processing | Gravity Thickener 1 | | Unspecified Asset Type | 3 - Critical | 4 - Fair | Extreme | | | 5.2 | Not defined | 1/1/2025 | REPLACE |
| Chemical Metering System | Sodium Hydroxide Storage Tank Mixer | | Unspecified Asset Type | 2 - Low criticality | 4 - Fair | High | | | 0.0 | Not defined | 1/1/2011 | REPLACE |
| Gates and Valves | Headworks Influent Channel Gate 2 | | Unspecified Asset Type | 2 - Low criticality | 3 - Average | Moderate | | | 1.2 | Not defined | 1/1/2011 | Returbish |
| Gates and Valves | Headworks Effluent Channel Gate 1 | | Unspecified Asset Type | 2 - Low criticality | 3 - Average | Moderate | | | 1.2 | Not defined | 1/1/2011 | Returbish |
| Gates and Valves | Headworks Effluent Channel Gate 2 | | Unspecified Asset Type | 2 - Low criticality | 3 - Average | Moderate | | | 1.2 | Not defined | 1/1/2011 | Returbish |
| Gates and Valves | Aeration Basin Influent Channel Gate 1 | | Unspecified Asset Type | 2 - Low criticality | 3 - Average | Moderate | | | 1.2 | Not defined | 1/1/2011 | Returbish |
| Gates and Valves | Aeration Basin Influent Channel Gate 2 | | Unspecified Asset Type | 2 - Low criticality | 3 - Average | Moderate | | | 1.2 | Not defined | 1/1/2011 | Returbish |





| System | Asset Name | ASSETS tag | DOC Title | Loc Me | First Installed | Plan Replace Cost | Plan Refurb Cost | Plan Interval (Years) | Plan Refurb Cycle | Pror mm | Criticality | Condi tion | D C O n C o n d i t i o n | Risk Exposu re | Information |
|--------------------------|---|---------------|--------------|-----------|--------------------|-------------------------|------------------------|-----------------------------|-------------------------|------------|-------------|---------------|---|---|-------------|
| Water Booster System | Plant Water Pump 1 | | | | 1/1/2005 | 50,000 | 5000 | 10 | 1 | 1 | 2 | 3 | 3 | 6 15 HP | |
| Water Booster System | Plant Water Pump 2 | | | | 1/2/2005 | 50,000 | 5000 | 10 | 1 | 1 | 2 | 3 | 3 | 6 15 HP | |
| Water Booster System | Plant Water Pump 3 | | | | 1/3/2005 | 50,000 | 5000 | 10 | 1 | 1 | 2 | 3 | 3 | 6 15 HP | |
| Water-Booster System | LP Plant Water Pump 1 | | | | 1/4/2005 | 8,000 | 1000 | 5 | 5 | 1 | 1 | 2 | 2 | 2 Hp | |
| Water-Booster System | LP Plant Water Pump 2 | | | | 1/1/2001 | 8,000 | 1000 | 5 | 5 | 1 | 1 | 2 | 2 | 2 Hp | |
| Water-Booster System | BFP Booster Pump 1 | | | | 1/1/2001 | 14,000 | 2000 | 5 | 5 | 1 | 1 | 2 | 2 | 2 7.5 HP | |
| Water-Booster System | BFP Booster Pump 2 | | | | 1/1/2001 | 14,000 | 2000 | 5 | 5 | 1 | 1 | 2 | 2 | 2 7.5 HP | |
| Headworks | Parshall Flume | | | | 1/1/2001 | 25,000 | 2500 | 20 | 20 | 2 | 2 | 3 | 3 | 6 5 MGD Capacity | |
