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**WALNUT HILL UTILITY
WASTEWATER TREATMENT PLANT
UPGRADE FEASIBILITY REPORT AND FINANCIAL
ANALYSIS**

Submitted to: Walnut Hill Utility
ATTN: Mr. Robert Sacks
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Fort Washington, PA 19034

Submitted: May 2025

Herbert, Rowland & Grubic, Inc.
Engineering | Planning | Infrastructure Solutions

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EXECUTIVE SUMMARY

Herbert, Rowland & Grubic, Inc. (HRG) was authorized by Walnut Hill Utility Company (WHU) to conduct a Wastewater Treatment Plant (WWTP) Upgrade Feasibility Study (Study) to assess current conditions at the WWTP and evaluate the feasibility and costs of necessary improvements or replacement.

The purpose of the Study is to identify the existing condition of the WWTP, define the scope of required upgrades, and provide planning-level cost estimates for the improvements. The Study also includes an evaluation of projected future flows to the WWTP to determine whether hydraulic capacity expansions will be required to support anticipated growth.

This Study is being completed in the context of a new subdivision planning module submission, for which the Pennsylvania Department of Environmental Protection (PaDEP) is requiring an oversight agreement between Chester Heights Borough and WHU. In response to this requirement, the Borough has requested additional information to evaluate both the technical and financial aspects of the WWTP's condition and long-term viability.

Specifically, the Borough has raised questions concerning WHU's current reserve levels, the allocation of user fees, future reserve needs, the extent of deferred maintenance, long-term operation and maintenance costs, and the impact of a proposed agreement with a third-party operator. The Borough is also evaluating oversight mechanisms, including potential reserve milestones, contractual controls, and system condition requirements that may need to be met before entering into any formal agreement.

This Study is intended to address these questions and assist both WHU and the Borough in making informed decisions regarding the future of the WWTP and the structure of any required oversight agreement.

INTRODUCTION

Walnut Hill Utility Company (WHU) owns and operates the Walnut Hill Wastewater Treatment Plant (WWTP), located in Chester Heights Borough, Delaware County, Pennsylvania. The WWTP provides sanitary service to the Darlington Woods Condominium Complex, Highland Reserves Townhomes, The Highlands single-family homes, and several nearby commercial establishments. The facility is situated at 400 Ashley Court, along the eastern side of Brandywine Circle between Nottingham Court and Kingswood Court. The WWTP is currently permitted and hydraulically rated for 150,000 gallons per day.

Given the age of the existing infrastructure and the proposed development of the Stoneybank Residential Subdivision, an evaluation of the WWTP was undertaken to assess the condition of the plant and to review the financial capacity and planning of WHU in support of both continued service and potential system expansion.

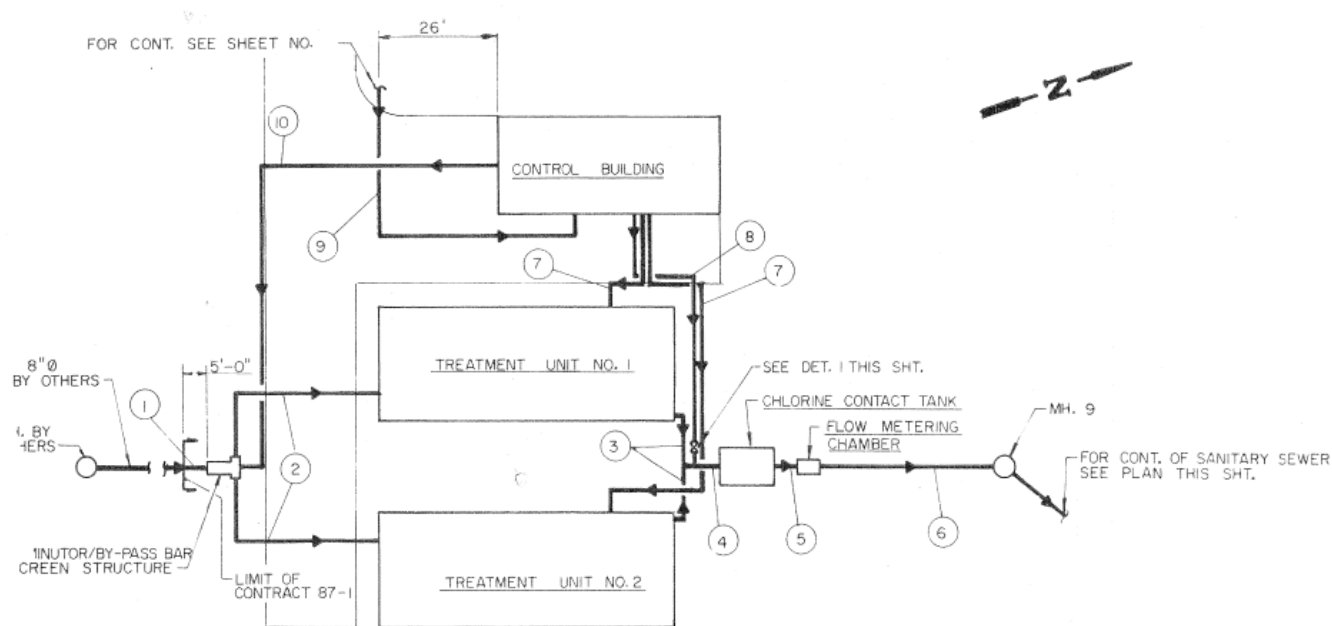
The WWTP is a conventional activated sludge facility with a permitted hydraulic capacity of 150,000 gallons per day (GPD). Over the past five years, the average daily flow to the plant has been approximately 37,630 GPD.

The treatment process begins at the headworks, where influent enters without any flow equalization. A relatively new Envirep sewage grinder is installed at the headworks to provide preliminary solids reduction. From there, the wastewater is directed to two parallel aeration tanks, which serve as the primary biological treatment units. Ferric chloride is added as a coagulant to assist with phosphorus removal.

Following biological treatment, the flow proceeds to disinfection through a chlorine contact tank, where sodium hypochlorite is used as the disinfecting agent. A makeshift dechlorination tank, installed by the system operator, currently serves to remove residual chlorine; however, this setup is not considered a sustainable long-term solution.

Treated effluent is then routed through a metering chamber before being discharged via Outfall 001 to an Unnamed Tributary of Chester Creek, classified as a Trout Stocked Fishery and Migratory Fishery (TSF, MF) within Pennsylvania Department of Environmental Protection (PADEP) Watershed 3-G. The WWTP operates under National Pollutant Discharge Elimination System (NPDES) Permit Number PA0050237, which is scheduled to expire on June 30, 2025.

A process flow diagram is provided in the figure below.



STUDY APPROACH

HRG conducted a site visit to the Walnut Hill WWTP on February 11, 2025, and met with the plant operator, KBX Golden. As part of the evaluation, HRG reviewed five years of Discharge Monitoring Report (DMR) data and corresponding flow records to assess historical performance and loading trends. HRG also

coordinated with equipment vendors and regulatory agencies to identify necessary improvements to meet current and future regulatory and operational requirements.

At this stage, HRG performed a preliminary evaluation of the site's civil and process components. A limited review of the structural and electrical systems was completed; a more detailed assessment of these elements will be conducted during the preliminary design phase.

The existing treatment units consist of steel tanks. During the site visit, severe corrosion was observed above the water line on multiple tanks. HRG did not perform an in-depth evaluation of the tank condition below the water line or below grade. Due to the age of the tanks and their apparent condition—likely beyond their useful service life—WHU has expressed a desire to fully replace the tanks as part of any future upgrade.

Multiple improvement alternatives were considered based on current and projected flows, existing plant configuration, and operational needs. Site photographs documenting existing conditions are provided in Appendix A.

REQUIRED PERMITTING

The following permits and approvals are anticipated in connection with the proposed upgrades to the Walnut Hill Wastewater Treatment Plant (WWTP). These include requirements from the Pennsylvania Department of Environmental Protection (PADEP), local municipalities, and other applicable agencies:

- **Act 537 Planning Approval**

Required to ensure consistency with the approved municipal sewage facilities plan. This can be accomplished through the planning module submission associated with the proposed Stoneybank Residential Subdivision.

- **Revised NPDES Permit**

A revision to the existing National Pollutant Discharge Elimination System (NPDES) Permit will be required to reflect any proposed changes to the facility's permitted hydraulic flow and/or treatment processes. The NPDES permit governs discharge limits and monitoring requirements for the WWTP.

- **PADEP Water Quality Management (WQM) Permit**

Required for construction or modification of wastewater treatment facilities in accordance with PADEP Chapter 91 regulations.

- **Local Municipality Permits**

Building, electrical, and zoning permits may be required for structural modifications, electrical upgrades, or building additions related to the plant improvements.

- **Delaware County Conservation District – Erosion and Sediment (E&S) Control Permit**

Required for any earth disturbance activities in accordance with PA Chapter 102 regulations, including grading or construction associated with the WWTP upgrades.

PROJECT COST

The projected cost for the recommended upgrades to the Walnut Hill WWTP is approximately \$2.3 million. A detailed cost breakdown is provided in Appendix B. This estimate includes:

- A 20% contingency to account for unknowns and potential changes during design and construction
- Engineering and permitting costs
- Construction inspection services
- Costs associated with the following major components:
 - General site work and restoration
 - Replacement of WWTP process equipment
 - Required electrical upgrade
 - Miscellaneous improvements necessary for plant operation and regulatory compliance

The estimate reflects current industry pricing and is intended as a planning-level projection. It may be further refined during the preliminary and final design phases as more detailed information becomes available. Additionally, the costs presented do not include adjustments for inflation or potential impacts from supply chain volatility or tariffs on materials or equipment. Final project costs may vary depending on market conditions and the timing of project implementation.

PROPOSED SCHEDULE

The projected schedule would be as follows:

- Act 537 Planning – September 2025
- Preliminary Design – September 2025
- WQM Permit – October 2025
- Financing for the project – February 2026
- Bid Project March - 2026
- Construction Begin - May 2026
- Construction Complete - April 2027
- WWTP Operation - May 2027

PROCESS ASSESSMENT

HEADWORKS

The headworks of the Walnut Hill WWTP includes several components that are in poor condition and require significant upgrades. The retaining wall adjacent to the headworks is deteriorated and should be replaced. The existing headworks inlet tank is constructed of steel and exhibits visible rust and corrosion due to age; full replacement of this tank is recommended.

Currently, the facility utilizes a relatively new sewage grinder; however, there is no mechanical screen to remove grit and larger solids. For long-term operational reliability and process protection, the installation of a mechanical screen is recommended. A properly designed screening system would remove debris and convey screenings to a nearby dumpster for disposal, rather than simply reducing particle size via grinding.

Additionally, there is no flow equalization at the headworks. Incorporating a flow equalization basin would help mitigate the impacts of diurnal and wet weather flow variations, improving downstream process stability and overall plant performance.

DISINFECTION

The WWTP currently utilizes chlorine disinfection through a steel chlorine contact tank. The tank shows signs of corrosion, and given its age and construction material, full replacement is recommended. In addition, the associated chemical feed pumps and storage tanks are in poor condition and are also recommended for replacement. Notably, the chlorine chemical pump does not operate continuously, which is not considered best practice for consistent and effective disinfection.