| BNR | Submersible Mixer 1 | | | | 1/1/2001 | 7,000 | 1000 | 10 | 2 | 2 | 2 | 3 | 3 | 6 1.2 HP ,1444 gpm capacity | |
| BNR | Submersible Mixer 2 | | | | 1/1/2001 | 7,000 | 1000 | 10 | 2 | 2 | 2 | 3 | 3 | 6 1.2 HP ,1444 gpm capacity | |
| BNR | Submersible Mixer 3 | | | | 1/1/2001 | 7,000 | 1000 | 10 | 2 | 2 | 2 | 3 | 3 | 6 1.2 HP ,1444 gpm capacity | |
| BNR | Submersible Mixer 4 | | | | 1/1/2001 | 7,000 | 1000 | 10 | 2 | 2 | 2 | 3 | 3 | 6 1.2 HP ,1444 gpm capacity | |
| BNR | Submersible Mixer 5 | | | | 1/1/2001 | 7,000 | 1000 | 10 | 2 | 2 | 2 | 3 | 3 | 6 2.3 HP ,1714 gpm capacity | |
| BNR | Submersible Mixer 6 | | | | 1/1/2001 | 7,000 | 1000 | 10 | 2 | 2 | 2 | 3 | 3 | 6 2.3 HP ,1714 gpm capacity | |
| Chemical Metering System | Sodium Hydroxide Storage Tank Mixer | | | | 1/1/2001 | 5,000 | 1000 | 10 | 10 | 2 | 2 | 3 | 3 | 6 2 HP, propeller mixer | |
| Chemical Metering System | Sodium Hydroxide Storage Tank Mixer | | | | 1/1/2001 | 5,000 | 1000 | 10 | 10 | 2 | 2 | 3 | 3 | 6 2 HP, propeller mixer | |
| Chemical Metering System | Sodium Hydroxide Storage Tank Mixer | | | | 1/1/2001 | 5,000 | 1000 | 10 | 10 | 2 | 2 | 4 | 4 | 8 2 HP, propeller mixer | |
| Chemical Metering System | Potassium Permanganate Storage Tank Mixer (Tank - No Mixer) | | | | 1/1/2001 | 5,000 | 5,000 | 10 | 10 | 1 | 1 | 3 | 3 | 3 0.5 HP, propeller mixer 1.5 HP, pedestal mounted | |
| Solids Processing | Gravity Thickener Mixer | | | | 1/1/2001 | 1,000 | 1,000 | 10 | 10 | 3 | 3 | 4 | 4 | 12 open tank mixer 10 gph pumping capacity, | |
| Chemical Metering System | PAC Pump 1 | | | | 1/1/2001 | 4,000 | 1000 | 5 | 5 | 2 | 2 | 2 | 2 | 4 1/3 HP 10 gph pumping capacity, | |
| Chemical Metering System | PAC Pump 2 | | | | 1/1/2001 | 4,000 | 1000 | 5 | 5 | 2 | 2 | 2 | 2 | 4 1/3 HP 10 gph pumping capacity, | |
| Chemical Metering System | PAC Pump 3 | | | | 1/1/2001 | 4,000 | 1000 | 5 | 5 | 2 | 2 | 2 | 2 | 4 1/3 HP 10 gph pumping capacity, | |
| Chemical Metering System | PAC Pump 4 | | | | 1/1/2001 | 4,000 | 1000 | 5 | 5 | 2 | 2 | 2 | 2 | 4 1/3 HP 1 gph pumping capacity, 1/3 | |
| Chemical Metering System | Sodium Hydroxide Pump 1 | | | | 1/1/2001 | 4,000 | 1000 | 5 | 5 | 2 | 2 | 2 | 2 | 26.4 gph pumping capacity, | |
| Chemical Metering System | Sodium Hydroxide Pump 2 | | | | 1/1/2001 | 4,000 | 1000 | 5 | 5 | 2 | 2 | 2 | 2 | 4 1 HP 26.4 gph pumping capacity, | |
| Chemical Metering System | Sodium Hypochlorite Pump 1 | | | | 1/1/2001 | 4,000 | 1000 | 5 | 5 | 1 | 1 | 2 | 2 | 5 gph pumping capacity, 1/3 | |
| Chemical Metering System | Sodium Hypochlorite Pump 2 | | | | 1/1/2001 | 4,000 | 1000 | 5 | 5 | 1 | 1 | 2 | 2 | 5 ph pumping capacity, 1/3 | |
| Chemical Metering System | Sodium Hypochlorite Pump 3 | | | | 1/1/2001 | 4,000 | 1000 | 5 | 5 | 1 | 1 | 2 | 2 | 5gph pumping capacity, 1/3 | |
| Chemical Metering System | BFP Poly Feed Pump | | | | 1/1/2001 | 6,000 | 2000 | 5 | 5 | 1 | 1 | 2 | 2 | 7 gph pumping capacity, 1 | |
| Chemical Metering System | Plant Poly Feed Pump | | | | 1/1/2001 | 3,000 | 2000 | 5 | 5 | 1 | 1 | 3 | 3 | 1.7 gph pumping capacity, 1 3 HP | |
| Chemical Storage Tanks | PAC Tank 1 | | | | 1/1/2001 | 7,000 | 7,000 | 15 | 15 | 1 | 1 | 3 | 3 | 3 HDXLPE 1800 gallon capacity, | |
| Chemical Storage Tanks | PAC Tank 2 | | | | 1/1/2001 | 7,000 | 7,000 | 15 | 15 | 1 | 1 | 3 | 3 | 3 HDXLPE 1800 gallon capacity, | |

| | | | | | | | |
|-------------------------|---|----------|--------|----|---|---|--|
| Chemical Storage Tanks | PAC Tank 3 | 1/1/2001 | 7,000 | 15 | 1 | 3 | 1800 gallon capacity, 3 HDXLPE |
| Chemical Storage Tanks | Sodium Hydroxide Slurry Storage Tank 1 | 1/1/2001 | 8,000 | 15 | 2 | 3 | 6 1500 Gallon capacity, HDXLPE |
| Chemical Storage Tanks | Sodium Hydroxide Slurry Storage Tank 2 | 1/1/2001 | 8,000 | 15 | 2 | 3 | 6 1500 Gallon capacity, HDXLPE |
| Chemical Storage Tanks | Sodium Hydroxide Slurry Storage Tank 3 | 1/1/2001 | 8,000 | 15 | 2 | 3 | 6 1500 Gallon capacity, HDXLPE |
| Chemical Storage Tanks | Sodium Hypochlorite Storage Tank 1 | 1/1/2001 | 5,000 | 15 | 1 | 2 | 2 HDXLPE 1500 Gallon capacity, |
| Chemical Storage Tanks | Sodium Hypochlorite Storage Tank 2 | 1/1/2001 | 5,000 | 15 | 1 | 2 | 2 HDXLPE 1500 Gallon capacity, |
| Chemical Storage Tanks | Storage Tank 1 | 1/1/2001 | 5,000 | 15 | 1 | 2 | 2 100 kg capacity, HDXLPE |
| Gates and Valves | Headworks Influent Channel Gate 1 | 1/1/2001 | 18,000 | 10 | 2 | 3 | 6 3' x 4'-3" |
| Gates and Valves | Headworks Influent Channel Gate 2 | 1/1/2001 | 18,000 | 10 | 1 | 3 | 6 3' x 4'-3" |
| Gates and Valves | Headworks Effluent Channel Gate 1 | 1/1/2001 | 18,000 | 10 | 1 | 3 | 6 3' x 5' |
| Gates and Valves | Headworks Effluent Channel Gate 2 | 1/1/2001 | 18,000 | 10 | 1 | 3 | 6 3' x 5' |
| Gates and Valves | Aeration Basin Influent Channel Gate 1 | 1/1/2001 | 12,000 | 10 | 2 | 3 | 6 2' x 2' |
| Gates and Valves | Aeration Basin Influent Channel Gate 2 | 1/1/2001 | 12,000 | 10 | 1 | 3 | 6 2' x 2' |
| Gates and Valves | Aeration Basin Influent Channel Gate 3 | 1/1/2001 | 12,000 | 10 | 2 | 3 | 6 2' x 2' |
| Gates and Valves | Aeration Basin Influent Channel Gate 4 | 1/1/2001 | 12,000 | 10 | 1 | 3 | 6 2' x 2' |
| Gates and Valves | Aeration Basin Influent Channel Gate 5 | 1/1/2001 | 12,000 | 10 | 2 | 3 | 6 1' x 1' |