During correspondence with the Pennsylvania Department of Environmental Protection (PADEP) regarding anticipated revisions to the facility's NPDES Permit, PADEP advised that any new WWTP design should include ultraviolet (UV) light disinfection in place of chlorine. There is a strong possibility that chlorine disinfection byproducts (DBPs) will be regulated under the revised permit, which would necessitate transitioning to UV disinfection. The current NPDES Permit is set to expire on June 30, 2025, and a renewal application was submitted to PADEP in November 2024. The permit is currently under technical review.

The existing dechlorination process consists of an improvised setup, wherein a bucket containing dechlorination tablets is placed at the bottom of a tank through which effluent passes prior to discharge. This setup was not part of the original design and is not considered a reliable or permanent solution. If UV disinfection is implemented, chemical dechlorination would no longer be necessary.

TREATMENT PROCESS

The package aeration treatment tanks at the WWTP are in poor condition, with an estimated age of approximately 35 years, surpassing their expected useful life. The steel tanks exhibit significant corrosion, and many of the walkway supports have deteriorated to the point where they have broken off. Due to these

unsafe conditions, operator access to the walkways should be restricted to mitigate the risk of injury. Given the age and condition of the tanks, replacement is strongly recommended.

The current coagulant used in the treatment process is ferric chloride. It is recommended that the WWTP transition to polymerized aluminum chloride (PAC) or alum, which are more effective and commonly used alternatives. Alternatively, it is advisable to work with a chemical supplier to perform bench testing to identify a more cost-effective coagulant that meets the plant's needs. Additionally, the chemical storage tanks are in poor condition and should be replaced. The installation of a mini bulk tank is recommended to better manage chemical storage and improve operational efficiency.

The blowers, which are also nearing the end of their useful life, are in poor condition. One of the air header pipes appears to have a leak near one of the treatment tanks, which could impact aeration efficiency. Therefore, the complete replacement of the aeration equipment, including blowers and associated piping, is recommended.

SLUDGE HOLDING TANK

The sludge holding tank at the WWTP is 35 years old and has exceeded its expected useful life. Over time, wear and corrosion have likely compromised the structural integrity and efficiency of the tank. The aging tank may pose operational challenges, including reduced capacity, leakage risks, and potential non-compliance with environmental standards. Given the critical nature of sludge holding for the treatment process, it is strongly recommended that the tank be replaced with a more durable and modern system.

A replacement tank should be designed to meet current capacity requirements, incorporate improved materials to resist corrosion, and provide better long-term performance. This will help ensure reliable sludge management and avoid potential disruptions to plant operations.

OUTFALL STRUCTURE

The outfall structure at the WWTP is reported to be in good condition and is currently functioning as intended. Given its present state, it does not require immediate replacement. However, the pipeline from the tank to the outfall structure is relatively long and should be televised to assess its condition. This will help identify any potential issues such as blockages, corrosion, or leaks that could affect the integrity and functionality of the discharge system. Ongoing monitoring and maintenance should also be conducted to ensure continued performance and compliance with regulatory standards.

NPDES PERMIT/ TREATMENT EVALUATION

HRG reviewed and evaluated the past five years (2020-2024) of eDMR data for the Walnut Hill Wastewater Treatment Plant (WWTP). From a hydraulic standpoint, the average daily flow was significantly lower than the plant's hydraulic rating of 150,000 gallons per day (GPD). The five-year average flow was 37,630 GPD, with the maximum monthly flow during that period recorded at 56,580 GPD. The year 2020 experienced a

notable increase in flow compared to the other years, with a peak daily flow of 109,310 GPD recorded in 2021.

Upon review of the eDMR data, there were no permit violations identified. To further assess the plant's compliance and operational performance, HRG reached out to the Pennsylvania Department of Environmental Protection (DEP) and requested a Preliminary Treatment Requirements (PTR) analysis. The results and analysis from DEP are currently pending.

However, in correspondence with DEP, it was indicated that the WWTP should transition from chlorine disinfection to UV light disinfection. This recommendation aligns with a growing trend from DEP for NPDES Permit renewals, reflecting a shift towards more sustainable and safer disinfection methods.

The NPDES Permit renewal application was submitted to DEP in November 2024 and is currently under technical review.

ELECTRICAL ASSESSMENT

All of the electrical equipment located within the WWTP building appears to be original to the plant's initial construction, and much of it has reached or is nearing the end of its useful life. As part of the recommended process upgrades, it is advised that the primary electrical components—such as the transformer, motor control center (MCC), disconnects, safety switches, and related systems—be replaced to ensure operational reliability and compliance with current electrical codes.

Additionally, both the interior and exterior lighting are outdated and are recommended for replacement with energy-efficient alternatives that improve visibility, safety, and energy performance.

There are also a number of abandoned electrical components and conduits present within the facility. These should be properly decommissioned and removed to eliminate confusion, reduce safety risks, and allow for a cleaner, more organized installation of the new electrical systems.

A more detailed evaluation of the electrical systems will be conducted during the preliminary design phase to determine if any existing components can be retained or if full replacement is warranted based on condition, performance, and compatibility with the planned process upgrades.

BUILDING AND SITE ASSESSMENT

The overall exterior condition of the building appears acceptable. However, the roof and gutters were not formally inspected by HRG and should be evaluated by a qualified roofing contractor to determine their condition and any necessary repairs or replacement.

The exterior doors are in poor condition—some do not lock properly or fully close. Replacement of all building doors is recommended to restore security and proper functionality.

The interior and exterior lighting is at the end of its useful life. Several exterior fixtures are non-functional, and all lights—both interior and exterior—should be replaced with modern, energy-efficient units to improve visibility and reliability. In addition, the street lighting within the WWTP site is outdated and insufficient. For safety and accessibility during overnight or emergency operations, improved site lighting is strongly recommended.

The building sewer pump and associated control panel have also exceeded their useful life and should be replaced to ensure proper and reliable operation of the building's wastewater discharge system.

The parking lot paving and security fencing remain functional and are not in urgent need of replacement. While improvements could be considered in the future for aesthetics or performance, these elements are considered lower priority compared to other critical systems at the WWTP.

PROJECTED FLOWS

The past five years of flow data (2020–2024) were used to project future average daily flows at the Walnut Hill Wastewater Treatment Plant (WWTP). There are currently 404 residential connections. Based on previous five years of flow data, the average flow per connection is approximately 87 gallons per day (GPD). In addition, Nudy's Café and PJ Whelihan's contribute a combined average daily flow of 1,087 GPD in 2024. The five years of flow data are included in Appendix C.

To establish conservative projections:

- Existing residential flow was estimated at 150 GPD per Equivalent Dwelling Unit (EDU), yielding 60,600 GPD.
- Commercial properties currently have an allocated capacity of 40,000 GPD, which is significantly higher than actual usage (currently under 1,100 GPD). It is recommended that the commercial allocation be renegotiated to reflect actual usage, allowing the WWTP to be more appropriately sized without reserving capacity for flows that are unlikely to materialize.
- The proposed Stoney Bank subdivision, with 33 homes, was projected using a PADEP planning rate of 262.5 GPD/EDU, yielding 8,663 GPD.

This results in a total projected average daily flow of 73,139 GPD, nearly double the current flow. These estimates are intentionally conservative, particularly for existing residential users, to ensure sufficient capacity planning.

PROJECTED FLOWS – WALNUT HILL WWTP			
User	Average Flow* (GPD)	Projected Flow (GPD)	Projected Flow per EDU (GPD/EDU)
Existing Residential (404 Units)	34,334	60,600	150
Commercial Properties	969	3,876**	N/A
Stoney Bank (Proposed Residential)	N/A	8,663	262.5
Total	35,303	73,139	N/A

*Note: The Total 5-Year Average Flow is based on the 5-year eDMR Flows. HRG only had access to 2-years worth of data for the Commercial Flow

**Note: Commercial properties have an allocated capacity of 40,000 GPD. HRG recommends renegotiating this allocation to better reflect actual usage and avoid unnecessary upsizing of the WWTP.

Based on the projected average daily flow of approximately 73,000 GPD, only one treatment train rated for 75,000 GPD is required to meet anticipated demand. Therefore, to reduce initial capital costs, it is recommended that only one treatment train be replaced and upgraded at this time.

To help manage both wet weather flow and diurnal flow fluctuations, the facility would include a new flow equalization (EQ) tank as part of the upgrades. This will improve the plant's ability to handle peak flows during high rainfall events and during times of daily flow variation.

This approach enhances constructability, as the second treatment train can remain online during the construction of the new treatment train, ensuring continuous operation of the WWTP while minimizing disruption to service.

Given the current flow projections and limited potential for significant future growth, this approach will meet the plant's needs without over-sizing the system. Should future changes in demand arise, WHU can evaluate the need for additional improvements at that time.

RECOMMENDATIONS BASED ON SITE ASSESSMENT AND REGULATORY CONSULTATION

Based on the site assessment performed by HRG, as well as consultation with the appropriate regulatory agencies and equipment vendors, HRG recommends complete replacement of the WWTP treatment processes, with staged rehabilitation of the building as needed.

The highest priority is the replacement of electrical equipment and WWTP process equipment, both of which are in critical need of replacement.

While the WWTP is currently able to meet permit limits, there is a notable amount of corrosion present in the steel tanks. As this corrosion continues to deteriorate the steel, it becomes increasingly important to proactively replace the WWTP before a major structural failure occurs. In addition, DEP has indicated that chlorine disinfection byproducts may become part of the WWTP's new permit limits, which means the plant will likely need to upgrade to UV Light Disinfection once the revised NPDES permit is issued.

Dutchland has prepared a preliminary proposal for a package WWTP that would fit the projected needs for Walnut Hill. The proposed treatment plant would consist of one precast post-tensioned concrete wastewater treatment plant tank (95' x 16' x 18' deep with a 16' SWD). The WWTP would include compartments for Equalization, Aeration, Clarifier, and Sludge, all rated for 75,000 gallons per day. The proposal is based on treating normal domestic-strength sewage; additional modifications to the system may be required pending the results of influent loading testing. The preliminary layout and Dutchland proposal are included in Appendix D.

Dutchland previously completed a replacement at the nearby Valleybrook WWTP in 2019, demonstrating their capability and expertise in providing similar wastewater treatment solutions.

HRG contacted the current plant vendor, who proposed the use of steel tanks as part of the replacement. However, the costs associated with steel tanks were found to be similar to the cost of using precast concrete tanks.

A full evaluation of alternatives was not part of the scope of this report. Further evaluation of different treatment plant options, including steel versus concrete tanks and other process modifications, can be conducted during the preliminary design phase.

PROCESS IMPROVEMENTS

Equalization

The equalization system includes two (2) submersible equalization pumps, complete with the necessary PVC plumbing and valves. Additionally, the system features a pump retrieval system, pump float system, and an aluminum flow regulation box. The proposed Dutchland package also includes fixed grid aeration piping, complete with valves and diffusers.

Aeration Equipment

The aeration system will include the fixed grid aeration piping, complete with valves and diffusers, as well as sludge and skimmer return pipes.

Clarifier Equipment

Dutchland's proposal includes one submersible RAS/WAS pump for sludge waste and return lines. The clarifier will also include a stainless-steel rotating skimmer and an effluent adjustable weir with an aluminum scum baffle.

Sludge Holding

Dutchland's proposed sludge holding equipment will include a submersible sludge decant pump, fixed aeration piping, and a 6" PVC overflow pipe connecting to the equalization system.

UV Equipment

The proposed UV disinfection system will be housed in a 15' x 6'-2" x 9'-6" deep fixed-form style tank, including one complete ultraviolet system with controls. Stainless steel aeration piping is included, along with an aluminum v-notch weir meter box and flow meter. The UV platform will feature aluminum grating for durability and safety.