| Gates and Valves | Aeration Basin Influent Channel Gate 6 | 1/1/2001 | 12,000 | 10 | 1 | 3 | 6 1' x 1' |
| Gates and Valves | Aeration Basin Influent Channel Gate 7 | 1/1/2001 | 12,000 | 10 | 2 | 3 | 6 1' x 1' |
| Gates and Valves | Aeration Basin Influent Channel Gate 8 | 1/1/2001 | 12,000 | 10 | 2 | 3 | 6 2' x 2'-1" |
| Gates and Valves | Aeration Basin Influent Channel Gate 9 | 1/1/2001 | 12,000 | 10 | 1 | 3 | 6 2' x 3'-1" |
| Gates and Valves | Aeration Basin Effluent Gate 1 | 1/1/2001 | 12,000 | 10 | 1 | 3 | 6 2' x 3'-1" |
| Gates and Valves | Aeration Basin Effluent Gate 2 | 1/1/2001 | 12,000 | 10 | 2 | 3 | 6 2' x 3'-1" |
| Gates and Valves | Secondary Clarifier Distribution Box Gate 1 | 1/1/2001 | 8,000 | 10 | 2 | 3 | 6 5' x 3' |
| Gates and Valves | Secondary Clarifier Distribution Box Gate 2 | 1/1/2001 | 8,000 | 10 | 2 | 3 | 6 5' x 3' |
| Gates and Valves | UV Disinfection Channels Gate 1 | 1/1/2001 | 10,000 | 10 | 1 | 3 | 6 2'-9" x 4' |
| Gates and Valves | UV Disinfection Channels Gate 2 | 1/1/2001 | 10,000 | 10 | 1 | 3 | 6 2'-9" x 4' |
| Gates and Valves | Effluent Pumping Station Gate 1 | 1/1/2001 | 5,000 | 10 | 2 | 3 | 6 4' x 3' |
| Gates and Valves | Effluent Pumping Station Gate 2 | 1/1/2001 | 5,000 | 10 | 2 | 3 | 6 2' x 2' |
| Effluent Pumping System | Drainage Transfer Pump 1 | 1/1/2001 | 10,000 | 10 | 2 | 3 | Submersible, non clog, 5 Hp, 6 500 gpm capacity at 18 TDH |
| Effluent Pumping System | Drainage Transfer Pump 2 | 1/1/2001 | 10,000 | 10 | 1 | 3 | Submersible, non clog, 5 Hp, 6 500 gpm capacity at 18 TDH |
| Primary Treatment | Septage Receiving Pump 1 | 1/1/2001 | 2,000 | 10 | 1 | 3 | Plunger pump, 10 gpm 3 capacity, 2 HP |
| Primary Treatment | Primary Sludge Pump 1 | 1/1/2001 | 12,000 | 6 | 2 | 3 | Plunger pump 150 gpm 6 capacity, 3 HP |
| Primary Treatment | Primary Sludge Pump 2 | 1/1/2001 | 12,000 | 6 | 2 | 3 | Plunger pump 150 gpm 6 capacity, 3 HP |
| Primary Treatment | Primary Sludge Pump 3 | 1/1/2001 | 12,000 | 6 | 2 | 3 | Plunger pump 150 gpm 6 capacity, 3 HP |

| | | | | | | | | | |
|---------------------|---------------------------------------|----------|---------|--------|----|---|---|---|---|
| Solids Processing | Thickened Sludge Pump 1 | 1/1/2001 | 7,500 | 1000 | 8 | 2 | 2 | 3 | Plunger pump, 240 gpm 6 capacity, 7.5 HP |
| Solids Processing | Thickened Sludge Pump 2 | 1/1/2001 | 7,500 | 1000 | 8 | 2 | 2 | 3 | Plunger pump, 240 gpm 6 capacity, 7.5 HP |
| Solids Processing | WAS Pump 1 | 1/1/2001 | 5,000 | 1000 | 6 | 2 | 2 | 3 | Recessed impeller, 150 gpm 6 capacity, 5 HP |