Air Supply

The air supply will include four complete motor blower packages, with an interconnection air header and valving to allow the spare blower to operate for any of the others during maintenance or repairs.

Instrumentation and Controls

A control panel for the blowers and pumps will be included in the proposed Dutchland package, ensuring seamless operation and integration of the new system.

Chemical Feed System

The two existing chemical feed systems—Ferric Chloride and Sodium Hypochlorite—will be replaced. The Ferric Chloride system is recommended for replacement with an alternative coagulant, such as alum or PAC, to improve treatment performance and reduce operational costs.

ELECTRICAL IMPROVEMENTS

The entirety of the major electrical equipment at the WWTP is recommended for replacement as part of the upgrades. This includes key components such as the transformer, Motor Control Center (MCC), disconnects, and safety switches. Additionally, both interior and exterior lights in the control building, as well as site lighting for the WWTP, are recommended to be replaced.

BUILDING IMPROVEMENTS

The control building was generally in good condition, as noted above in the report. As a result, not many items are being recommended for immediate replacement. However, the metal exterior doors are included in the immediate costs because some do not lock and are generally in poor condition. Additionally, the interior heaters in the control building are non-functional and are recommended for immediate replacement. The remainder of the control building appears to be in fair or better condition, and immediate replacement is not required or recommended.

The roof and gutters were not directly inspected during this evaluation. Given the age of the building, it is recommended that a qualified roofer perform a thorough inspection to assess the condition of the roof and ensure it is still structurally sound and free from leaks or other issues.

FINANCIAL ANALYSIS

As part of the Study, HRG evaluated the financial feasibility of the proposed improvements, including projected operating costs, future revenue needs, debt service obligations and customer rate impacts.

OPERATING EXPENSES

The operating expenses were reviewed and projected based on historical actuals for 2023 and 2024, along with the adopted 2025 budget. Expenses were escalated annually to account for inflation. A general inflation factor of 3% per year was applied to most line items beginning in 2026 to capture ongoing increases in utility costs, chemical costs, personnel expenses, and maintenance activities. This inflationary assumption is consistent with historical Consumer Price Index (CPI) trends and is considered a conservative and reasonable estimate for future budget planning.

Please see Appendix E for the projected expenses of WHU.

DEBT SERVICE REQUIREMENTS

The project is anticipated to be funded through a PENNVEST low-interest loan, with a planned closing date in 2026 and the first full year of debt service beginning in 2027. The total financing amount includes both construction-related project costs as well as approximately \$75,000 in issuance and financing expenses. Based on an estimated overall loan amount of \$2,306,000 and interest rates ranging from approximately 1.74% to 2.18%, the projected average annual debt service obligation is estimated to be approximately

\$135,000 to \$140,000 per year over a 20-year term. This debt service has been incorporated into the financial model beginning in 2027.

Please see Appendix F for the full amortization schedule of the anticipated PENNVEST loan.

ADDITIONAL REVENUE – TAPPING FEES

In addition to user rate revenues, WHU anticipates receiving tapping fees associated with the planned Stoneybank Residential Subdivision. The Stoneybank Residential Subdivision is projected to add 33 new residential units over the next three years. The initial tapping fee revenue generated from these new connections will provide a meaningful injection of capital during the construction and early debt service periods. The tapping fee revenues are expected to significantly reduce near-term borrowing needs or be applied directly to early debt service payments, thereby helping to moderate the magnitude of required rate increases.

RATE ANALYSIS

To address the combined impact of rising operating expenses and the new debt service requirements, the financial model assumes larger initial rate adjustments in the years immediately following construction (2026–2028), followed by smaller, inflationary adjustments approximately every other year thereafter. This approach is intended to minimize financial stress on customers while ensuring that the utility remains financially sound.

In addition to covering projected operating and debt service costs, the rate model includes provisions for maintaining a positive reserve balance throughout the 20-year planning horizon. Maintaining adequate reserves is essential for ensuring uninterrupted operations, preparing for unplanned repairs or equipment failures, and supporting future capital reinvestment needs.

The full 20-year rate projections are included in Appendix G.

In addition to the rate analysis, projections were also prepared assuming no rate increases over the 20-year planning period. This respective “no action” scenario demonstrates that, under current rates, WHU would begin operating at a deficit shortly after construction is completed and would be unable to meet its debt service and reserve obligations. These results underscore the importance of implementing a proactive and sustainable rate strategy.

The full 20-year no-rate-increase projections are included in Appendix H.

FINANCIAL OUTLOOK AND SUSTAINABILITY

It is important to note that the rate analysis presented in this report is preliminary and subject to change as cost estimates, development timing, financing terms, and regulatory requirements are finalized. As more concrete information becomes available, WHU intends to revisit and update the financial model and rate projections accordingly.

The projected rate increases outlined herein are not final. WHU may consider moderating the initial rate increases in 2026 and 2027 to reduce the potential for customer rate shock. If this approach is taken, however, it will likely require larger rate adjustments in subsequent years to ensure long-term financial sustainability and meet debt service obligations.

Overall, the financial projections confirm that WHU can support the proposed WWTP improvements through a combination of tapping fee revenues, prudent financing, and responsible long-term rate planning. By proactively incorporating reserves, inflation, and system growth into the financial model, WHU is positioned to maintain reliable service while meeting future financial obligations in a sustainable and measured manner.

Appendix A: Site Visit Photo Log





Photo No. 1: Existing Headworks (Sewage Grinder)



Photo No. 2: Existing Steel Process Tank

Walnut Hill WWTP Site Visit Photos



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SHEET: 1	OF: 9	DATE: 2/11/2025
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SCALE N/A
PROJECT 010678.0428



Photo No. 3: Signs of Corrosion/ Deterioration in Steel Process Tanks



Photo No. 4: Existing "Dechlorination Tank"

Walnut Hill WWTP Site Visit Photos

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9

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2/11/2025



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SCALE
N/A

PROJECT
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Photo No. 5: Existing Chlorine Contact Tank



Photo No. 6: Sodium Hypochlorite Drums

Walnut Hill WWTP Site Visit Photos

SHEET: 3 OF: 9 DATE: 2/11/2025



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SCALE
N/A
PROJECT
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Photo No. 7: Existing Steel Process Tank (Structural Support Deteriorating)



Photo No. 8: Eastern Side of Control Building

Walnut Hill WWTP Site Visit Photos

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SCALE
N/A
PROJECT
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Photo No. 9: Northern Side of Control Building



Photo No. 10: Western Side of Control Building

Walnut Hill WWTP Site Visit Photos

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SCALE N/A
PROJECT 010678.0428



Photo No. 11: Ferric Chloride Chemical Storage

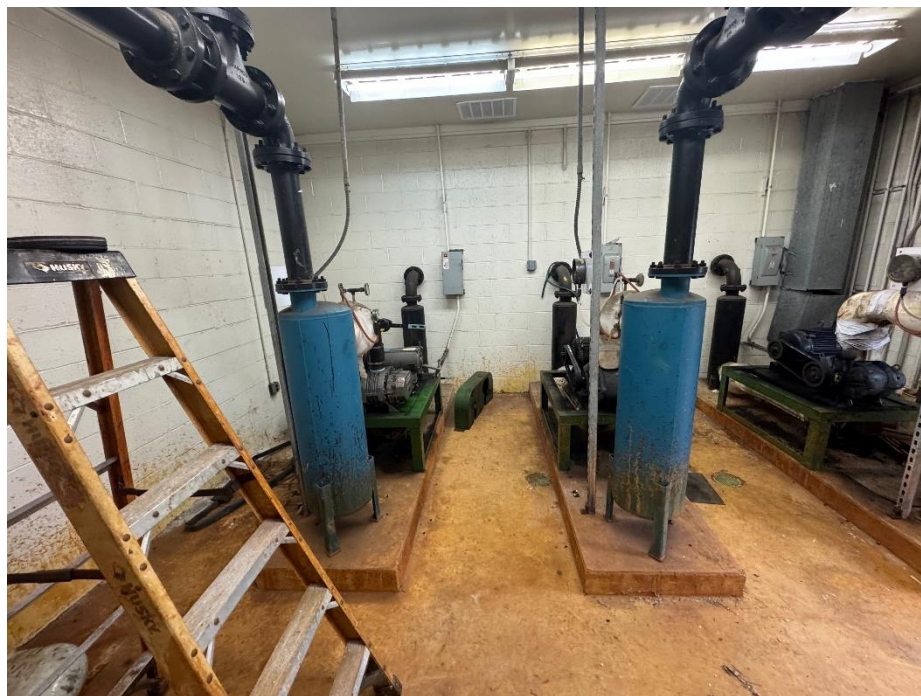


Photo No. 12: Existing Blowers

Walnut Hill WWTP Site Visit Photos



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SCALE N/A
PROJECT 010678.0428



Photo No. 13: Existing MCC



Photo No. 14: Existing Communications/ Wiring

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				SCALE N/A
				PROJECT 010678.0428
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Photo No. 15: Existing Ventilation

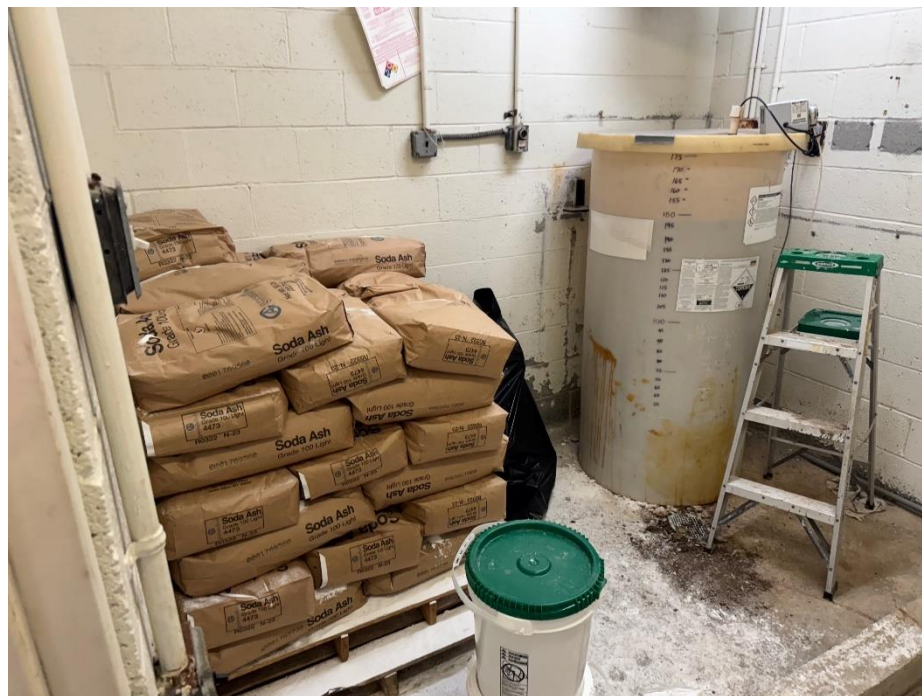


Photo No. 16: Chemical Feed System

Walnut Hill WWTP Site Visit Photos

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SCALE
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PROJECT
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Photo No. 17: Existing Heater (Does not work)
Two (2) Presently Utilized Groundwater Observation/Monitoring Wells (Eastern Lagoon Toe)



Photo No. 18: Aeration Pipe with Apparent Leak

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				SCALE N/A
				010678.0428
SHEET: 9	OF: 9	DATE: 2/11/2025		

Appendix B: Engineer's Cost Opinion





Herbert, Rowland & Grubic, Inc.
501 Allendale Road, Suite 203
King of Prussia, PA 19406
484.460.7050
www.hrg-inc.com

ENGINEER'S OPINION OF PROBABLE PROJECT COST

WALNUT HILL UTILITY

WWTP UPGRADE FEASIBILITY STUDY

HRG Project Number: R0010678.0428

Date: April 2025

ITEM NO.	DESCRIPTION	EST. QTY.	UNIT	UNIT COST	EXTENSION
GENERAL					
1	MOBILIZATION, PROJECT MANAGEMENT, BONDS, AND INSURANCE	1	LS	\$ 32,808.80	\$ 32,808.80
2	E AND S CONTROLS	1	LS	\$ 16,404.40	\$ 16,404.40
Subtotal	GENERAL SUBTOTAL	1	LS	\$	49,213.20
GENERAL CONTRACTOR SITEWORK					
3	DEMOLITION AND REMOVAL OF ONE EXISTING TRAIN AND ONE SLUDGE HOLDING TANK	1	LS	\$ 32,700.00	\$ 32,700.00
4	CLEARING AND GRUBBING	1	LS	\$ 22,600.00	\$ 22,600.00
5	REMOVAL OF EXISTING WORK AS REQUIRED FOR CONSTRUCTION	1	LS	\$ 2,800.00	\$ 2,800.00
6	TEMPORARY CONSTRUCTION FENCING	1	LS	\$ 5,100.00	\$ 5,100.00
7	LOCATE EXISTING YARD PIPING & UTILITIES TO BE MODIFIED FOR CONSTRUCTION	1	LS	\$ 21,200.00	\$ 21,200.00
8	PROVIDE SHORING AS REQUIRED ALONG THE EXISTING TRAIN TO REMAIN IN SERVICE	1	LS	\$ 56,000.00	\$ 56,000.00
9	EXCAVATION FOR NEW TANKS	1	LS	\$ 37,500.00	\$ 37,500.00
10	PROVIDE STONE SUB BASE FOR NEW TANK	1	LS	\$ 10,600.00	\$ 10,600.00
11	PROVIDE SITE ACCESS AND EXCAVATOR FOR INSTALLATION OF NEW TANKS	1	LS	\$ 14,800.00	\$ 14,800.00
12	PROVIDE STONE BACKFILL FOR NEW TANKS	1	LS	\$ 24,700.00	\$ 24,700.00
13	PROVIDE TRENCHING FOR YARD PIPING & ELECTRIC INSTALLATIONS	1	LS	\$ 21,100.00	\$ 21,100.00
14	PROVIDE INSTALLATION & CONNECTION OF THE NEW WWTP TO EXISTING EFFLUENT DISCHARGE LINE	1	LS	\$ 16,600.00	\$ 16,600.00
15	FINAL SITE RESTORATION	1	LS	\$ 25,900.00	\$ 25,900.00
16	RESTORE PERIMETER FENCING	1	LS	\$ 16,600.00	\$ 16,600.00
17	RAKE, SEED, AND PROVIDE SOIL STABILIZATION AS REQUIRED	1	LS	\$ 13,100.00	\$ 13,100.00
Subtotal	GENERAL CONTRACTOR SITEWORK SUBTOTAL	1	LS	\$	321,300.00
CHEMICAL FEED SYSTEM					
18	COAGULANT FEED SYSTEM (TANK AND PUMP)	1	LS	\$ 6,080.00	\$ 6,080.00
19	SODIUM HYPO FEED SYSTEM (TANK AND PUMP)	1	LS	\$ 7,700.00	\$ 7,700.00
Subtotal	CHEMICAL FEED SUBTOTAL	1	LS	\$	13,780.00
DUTCHLAND					
20	DUTCHLAND COMPLETE PACKAGE (EQUALIZATION, SCREENS, AERATION, SLUDGE HOLDING, UV)	1	LS	\$ 1,200,000.00	\$ 1,200,000.00
Subtotal	DUTCHLAND SUBTOTAL	1	LS	\$	1,200,000.00
ELECTRICAL					
21	TRANSFORMER	1	LS	\$ 4,210.00	\$ 4,210.00
22	STREET LIGHTS	1	LS	\$ 8,420.00	\$ 8,420.00
23	EXTERIOR LIGHTS	1	LS	\$ 4,210.00	\$ 4,210.00
24	INTERIOR LIGHTS	3	LS	\$ 5,650.00	\$ 16,950.00
25	MOTOR CONTROL CENTER	1	LS	\$ 14,600.00	\$ 14,600.00
26	SERVICE DISCONNECT (MAIN)	1	LS	\$ 4,210.00	\$ 4,210.00
27	REMOTE MONITORING SYSTEM	1	LS	\$ 1,690.00	\$ 1,690.00
28	ELECTRIC PANELBOARDS	2	EA	\$ 6,710.00	\$ 13,420.00
29	CIRCULAR CHART RECORDER	1	EA	\$ 2,390.00	\$ 2,390.00
30	EFFLUENT FLOW METER	1	EA	\$ 1,890.00	\$ 1,890.00
31	ENCLOSED SAFETY SWITCH	3	EA	\$ 2,100.00	\$ 6,300.00
32	INTERIOR WIRING	1	LS	\$ 9,010.00	\$ 9,010.00
Subtotal	ELECTRICAL SUBTOTAL	1	LS	\$	87,300.00
BUILDING					
33	EXTERIOR METAL DOORS	3	EA	\$ 2,270.00	\$ 6,810.00
Subtotal	BUILDING SUBTOTAL	1	LS	\$	6,810.00
PLUMBING AND HVAC					
34	INTERIOR HEATERS	5	EA	\$ 2,250.00	\$ 11,250.00
Subtotal	PLUMBING AND HVAC SUBTOTAL	1	LS	\$	11,250.00

CONSTRUCTION SUBTOTAL	\$	1,690,000.00
ENGINEERING DESIGN	\$	118,300.00
INSPECTION AND OVERSIGHT	\$	84,500.00
CONSTRUCTION CONTINGENCY (20%)	\$	338,000.00
	\$	2,230,800.00
TOTAL	\$	2,231,000.00

Appendix C: 5-Year Flow Data



5-Year Walnut Hill Flow Summary (MGD)

	2020		2021		2022		2023		2024	
	Average Monthly	Max Daily	Average Monthly	Max Daily	Average Monthly	Max Daily	Average Monthly	Max Daily	Average Monthly	Max Daily
January	0.0355	0.0654	0.0415	0.0507	0.0373	0.0690	0.0362	0.0492	0.0358	0.0504
February	0.0438	0.0641	0.0412	0.0558	0.0335	0.0549	0.0342	0.0448	0.0328	0.0328
March	0.0463	0.0795	0.0416	0.1093	0.0344	0.0506	0.0358	0.0474	0.0334	0.0557
April	0.0535	0.1983	0.0337	0.0770	0.0362	0.0604	0.0363	0.0582	0.0328	0.0630
May	0.0461	0.1624	0.0345	0.1080	0.0348	0.0515	0.0382	0.0586	0.0299	0.0440
June	0.0410	0.1189	0.0370	0.0529	0.0337	0.0506	0.0356	0.0825	0.0300	0.0472
July	0.0365	0.0671	0.0366	0.0520	0.0330	0.0416	0.0337	0.0479	0.0304	0.0453
August	0.0566	0.1646	0.0350	0.0513	0.0375	0.0854	0.0354	0.0777	0.0312	0.0442
September	0.0523	0.1578	0.0350	0.0714	0.0319	0.0721	0.0344	0.0455	0.0311	0.0398
October	0.0466	0.1598			0.0352	0.0570	0.0352	0.0517	0.0304	0.0398
November	0.0548	0.2396	0.0342	0.0455	0.0357	0.0589	0.0396	0.1032	0.0316	0.0423
December	0.0476	0.0709	0.0476	0.0709	0.0354	0.0434	0.0380	0.0680	0.0408	0.0787

Average	0.0467	0.1290	0.0380	0.0677	0.0349	0.0579	0.0361	0.0612	0.0325	0.0486
Max	0.0566	0.2396	0.0476	0.1093	0.0375	0.0854	0.0396	0.1032	0.0408	0.0787
Max Month	August		December		August		November		December	

3 month max flow	0.0518		0.0414		0.0354		0.0376		0.0342
Month Period	A,S,O		J,F,M		O,N,D		O,N,D		O,N,D
3 month to average ratio	1.11		1.09		1.02		1.04		1.05

5 Year Average Daily Flow	0.035
5 year max daily	0.240

Appendix D: Dutchland Proposal and Site Layout



B U D G E T A R Y E S T I M A T E

April 1, 2025

HRG, Inc.

Attn: Walt Fazler

RE: DARLINGTON WOODS UPGRADE – 75K GPD EXTENDED AIR WWTP

Dutchland LLC specializes in designing, manufacturing, and constructing wastewater treatment plants. Plants manufactured by Dutchland LLC include high strength precast concrete structures as well as high quality equipment to provide a superior, low maintenance system.

Accordingly, we are pleased to offer the following quote:

Proposal #E2023.0270-1

Scope of Work:

Manufacture, deliver, and install (crane included) the following wastewater treatment plant into a prepared excavation and stone sub-base. All site work, including site access and dewatering, electrical work, and control building construction are to be provided by others. Scope is based on Dutchland LLC's standard process design for typical residential influent and effluent wastewater characteristics.

Design Assumptions and Standards:

1. Tank subgrade assumed to have an adequate soil bearing capacity and settlement values to support this structure with no ground or flood water conditions.
2. Backfill elevation assumed to be sufficient for frost protection.
3. Tank structure is designed to Dutchland LLC Standard Specifications based on ACI 350 Code including requirements for Post-Tensioned Tanks.

Inclusions:

1. One (1) precast post-tensioned concrete wastewater treatment plant, 95'-0" x 16'-0" x 18'-0" deep with a 16'-0" SWD approximate dimensions.
2. The wastewater treatment plant shall be equipped with the following compartments and approximate effective capacities:
 - A. Equalization
 - B. Aeration
 - C. Clarifier
 - D. Sludge Holding
3. All labor, material, and equipment necessary to erect the tank structure.
4. EQUALIZATION EQUIPMENT, INCLUDING:
 - A. Two (2) submersible equalization pumps, including necessary 2" PVC plumbing and valves.
 - B. Pump retrieval system, including:
 - 1) Cast iron base with stainless steel slide rail system.
 - 2) One (1) adjustable reach 300 lb. stainless steel hoist with stainless steel hoist socket and stainless steel lifting cable with ball.
 - C. Pump float system with stainless steel float bracket.
 - D. Aluminum flow regulation box.
 - E. Fixed grid aeration piping, including valve and diffusers.
 - F. PVC transfer pipe.