| Solids Processing | WAS Pump 2 | 1/1/2001 | 5,000 | 1000 | 6 | 2 | 2 | 3 | Recessed impeller, 150 gpm 6 capacity, 5 HP |
| Solids Processing | WAS Pump 3 | 1/1/2001 | 5,000 | 1000 | 6 | 2 | 2 | 3 | Recessed impeller, 150 gpm 6 capacity, 5 HP |
| Solids Processing | RAS Pump 1 | 1/1/2001 | 30,000 | 5000 | 6 | 2 | 2 | 3 | Recessed impeller, 870 gpm 6 capacity, 15 HP |
| Solids Processing | RAS Pump 2 | 1/1/2001 | 30,000 | 5000 | 6 | 2 | 2 | 3 | Recessed impeller, 870 gpm 6 capacity, 15 HP |
| Solids Processing | RAS Pump 3 | 1/1/2001 | 30,000 | 5000 | 6 | 2 | 2 | 4 | Recessed impeller, 870 gpm 8 capacity, 15 HP |
| Headworks | Channel Grinder | 1/1/2001 | 15,000 | 2500 | 10 | 2 | 3 | 3 | Submersible, explosion proof motor, 5 HP, 1595 in- 9 lbs. torque |
| Headworks | Sewage Grinder 1 | 1/1/2001 | 12,000 | 2500 | 10 | 2 | 2 | 3 | 6 3 HP, 1000 in-lbs. torque |
| Headworks | Sewage Grinder 2 | 1/1/2001 | 12,000 | 2500 | 10 | 2 | 2 | 3 | 6 3 HP, 1000 in-lbs. torque |
| Headworks | Sewage Grinder 3 | 1/1/2001 | 12,000 | 2500 | 10 | 2 | 2 | 4 | 8 3 HP, 1000 in-lbs. torque |
| Primary Treatment | Primary Clarifier 1 | 1/1/2001 | 800,000 | 100000 | 15 | 2 | 2 | 3 | Concrete, 45' diameter, 12' side depth, bottom slope 1" per foot, drive mechanism, 2 rake arms, skimming system. |
| Primary Treatment | Primary Clarifier 2 | 1/1/2001 | 800,000 | 100000 | 15 | 5 | 2 | 3 | Concrete, 45' diameter, 12' side depth, bottom slope 1" per foot, drive mechanism, 2 rake arms, skimming system. |
| Secondary Treatment | Secondary Clarifier 1 | 1/1/2001 | 800,000 | 100000 | 15 | 5 | 2 | 3 | Concrete, 70' diameter, 14' side depth, bottom slope 1" per foot, rapid return |
| Secondary Treatment | Secondary Clarifier 2 | 1/1/2001 | 800,000 | 100000 | 15 | 5 | 2 | 3 | Concrete, 70' diameter, 14' side depth, bottom slope 1" per foot, rapid return |
| Solids Processing | Gravity Thickener 1 | 1/1/2001 | 650,000 | 80000 | 15 | 5 | 3 | 4 | 6 suction piping 12 26' diameter |
| Solids Processing | Gravity Thickener 2 - Non-Operational | 1/1/2001 | 650,000 | 80000 | 15 | 5 | 1 | 3 | 3 26' diameter Heavy duty belt, sludge/polymer mixing unit, 150 gpm minimum |
| Solids Processing | BFP 1 | 1/1/2001 | 350,000 | 50000 | 15 | 3 | 1 | 2 | 2 throughput |
| Disinfection | Disinfection Chamber | 1/1/2001 | 400,000 | 20000 | 15 | 2 | 1 | 2 | 2 tanks, 68' x 34' each, 13' water depth, membrane disc aeration system, 1184 |
| BNR | Diffused Aeration System | 1/1/2001 | 400,000 | 80000 | 10 | 2 | 2 | 2 | 4 diffusers total |

| | | | | | | | | | |
|----------------------------|-----------------------------------|----------|--------|--------|----|---|---|---|---|