5. AERATION EQUIPMENT, INCLUDING:
 - A. Fixed grid aeration piping, including valve and diffusers.
 - B. Sludge return piping.
 - C. Skimmer return pipe.
6. CLARIFIER EQUIPMENT, INCLUDING:
 - A. One (1) submersible RAS/WAS pump including sludge return/sludge waste lines.
 - B. Stainless steel rotating skimmer with 6" pipe assembly.
 - C. Effluent aluminum adjustable weir with aluminum scum baffle.
7. SLUDGE HOLDING EQUIPMENT, INCLUDING:
 - A. 6" dia. PVC overflow line sludge holding to equalization.
 - B. Fixed grid aeration piping, including valve and diffusers.
 - C. Submersible sludge decant pump, necessary PVC pipe.
8. UV EQUIPMENT, INCLUDING:
 - A. One (1) 15'-0" x 6'-2" x 9'-6" deep fixed-form style tank.
 - B. One (1) complete ultraviolet system, including controls.
 - C. Stainless steel aeration piping, including brass ball valves, unions, and stainless steel coarse bubble diffusers.
 - D. Aluminum V-notch meter box.
 - E. One (1) flow meter system with paperless recorder.
 - F. Aluminum UV platform with aluminum ladder.
 - G. Aluminum grating.
9. AIR SUPPLY EQUIPMENT, INCLUDING:
 - A. Four (4) complete motor blower packages.
 - B. Galvanized steel interconnection air header with valving to allow the spare to operate for any of the other blower setups during maintenance.
10. INSTRUMENTATION AND CONTROLS, INCLUDING:
 - A. One (1) indoor rated multiplex control panel housing controls for the Blowers and Pumps.
11. Dutchland LLC is proposing a hydraulic crane that must be close enough to set the proposed precast concrete structure with a maximum of one (1) set for structure.
12. Dutchland LLC is to provide complete prints and equipment submittals for the WWTP. The Buyer/The OWNER will be responsible for providing an engineer to submit this information to the DEP (and to provide the engineer's stamp). A Process Design Report will be provided to justify the design of the plant, upon request.
13. Coordinate site work with the Buyer's excavator.
14. Provide an electronic copy of the equipment Operation & Maintenance Manuals.
15. One (1) clean water start-up session including a detailed report with electrical service check, equipment amperage readings, equipment rotation check, lubrication check, sequence/alternating check, motor timers set, valves set, etc.
16. Two (2) year structural warranty on the tank structure. This is a corporate guarantee and not covered by any bonds or insurance policies.
17. One (1) year warranty on all mechanical equipment. This is a corporate guarantee and not covered by any bonds or insurance policies.

**This cost estimate has been prepared based on the information available at this time
and is to be used for budgeting purposes only.**

TOTAL (For Above Scope) \$1.0M - \$1.1M
Taxes included.

Exclusions:

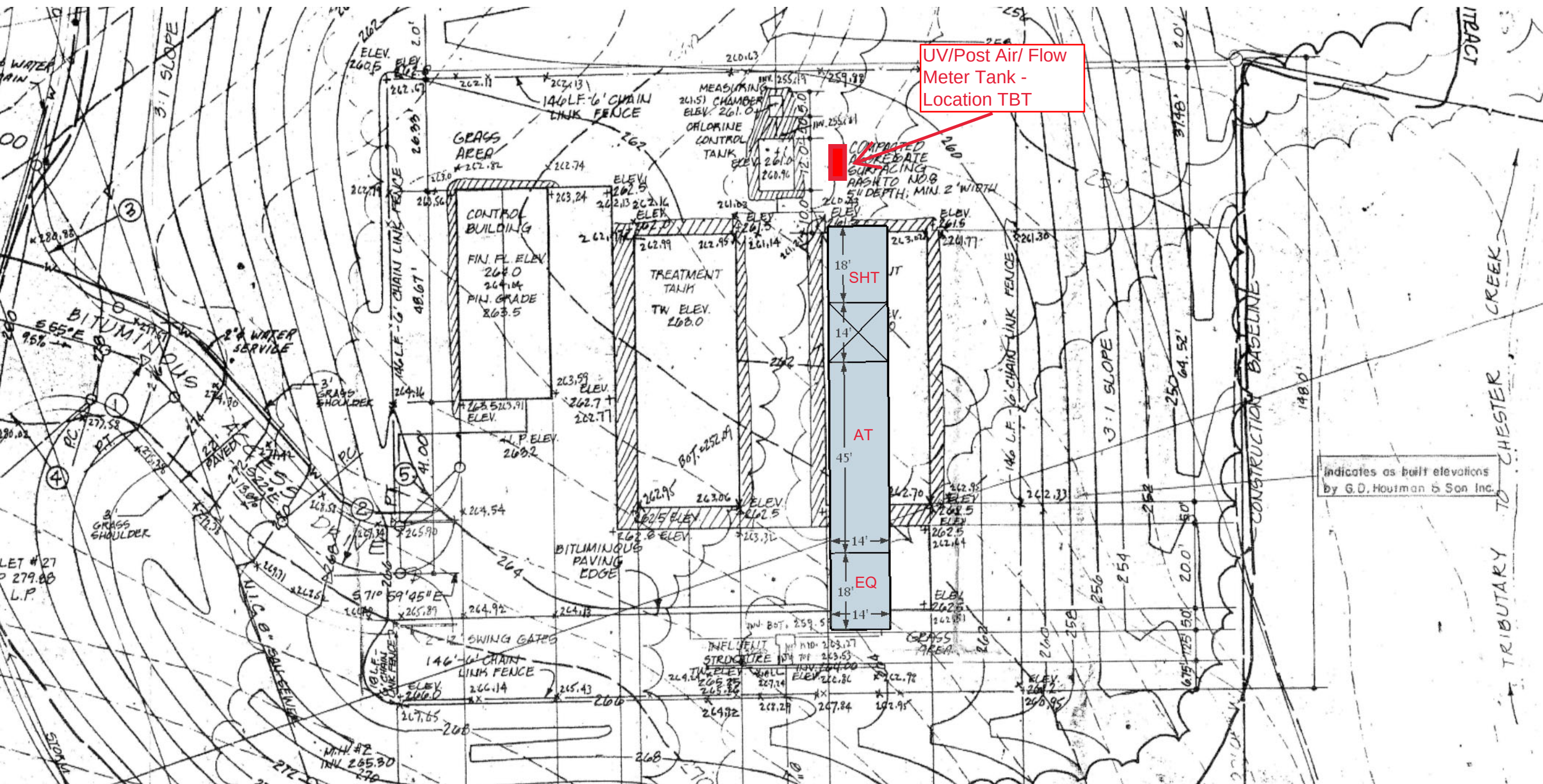
1. All site work related to access, excavation, excavation maintenance, shoring, sub-base preparation, dewatering, crane pads, delivery truck roads and pads, concrete delivery wash out areas/holes, and backfill of tank site.
2. Rock removal and/or blasting.
3. Survey and layout work other than precast layout.
4. Engineering approval fees.
5. Dumpsters, sanitary stations, and any other temporary facilities.
6. Interior and exterior coatings of tank, if requested.
7. All testing including sub-grade testing, concrete strength break testing, tank leak testing and pipe testing. The Contractor/The OWNER is responsible for water supply, disposal of water, all pumping, pipe plugs, and labor to fully execute the leak testing requirements.
8. All electrical material and installation.
9. Alarm auto dialer system, SCADA, and/or remote monitoring equipment.
10. All piping two (2') feet beyond the proposed precast concrete structures.
11. Blower enclosures.
12. Water supply for construction and testing of tank, pumps, and equipment.
13. Traffic control.
14. State or Federal Prevailing Wages, Union labor, or the inclusion of Project Labor Agreements.
15. All costs associated with wintertime construction.
16. Repairs, modifications, demolition, and/or removal of any existing tanks, equipment, or systems.
17. Existing tank dewatering or cleaning, wastewater hauling, and bypass pumping.
18. Incoming pressurized water supply into the control building.
19. All permits including, but not limited to, DEP, building, zoning, easements, and/or right-of-way agreements.
20. Engineering and approval fees.
21. Wastewater testing equipment.
22. Chemicals for chemical feed systems.
23. Costs to repair any road damage caused by concrete trucks, tractor-trailer delivery trucks, and cranes.
24. All bonds. This includes performance and payment bonds, state and local highway bonds, and road bonds.

Thank you for considering Dutchland LLC for your project.

Sincerely,



Kirk Merges
Process Mechanical Business Development Manager
Dutchland LLC



UV/Post Air/ Flow
Meter Tank -
Location TBT

Indicates as built elevations
by G.D. Houtman & Son Inc.

Appendix E: Projected Expenses



Walnut Hill Utility Co.
Sewer System Projection of Operating and Non-Operating Expenses

		2023	2024	2025	Past 3 Yr.	2026	2027	2028	2029	2030	2031	2032	2033
		Actual	Actual	Adopted	Average	Projected	Projected	Projected	Projected	Projected	Projected	Projected	Projected
Utilities													
Electric	(1)	\$ 25,782	\$ 19,926	\$ 20,000	21,900	\$ 20,600	\$ 21,218	\$ 21,855	\$ 22,510	\$ 23,185	\$ 23,881	\$ 24,597	\$ 25,335
Water	(1)	2,523	662	4,000	2,400	4,120	4,244	4,371	4,502	4,637	4,776	4,919	5,067
<i>Utilities Total</i>		\$ 28,305	\$ 20,588	\$ 24,000	\$ 24,300	\$ 24,720	\$ 25,462	\$ 26,225	\$ 27,012	\$ 27,823	\$ 28,657	\$ 29,517	\$ 30,402
Maintenance													
Chemicals	(1)	\$ 43,501	\$ 30,729	\$ 40,000	\$ 38,100	\$ 41,200	\$ 42,436	\$ 43,709	\$ 45,020	\$ 46,371	\$ 47,762	\$ 49,195	\$ 50,671
Sludge Hauling	(1)	9,559	18,079	18,000	15,200	18,540	19,096	19,669	20,259	20,867	21,493	22,138	22,802
KBX Monthly Fees	(1),(2)	52,453	50,196	51,000	51,200	51,000	51,000	51,000	51,000	51,000	51,000	51,000	51,000
General Maintenance/Repairs	(2)	21,578	39,137	15,000	25,200	15,450	15,914	16,391	16,883	17,389	17,911	18,448	19,002
DEP Sampling	(1)	28,947	11,209	12,000	17,400	12,360	12,731	13,113	13,506	13,911	14,329	14,758	15,201
Snow Removal	(3)	-	779	3,000	1,300	1,339	1,379	1,421	1,463	1,507	1,552	1,599	1,647
Landscaping	(1)	-	2,308	3,500	1,900	3,605	3,713	3,825	3,939	4,057	4,179	4,305	4,434
<i>Maintenance Total</i>		\$ 156,038	\$ 152,436	\$ 142,500	\$ 150,300	\$ 143,494	\$ 146,269	\$ 149,127	\$ 152,071	\$ 155,103	\$ 158,226	\$ 161,443	\$ 164,756
Engineering													
2024 Funding	(4)	\$ -	\$ 2,880	\$ 8,000	\$ 3,600	\$ 5,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Walter Fazler	(3)	-	2,840	4,500	2,400	2,472	2,546	2,623	2,701	2,782	2,866	2,952	3,040
<i>Engineering Total</i>		\$ -	\$ 5,720	\$ 12,500	\$ 6,000	\$ 7,472	\$ 2,546	\$ 2,623	\$ 2,701	\$ 2,782	\$ 2,866	\$ 2,952	\$ 3,040
Professional Services													
Property Management Fees	(1),(2)	\$ 28,980	\$ 28,980	\$ 18,000	\$ 25,300	\$ 18,000	\$ 18,000	\$ 18,000	\$ 18,000	\$ 18,000	\$ 18,000	\$ 18,000	\$ 18,000
Insurance	(1)	7,035	6,931	8,000	7,300	8,240	8,487	8,742	9,004	9,274	9,552	9,839	10,134
Legal Fees	(1)	146,975	27,985	50,000	75,000	51,500	53,045	54,636	56,275	57,964	59,703	61,494	63,339
Collection Legal Fees	(1),(5)	4,220	1,651	-	2,000	-	-	-	-	-	-	-	-
Audit and Tax Prep	(1)	4,718	110	2,678	2,500	2,758	2,841	2,926	3,014	3,105	3,198	3,294	3,392
Website	(3)	202	43	500	200	515	530	546	563	580	597	615	633
<i>Professional Services Total</i>		\$ 192,129	\$ 65,700	\$ 79,178	\$ 112,300	\$ 81,013	\$ 82,904	\$ 84,851	\$ 86,856	\$ 88,922	\$ 91,050	\$ 93,241	\$ 95,498
General and Administrative													
Bad Debt	(3)	\$ -	\$ 415	\$ 1,000	\$ 500	\$ 515	\$ 530	\$ 546	\$ 563	\$ 580	\$ 597	\$ 615	\$ 633
Processing/Bank Fees	(1)	-	15	-	-	-	-	-	-	-	-	-	-
Commercial Water Billings	(1),(5)	-	-	-	-	-	-	-	-	-	-	-	-
Regulatory Fees	(1)	715	1,749	1,760	1,400	1,813	1,867	1,923	1,981	2,040	2,102	2,165	2,230
Office Expense	(1)	13,384	7,128	5,000	8,500	5,150	5,305	5,464	5,628	5,796	5,970	6,149	6,334
Telephone/Internet	(1)	1,736	1,840	2,000	1,900	2,060	2,122	2,185	2,251	2,319	2,388	2,460	2,534
<i>General and Administrative Total</i>		\$ 15,835	\$ 11,148	\$ 9,760	\$ 12,300	\$ 9,538	\$ 9,824	\$ 10,119	\$ 10,422	\$ 10,735	\$ 11,057	\$ 11,389	\$ 11,730
Reserve and Taxes													
Replacement Reserve Funding	(3)	\$ 46,050	\$ 41,772	\$ 34,493	\$ 40,800	\$ 42,024	\$ 43,285	\$ 44,583	\$ 45,921	\$ 47,298	\$ 48,717	\$ 50,179	\$ 51,684
<i>Reserve and Taxes Total</i>		\$ 46,050	\$ 41,772	\$ 34,493	\$ 40,800	\$ 42,024	\$ 43,285	\$ 44,583	\$ 45,921	\$ 47,298	\$ 48,717	\$ 50,179	\$ 51,684
Debt Service													
PENNVEST Loan	(6)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 136,645	\$ 136,645	\$ 136,645	\$ 136,645	\$ 136,645	\$ 140,980	\$ 140,980
<i>Debt Service Total</i>		\$ -	\$ -	\$ -	\$ -	\$ -	\$ 136,645	\$ 136,645	\$ 136,645	\$ 136,645	\$ 136,645	\$ 140,980	\$ 140,980
Expense Total		\$ 438,357	\$ 297,364	\$ 302,431	\$ 346,000	\$ 308,261	\$ 446,934	\$ 454,173	\$ 461,628	\$ 469,308	\$ 477,218	\$ 489,700	\$ 498,092

Walnut Hill Utility Co.
Sewer System Projection of Operating and Non-Operating Expenses

		2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045
		Projected	Projected	Projected	Projected	Projected	Projected	Projected	Projected	Projected	Projected	Projected	Projected
Utilities													
Electric	(1)	\$ 26,095	\$ 26,878	\$ 27,685	\$ 28,515	\$ 29,371	\$ 30,252	\$ 31,159	\$ 32,094	\$ 33,057	\$ 34,049	\$ 35,070	\$ 36,122
Water	(1)	5,219	5,376	5,537	5,703	5,874	6,050	6,232	6,419	6,611	6,810	7,014	7,224
<i>Utilities Total</i>		\$ 31,315	\$ 32,254	\$ 33,222	\$ 34,218	\$ 35,245	\$ 36,302	\$ 37,391	\$ 38,513	\$ 39,668	\$ 40,858	\$ 42,084	\$ 43,347
Maintenance													
Chemicals	(1)	\$ 52,191	\$ 53,757	\$ 55,369	\$ 57,030	\$ 58,741	\$ 60,504	\$ 62,319	\$ 64,188	\$ 66,114	\$ 68,097	\$ 70,140	\$ 72,244
Sludge Hauling	(1)	23,486	24,190	24,916	25,664	26,434	27,227	28,043	28,885	29,751	30,644	31,563	32,510
KBX Monthly Fees	(1),(2)	51,000	51,000	51,000	51,000	51,000	51,000	51,000	51,000	51,000	51,000	51,000	51,000
General Maintenance/Repairs	(2)	19,572	20,159	20,764	21,386	22,028	22,689	23,370	24,071	24,793	25,536	26,303	27,092
DEP Sampling	(1)	15,657	16,127	16,611	17,109	17,622	18,151	18,696	19,256	19,834	20,429	21,042	21,673
Snow Removal	(3)	1,696	1,747	1,800	1,853	1,909	1,966	2,025	2,086	2,149	2,213	2,280	2,348
Landscaping	(1)	4,567	4,704	4,845	4,990	5,140	5,294	5,453	5,616	5,785	5,959	6,137	6,321
<i>Maintenance Total</i>		\$ 168,169	\$ 171,684	\$ 175,304	\$ 179,033	\$ 182,874	\$ 186,831	\$ 190,905	\$ 195,103	\$ 199,426	\$ 203,878	\$ 208,465	\$ 213,189
Engineering													
2024 Funding	(4)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Walter Fazler	(3)	3,131	3,225	3,322	3,422	3,524	3,630	3,739	3,851	3,967	4,086	4,208	4,335
<i>Engineering Total</i>		\$ 3,131	\$ 3,225	\$ 3,322	\$ 3,422	\$ 3,524	\$ 3,630	\$ 3,739	\$ 3,851	\$ 3,967	\$ 4,086	\$ 4,208	\$ 4,335
Professional Services													
Property Management Fees	(1),(2)	\$ 18,000	\$ 18,000	\$ 18,000	\$ 18,000	\$ 18,000	\$ 18,000	\$ 18,000	\$ 18,000	\$ 18,000	\$ 18,000	\$ 18,000	\$ 18,000
Insurance	(1)	10,438	10,751	11,074	11,406	11,748	12,101	12,464	12,838	13,223	13,619	14,028	14,449
Legal Fees	(1)	65,239	67,196	69,212	71,288	73,427	75,629	77,898	80,235	82,642	85,122	87,675	90,306
Collection Legal Fees	(1),(5)	-	-	-	-	-	-	-	-	-	-	-	-
Audit and Tax Prep	(1)	3,494	3,599	3,707	3,818	3,933	4,051	4,172	4,297	4,426	4,559	4,696	4,837
Website	(3)	652	672	692	713	734	756	779	802	826	851	877	903
<i>Professional Services Total</i>		\$ 97,823	\$ 100,218	\$ 102,685	\$ 105,225	\$ 107,842	\$ 110,537	\$ 113,313	\$ 116,173	\$ 119,118	\$ 122,151	\$ 125,276	\$ 128,494
General and Administrative													
Bad Debt	(3)	\$ 652	\$ 672	\$ 692	\$ 713	\$ 734	\$ 756	\$ 779	\$ 802	\$ 826	\$ 851	\$ 877	\$ 903
Processing/Bank Fees	(1)	-	-	-	-	-	-	-	-	-	-	-	-
Commercial Water Billings	(1),(5)	-	-	-	-	-	-	-	-	-	-	-	-
Regulatory Fees	(1)	2,296	2,365	2,436	2,509	2,585	2,662	2,742	2,824	2,909	2,996	3,086	3,179
Office Expense	(1)	6,524	6,720	6,921	7,129	7,343	7,563	7,790	8,024	8,264	8,512	8,768	9,031
Telephone/Internet	(1)	2,610	2,688	2,768	2,852	2,937	3,025	3,116	3,209	3,306	3,405	3,507	3,612
<i>General and Administrative Total</i>		\$ 12,082	\$ 12,445	\$ 12,818	\$ 13,203	\$ 13,599	\$ 14,007	\$ 14,427	\$ 14,860	\$ 15,305	\$ 15,765	\$ 16,237	\$ 16,725
Reserve and Taxes													
Replacement Reserve Funding	(3)	\$ 53,235	\$ 54,832	\$ 56,477	\$ 58,171	\$ 59,916	\$ 61,714	\$ 63,565	\$ 65,472	\$ 67,436	\$ 69,459	\$ 71,543	\$ 73,689
<i>Reserve and Taxes Total</i>		\$ 53,235	\$ 54,832	\$ 56,477	\$ 58,171	\$ 59,916	\$ 61,714	\$ 63,565	\$ 65,472	\$ 67,436	\$ 69,459	\$ 71,543	\$ 73,689
Debt Service													
PENNVEST Loan	(6)	\$ 140,980	\$ 140,980	\$ 140,980	\$ 140,980	\$ 140,980	\$ 140,980	\$ 140,980	\$ 140,980	\$ 140,980	\$ 140,980	\$ 140,980	\$ 140,980
<i>Debt Service Total</i>		\$ 140,980	\$ 140,980	\$ 140,980	\$ 140,980	\$ 140,980	\$ 140,980	\$ 140,980	\$ 140,980	\$ 140,980	\$ 140,980	\$ 140,980	\$ 140,980
Expense Total		\$ 506,735	\$ 515,638	\$ 524,807	\$ 534,252	\$ 543,980	\$ 554,000	\$ 564,321	\$ 574,951	\$ 585,900	\$ 597,178	\$ 608,794	\$ 620,758

Walnut Hill Utility Co.
Sewer System Projection of Operating and Non-Operating Expenses

Notes:

[illegible]

(1) Projection based on 2025 budget projection.

(2) Projection stays consistent.

(3) Projection based on 3-year historical average.

(4) Assumes engineering funding costs associated with PENNVEST loan.

(5) Expense excluded from projections.

Appendix F: PENNVEST Amortization Schedule



Walnut Hill Utility Co.