| BNR | Blower 1 | 1/1/2001 | 75,000 | 20,000 | 8 | 2 | 2 | 2 | Rotary positive displacement, 865 scfm at 4 7.5 psig, 50 HP |
| BNR | Blower 2 | 1/1/2001 | 75,000 | 20,000 | 8 | 2 | 2 | 2 | Rotary positive displacement, 865 scfm at 4 7.5 psig, 50 HP |
| BNR | Blower 3 | 1/1/2001 | 75,000 | 20,000 | 8 | 2 | 2 | 3 | Rotary positive displacement, 865 scfm at 6 7.5 psig, 50 HP |
| Emergency Power Laboratory | Fuel Storage Tank | 1/1/2001 | 5,000 | | 15 | 1 | 3 | 2 | 500 gallon capacity, double 6 walled, thermally insulated |
| Laboratory | Automatic Sampler 1 | 1/1/2001 | 1,000 | | 10 | | 3 | 3 | 9 ISCO 3700 FR |
| Instrumentation | Automatic Sampler 2 | 1/1/2001 | 1,000 | | 10 | | 3 | 3 | 9 Allen Bradley PLC-5 |
| Instrumentation | PLC 1 | 1/1/2001 | 60,000 | 10,000 | 15 | 1 | 3 | 4 | 12 Allen Bradley PLC-5 |
| Instrumentation | PLC 2 | 1/1/2001 | 60,000 | 10,000 | 15 | 1 | 3 | 4 | 12 Allen Bradley PLC-5 |
| Instrumentation | PLC 3 | 1/1/2001 | 60,000 | 10,000 | 15 | 1 | 3 | 4 | 12 |
| Instrumentation | SCADA System | 1/1/2001 | 80,000 | 40,000 | 15 | 1 | 3 | 4 | 12 |
| Security System | Security System | 1/1/2001 | 25,000 | 4,000 | 15 | 1 | 1 | 2 | 2 |
| Fire Alarm System | Fire Alarm System | 1/1/2001 | 25,000 | 5,000 | 15 | 1 | 3 | 2 | 6 |
| Solids Processing | Dewatered Sludge Screw Conveyor 1 | 1/1/2001 | 20,000 | 5,000 | 15 | 1 | 1 | 2 | 2 HP |
| Solids Processing | Dewatered Sludge Screw Conveyor 2 | 1/1/2001 | 20,000 | 5,000 | 15 | 1 | 1 | 2 | 300 cu. Ft./hr, 20 feet long, 2 3 HP |
| Hoists and Cranes | Electrical Hoist 1 | 1/1/2001 | 5,000 | 1,500 | 10 | 1 | 1 | 2 | 1 ton monorail hoist with 1 ton mounted jib |
| Hoists and Cranes | Electrical Hoist 2 | 1/1/2001 | 5,000 | 1,500 | 10 | 1 | 1 | 2 | 1 ton monorail hoist with 2 track |
| HVAC | HVAC (Main BLD) | 1/1/2001 | 12,000 | 1,500 | 10 | 1 | 1 | 3 | 3 |
| HVAC | HVAC (P1) | 1/2/2001 | 12,000 | 1,500 | 10 | 1 | 1 | 3 | 3 |
| HVAC | HVAC (P2) | 1/3/2001 | 12,000 | 1,500 | 10 | 1 | 1 | 3 | 3 |

Matt and I would like to meet with you sometime in the next couple of weeks, at your convenience, to review and discuss the Capital Plan for the Winchendon WWTF. Please either call or email me and we can arrange a date and time. If you have any questions or require any additional information please do not hesitate to reach out to me.

Respectfully,

A handwritten signature in blue ink, appearing to read "Darlene Domingos". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

Darlene Domingos,
VP of Operations, Veolia

Cc: Joseph Farrell, Project Manager, Winchendon WWTF
Matthew Johnson, Project Manager, Veolia CPM