Projected Debt Service

PERIOD	DUE DATE	RATE	PRINCIPAL	INTEREST	BALANCE	D/S
0					\$2,306,000	
1	1/1/2026	1.743%	\$8,038	\$3,349	\$2,297,962	\$11,387
2	2/1/2026	1.743%	\$8,049	\$3,338	\$2,289,913	\$11,387
3	3/1/2026	1.743%	\$8,061	\$3,326	\$2,281,852	\$11,387
4	4/1/2026	1.743%	\$8,073	\$3,314	\$2,273,779	\$11,387
5	5/1/2026	1.743%	\$8,084	\$3,303	\$2,265,695	\$11,387
6	6/1/2026	1.743%	\$8,096	\$3,291	\$2,257,599	\$11,387
7	7/1/2026	1.743%	\$8,108	\$3,279	\$2,249,491	\$11,387
8	8/1/2026	1.743%	\$8,120	\$3,267	\$2,241,371	\$11,387
9	9/1/2026	1.743%	\$8,131	\$3,256	\$2,233,240	\$11,387
10	10/1/2026	1.743%	\$8,143	\$3,244	\$2,225,096	\$11,387
11	11/1/2026	1.743%	\$8,155	\$3,232	\$2,216,941	\$11,387
12	12/1/2026	1.743%	\$8,167	\$3,220	\$2,208,774	\$11,387
2027 Subtotal			\$97,226	\$39,419		\$136,645
13	1/1/2027	1.743%	\$8,179	\$3,208	\$2,200,596	\$11,387
14	2/1/2027	1.743%	\$8,191	\$3,196	\$2,192,405	\$11,387
15	3/1/2027	1.743%	\$8,203	\$3,184	\$2,184,202	\$11,387
16	4/1/2027	1.743%	\$8,215	\$3,173	\$2,175,988	\$11,387
17	5/1/2027	1.743%	\$8,226	\$3,161	\$2,167,761	\$11,387
18	6/1/2027	1.743%	\$8,238	\$3,149	\$2,159,523	\$11,387
19	7/1/2027	1.743%	\$8,250	\$3,137	\$2,151,272	\$11,387
20	8/1/2027	1.743%	\$8,262	\$3,125	\$2,143,010	\$11,387
21	9/1/2027	1.743%	\$8,274	\$3,113	\$2,134,736	\$11,387
22	10/1/2027	1.743%	\$8,286	\$3,101	\$2,126,449	\$11,387
23	11/1/2027	1.743%	\$8,298	\$3,089	\$2,118,151	\$11,387
24	12/1/2027	1.743%	\$8,310	\$3,077	\$2,109,841	\$11,387
2028 Subtotal			\$98,934	\$37,711		\$136,645
25	1/1/2028	1.743%	\$8,323	\$3,065	\$2,101,518	\$11,387
26	2/1/2028	1.743%	\$8,335	\$3,052	\$2,093,183	\$11,387
27	3/1/2028	1.743%	\$8,347	\$3,040	\$2,084,837	\$11,387
28	4/1/2028	1.743%	\$8,359	\$3,028	\$2,076,478	\$11,387
29	5/1/2028	1.743%	\$8,371	\$3,016	\$2,068,107	\$11,387
30	6/1/2028	1.743%	\$8,383	\$3,004	\$2,059,724	\$11,387
31	7/1/2028	1.743%	\$8,395	\$2,992	\$2,051,328	\$11,387
32	8/1/2028	1.743%	\$8,408	\$2,980	\$2,042,921	\$11,387
33	9/1/2028	1.743%	\$8,420	\$2,967	\$2,034,501	\$11,387
34	10/1/2028	1.743%	\$8,432	\$2,955	\$2,026,069	\$11,387
35	11/1/2028	1.743%	\$8,444	\$2,943	\$2,017,625	\$11,387
36	12/1/2028	1.743%	\$8,456	\$2,931	\$2,009,168	\$11,387
2029 Subtotal			\$100,672	\$35,973		\$136,645
37	1/1/2029	1.743%	\$8,469	\$2,918	\$2,000,700	\$11,387
38	2/1/2029	1.743%	\$8,481	\$2,906	\$1,992,219	\$11,387
39	3/1/2029	1.743%	\$8,493	\$2,894	\$1,983,725	\$11,387
40	4/1/2029	1.743%	\$8,506	\$2,881	\$1,975,219	\$11,387

Walnut Hill Utility Co.

Projected Debt Service

PERIOD	DUE DATE	RATE	PRINCIPAL	INTEREST	BALANCE	D/S
41	5/1/2029	1.743%	\$8,518	\$2,869	\$1,966,701	\$11,387
42	6/1/2029	1.743%	\$8,530	\$2,857	\$1,958,171	\$11,387
43	7/1/2029	1.743%	\$8,543	\$2,844	\$1,949,628	\$11,387
44	8/1/2029	1.743%	\$8,555	\$2,832	\$1,941,073	\$11,387
45	9/1/2029	1.743%	\$8,568	\$2,819	\$1,932,505	\$11,387
46	10/1/2029	1.743%	\$8,580	\$2,807	\$1,923,925	\$11,387
47	11/1/2029	1.743%	\$8,593	\$2,795	\$1,915,333	\$11,387
48	12/1/2029	1.743%	\$8,605	\$2,782	\$1,906,727	\$11,387
2030 Subtotal			\$102,441	\$34,204		\$136,645
49	1/1/2030	1.743%	\$8,618	\$2,770	\$1,898,110	\$11,387
50	2/1/2030	1.743%	\$8,630	\$2,757	\$1,889,480	\$11,387
51	3/1/2030	1.743%	\$8,643	\$2,744	\$1,880,837	\$11,387
52	4/1/2030	1.743%	\$8,655	\$2,732	\$1,872,182	\$11,387
53	5/1/2030	1.743%	\$8,668	\$2,719	\$1,863,514	\$11,387
54	6/1/2030	1.743%	\$8,680	\$2,707	\$1,854,834	\$11,387
55	7/1/2030	1.743%	\$8,693	\$2,694	\$1,846,141	\$11,387
56	8/1/2030	1.743%	\$8,706	\$2,682	\$1,837,436	\$11,387
57	9/1/2030	1.743%	\$8,718	\$2,669	\$1,828,717	\$11,387
58	10/1/2030	1.743%	\$8,731	\$2,656	\$1,819,986	\$11,387
59	11/1/2030	1.743%	\$8,744	\$2,644	\$1,811,243	\$11,387
60	12/1/2030	1.743%	\$8,756	\$2,631	\$1,802,487	\$11,387
2031 Subtotal			\$104,241	\$32,404		\$136,645
61	1/1/2031	2.179%	\$8,475	\$3,273	\$1,794,011	\$11,748
62	2/1/2031	2.179%	\$8,491	\$3,258	\$1,785,521	\$11,748
63	3/1/2031	2.179%	\$8,506	\$3,242	\$1,777,015	\$11,748
64	4/1/2031	2.179%	\$8,522	\$3,227	\$1,768,493	\$11,748
65	5/1/2031	2.179%	\$8,537	\$3,211	\$1,759,956	\$11,748
66	6/1/2031	2.179%	\$8,553	\$3,196	\$1,751,403	\$11,748
67	7/1/2031	2.179%	\$8,568	\$3,180	\$1,742,835	\$11,748
68	8/1/2031	2.179%	\$8,584	\$3,165	\$1,734,252	\$11,748
69	9/1/2031	2.179%	\$8,599	\$3,149	\$1,725,653	\$11,748
70	10/1/2031	2.179%	\$8,615	\$3,133	\$1,717,038	\$11,748
71	11/1/2031	2.179%	\$8,630	\$3,118	\$1,708,407	\$11,748
72	12/1/2031	2.179%	\$8,646	\$3,102	\$1,699,761	\$11,748
2032 Subtotal			\$102,726	\$38,254		\$140,980
73	1/1/2032	2.179%	\$8,662	\$3,086	\$1,691,099	\$11,748
74	2/1/2032	2.179%	\$8,678	\$3,071	\$1,682,422	\$11,748
75	3/1/2032	2.179%	\$8,693	\$3,055	\$1,673,728	\$11,748
76	4/1/2032	2.179%	\$8,709	\$3,039	\$1,665,019	\$11,748
77	5/1/2032	2.179%	\$8,725	\$3,023	\$1,656,294	\$11,748
78	6/1/2032	2.179%	\$8,741	\$3,008	\$1,647,554	\$11,748
79	7/1/2032	2.179%	\$8,757	\$2,992	\$1,638,797	\$11,748
80	8/1/2032	2.179%	\$8,773	\$2,976	\$1,630,024	\$11,748
81	9/1/2032	2.179%	\$8,788	\$2,960	\$1,621,236	\$11,748

Walnut Hill Utility Co.

Projected Debt Service

PERIOD	DUE DATE	RATE	PRINCIPAL	INTEREST	BALANCE	D/S
82	10/1/2032	2.179%	\$8,804	\$2,944	\$1,612,431	\$11,748
83	11/1/2032	2.179%	\$8,820	\$2,928	\$1,603,611	\$11,748
84	12/1/2032	2.179%	\$8,836	\$2,912	\$1,594,775	\$11,748
2033 Subtotal			\$104,986	\$35,993		\$140,980
85	1/1/2033	2.179%	\$8,852	\$2,896	\$1,585,922	\$11,748
86	2/1/2033	2.179%	\$8,869	\$2,880	\$1,577,054	\$11,748
87	3/1/2033	2.179%	\$8,885	\$2,864	\$1,568,169	\$11,748
88	4/1/2033	2.179%	\$8,901	\$2,848	\$1,559,268	\$11,748
89	5/1/2033	2.179%	\$8,917	\$2,831	\$1,550,351	\$11,748
90	6/1/2033	2.179%	\$8,933	\$2,815	\$1,541,418	\$11,748
91	7/1/2033	2.179%	\$8,949	\$2,799	\$1,532,469	\$11,748
92	8/1/2033	2.179%	\$8,966	\$2,783	\$1,523,503	\$11,748
93	9/1/2033	2.179%	\$8,982	\$2,766	\$1,514,521	\$11,748
94	10/1/2033	2.179%	\$8,998	\$2,750	\$1,505,523	\$11,748
95	11/1/2033	2.179%	\$9,015	\$2,734	\$1,496,508	\$11,748
96	12/1/2033	2.179%	\$9,031	\$2,717	\$1,487,478	\$11,748
2034 Subtotal			\$107,297	\$33,683		\$140,980
97	1/1/2034	2.179%	\$9,047	\$2,701	\$1,478,430	\$11,748
98	2/1/2034	2.179%	\$9,064	\$2,685	\$1,469,367	\$11,748
99	3/1/2034	2.179%	\$9,080	\$2,668	\$1,460,286	\$11,748
100	4/1/2034	2.179%	\$9,097	\$2,652	\$1,451,190	\$11,748
101	5/1/2034	2.179%	\$9,113	\$2,635	\$1,442,076	\$11,748
102	6/1/2034	2.179%	\$9,130	\$2,619	\$1,432,947	\$11,748
103	7/1/2034	2.179%	\$9,146	\$2,602	\$1,423,800	\$11,748
104	8/1/2034	2.179%	\$9,163	\$2,585	\$1,414,637	\$11,748
105	9/1/2034	2.179%	\$9,180	\$2,569	\$1,405,458	\$11,748
106	10/1/2034	2.179%	\$9,196	\$2,552	\$1,396,262	\$11,748
107	11/1/2034	2.179%	\$9,213	\$2,535	\$1,387,049	\$11,748
108	12/1/2034	2.179%	\$9,230	\$2,519	\$1,377,819	\$11,748
2035 Subtotal			\$109,659	\$31,321		\$140,980
109	1/1/2035	2.179%	\$9,246	\$2,502	\$1,368,573	\$11,748
110	2/1/2035	2.179%	\$9,263	\$2,485	\$1,359,309	\$11,748
111	3/1/2035	2.179%	\$9,280	\$2,468	\$1,350,029	\$11,748
112	4/1/2035	2.179%	\$9,297	\$2,451	\$1,340,732	\$11,748
113	5/1/2035	2.179%	\$9,314	\$2,435	\$1,331,419	\$11,748
114	6/1/2035	2.179%	\$9,331	\$2,418	\$1,322,088	\$11,748
115	7/1/2035	2.179%	\$9,348	\$2,401	\$1,312,740	\$11,748
116	8/1/2035	2.179%	\$9,365	\$2,384	\$1,303,376	\$11,748
117	9/1/2035	2.179%	\$9,382	\$2,367	\$1,293,994	\$11,748
118	10/1/2035	2.179%	\$9,399	\$2,350	\$1,284,595	\$11,748
119	11/1/2035	2.179%	\$9,416	\$2,333	\$1,275,180	\$11,748
120	12/1/2035	2.179%	\$9,433	\$2,316	\$1,265,747	\$11,748
2036 Subtotal			\$112,072	\$28,908		\$140,980
121	1/1/2036	2.179%	\$9,450	\$2,298	\$1,256,297	\$11,748

Walnut Hill Utility Co.

Projected Debt Service

PERIOD	DUE DATE	RATE	PRINCIPAL	INTEREST	BALANCE	D/S
122	2/1/2036	2.179%	\$9,467	\$2,281	\$1,246,830	\$11,748
123	3/1/2036	2.179%	\$9,484	\$2,264	\$1,237,346	\$11,748
124	4/1/2036	2.179%	\$9,502	\$2,247	\$1,227,844	\$11,748
125	5/1/2036	2.179%	\$9,519	\$2,230	\$1,218,325	\$11,748
126	6/1/2036	2.179%	\$9,536	\$2,212	\$1,208,789	\$11,748
127	7/1/2036	2.179%	\$9,553	\$2,195	\$1,199,236	\$11,748
128	8/1/2036	2.179%	\$9,571	\$2,178	\$1,189,665	\$11,748
129	9/1/2036	2.179%	\$9,588	\$2,160	\$1,180,077	\$11,748
130	10/1/2036	2.179%	\$9,605	\$2,143	\$1,170,472	\$11,748
131	11/1/2036	2.179%	\$9,623	\$2,125	\$1,160,849	\$11,748
132	12/1/2036	2.179%	\$9,640	\$2,108	\$1,151,208	\$11,748
2037 Subtotal			\$114,539	\$26,441		\$140,980
133	1/1/2037	2.179%	\$9,658	\$2,090	\$1,141,550	\$11,748
134	2/1/2037	2.179%	\$9,675	\$2,073	\$1,131,875	\$11,748
135	3/1/2037	2.179%	\$9,693	\$2,055	\$1,122,182	\$11,748
136	4/1/2037	2.179%	\$9,711	\$2,038	\$1,112,471	\$11,748
137	5/1/2037	2.179%	\$9,728	\$2,020	\$1,102,743	\$11,748
138	6/1/2037	2.179%	\$9,746	\$2,002	\$1,092,997	\$11,748
139	7/1/2037	2.179%	\$9,764	\$1,985	\$1,083,233	\$11,748
140	8/1/2037	2.179%	\$9,781	\$1,967	\$1,073,452	\$11,748
141	9/1/2037	2.179%	\$9,799	\$1,949	\$1,063,653	\$11,748
142	10/1/2037	2.179%	\$9,817	\$1,931	\$1,053,836	\$11,748
143	11/1/2037	2.179%	\$9,835	\$1,914	\$1,044,001	\$11,748
144	12/1/2037	2.179%	\$9,853	\$1,896	\$1,034,149	\$11,748
2038 Subtotal			\$117,060	\$23,920		\$140,980
145	1/1/2038	2.179%	\$9,870	\$1,878	\$1,024,278	\$11,748
146	2/1/2038	2.179%	\$9,888	\$1,860	\$1,014,390	\$11,748
147	3/1/2038	2.179%	\$9,906	\$1,842	\$1,004,484	\$11,748
148	4/1/2038	2.179%	\$9,924	\$1,824	\$994,559	\$11,748
149	5/1/2038	2.179%	\$9,942	\$1,806	\$984,617	\$11,748
150	6/1/2038	2.179%	\$9,960	\$1,788	\$974,656	\$11,748
151	7/1/2038	2.179%	\$9,979	\$1,770	\$964,678	\$11,748
152	8/1/2038	2.179%	\$9,997	\$1,752	\$954,681	\$11,748
153	9/1/2038	2.179%	\$10,015	\$1,734	\$944,666	\$11,748
154	10/1/2038	2.179%	\$10,033	\$1,715	\$934,633	\$11,748
155	11/1/2038	2.179%	\$10,051	\$1,697	\$924,582	\$11,748
156	12/1/2038	2.179%	\$10,069	\$1,679	\$914,513	\$11,748
2039 Subtotal			\$119,636	\$21,344		\$140,980
157	1/1/2039	2.179%	\$10,088	\$1,661	\$904,425	\$11,748
158	2/1/2039	2.179%	\$10,106	\$1,642	\$894,319	\$11,748
159	3/1/2039	2.179%	\$10,124	\$1,624	\$884,195	\$11,748
160	4/1/2039	2.179%	\$10,143	\$1,606	\$874,052	\$11,748
161	5/1/2039	2.179%	\$10,161	\$1,587	\$863,891	\$11,748
162	6/1/2039	2.179%	\$10,180	\$1,569	\$853,711	\$11,748

Walnut Hill Utility Co.

Projected Debt Service

PERIOD	DUE DATE	RATE	PRINCIPAL	INTEREST	BALANCE	D/S
163	7/1/2039	2.179%	\$10,198	\$1,550	\$843,513	\$11,748
164	8/1/2039	2.179%	\$10,217	\$1,532	\$833,296	\$11,748
165	9/1/2039	2.179%	\$10,235	\$1,513	\$823,061	\$11,748
166	10/1/2039	2.179%	\$10,254	\$1,495	\$812,807	\$11,748
167	11/1/2039	2.179%	\$10,272	\$1,476	\$802,535	\$11,748
168	12/1/2039	2.179%	\$10,291	\$1,457	\$792,244	\$11,748
2040 Subtotal			\$122,269	\$18,711		\$140,980
169	1/1/2040	2.179%	\$10,310	\$1,439	\$781,934	\$11,748
170	2/1/2040	2.179%	\$10,328	\$1,420	\$771,606	\$11,748
171	3/1/2040	2.179%	\$10,347	\$1,401	\$761,259	\$11,748
172	4/1/2040	2.179%	\$10,366	\$1,382	\$750,893	\$11,748
173	5/1/2040	2.179%	\$10,385	\$1,363	\$740,508	\$11,748
174	6/1/2040	2.179%	\$10,404	\$1,345	\$730,104	\$11,748
175	7/1/2040	2.179%	\$10,423	\$1,326	\$719,681	\$11,748
176	8/1/2040	2.179%	\$10,441	\$1,307	\$709,240	\$11,748
177	9/1/2040	2.179%	\$10,460	\$1,288	\$698,779	\$11,748
178	10/1/2040	2.179%	\$10,479	\$1,269	\$688,300	\$11,748
179	11/1/2040	2.179%	\$10,498	\$1,250	\$677,802	\$11,748
180	12/1/2040	2.179%	\$10,518	\$1,231	\$667,284	\$11,748
2041 Subtotal			\$124,960	\$16,020		\$140,980
181	1/1/2041	2.179%	\$10,537	\$1,212	\$656,747	\$11,748
182	2/1/2041	2.179%	\$10,556	\$1,193	\$646,192	\$11,748
183	3/1/2041	2.179%	\$10,575	\$1,173	\$635,617	\$11,748
184	4/1/2041	2.179%	\$10,594	\$1,154	\$625,022	\$11,748
185	5/1/2041	2.179%	\$10,613	\$1,135	\$614,409	\$11,748
186	6/1/2041	2.179%	\$10,633	\$1,116	\$603,776	\$11,748
187	7/1/2041	2.179%	\$10,652	\$1,096	\$593,124	\$11,748
188	8/1/2041	2.179%	\$10,671	\$1,077	\$582,453	\$11,748
189	9/1/2041	2.179%	\$10,691	\$1,058	\$571,762	\$11,748
190	10/1/2041	2.179%	\$10,710	\$1,038	\$561,052	\$11,748
191	11/1/2041	2.179%	\$10,730	\$1,019	\$550,323	\$11,748
192	12/1/2041	2.179%	\$10,749	\$999	\$539,574	\$11,748
2042 Subtotal			\$127,710	\$13,270		\$140,980
193	1/1/2042	2.179%	\$10,769	\$980	\$528,805	\$11,748
194	2/1/2042	2.179%	\$10,788	\$960	\$518,017	\$11,748
195	3/1/2042	2.179%	\$10,808	\$941	\$507,209	\$11,748
196	4/1/2042	2.179%	\$10,827	\$921	\$496,382	\$11,748
197	5/1/2042	2.179%	\$10,847	\$901	\$485,535	\$11,748
198	6/1/2042	2.179%	\$10,867	\$882	\$474,669	\$11,748
199	7/1/2042	2.179%	\$10,886	\$862	\$463,782	\$11,748
200	8/1/2042	2.179%	\$10,906	\$842	\$452,876	\$11,748
201	9/1/2042	2.179%	\$10,926	\$822	\$441,950	\$11,748
202	10/1/2042	2.179%	\$10,946	\$803	\$431,004	\$11,748
203	11/1/2042	2.179%	\$10,966	\$783	\$420,038	\$11,748

Walnut Hill Utility Co.

Projected Debt Service

PERIOD	DUE DATE	RATE	PRINCIPAL	INTEREST	BALANCE	D/S
204	12/1/2042	2.179%	\$10,986	\$763	\$409,053	\$11,748
2043 Subtotal			\$130,521	\$10,459		\$140,980
205	1/1/2043	2.179%	\$11,006	\$743	\$398,047	\$11,748
206	2/1/2043	2.179%	\$11,026	\$723	\$387,022	\$11,748
207	3/1/2043	2.179%	\$11,046	\$703	\$375,976	\$11,748
208	4/1/2043	2.179%	\$11,066	\$683	\$364,911	\$11,748
209	5/1/2043	2.179%	\$11,086	\$663	\$353,825	\$11,748
210	6/1/2043	2.179%	\$11,106	\$642	\$342,719	\$11,748
211	7/1/2043	2.179%	\$11,126	\$622	\$331,593	\$11,748
212	8/1/2043	2.179%	\$11,146	\$602	\$320,447	\$11,748
213	9/1/2043	2.179%	\$11,166	\$582	\$309,280	\$11,748
214	10/1/2043	2.179%	\$11,187	\$562	\$298,094	\$11,748
215	11/1/2043	2.179%	\$11,207	\$541	\$286,887	\$11,748
216	12/1/2043	2.179%	\$11,227	\$521	\$275,659	\$11,748
2044 Subtotal			\$133,394	\$7,586		\$140,980
217	1/1/2044	2.179%	\$11,248	\$501	\$264,412	\$11,748
218	2/1/2044	2.179%	\$11,268	\$480	\$253,143	\$11,748
219	3/1/2044	2.179%	\$11,289	\$460	\$241,855	\$11,748
220	4/1/2044	2.179%	\$11,309	\$439	\$230,546	\$11,748
221	5/1/2044	2.179%	\$11,330	\$419	\$219,216	\$11,748
222	6/1/2044	2.179%	\$11,350	\$398	\$207,866	\$11,748
223	7/1/2044	2.179%	\$11,371	\$377	\$196,495	\$11,748
224	8/1/2044	2.179%	\$11,392	\$357	\$185,103	\$11,748
225	9/1/2044	2.179%	\$11,412	\$336	\$173,691	\$11,748
226	10/1/2044	2.179%	\$11,433	\$315	\$162,258	\$11,748
227	11/1/2044	2.179%	\$11,454	\$295	\$150,804	\$11,748
228	12/1/2044	2.179%	\$11,474	\$274	\$139,330	\$11,748
2045 Subtotal			\$136,329	\$4,650		\$140,980
229	1/1/2045	2.179%	\$11,495	\$253	\$127,835	\$11,748
230	2/1/2045	2.179%	\$11,516	\$232	\$116,318	\$11,748
231	3/1/2045	2.179%	\$11,537	\$211	\$104,781	\$11,748
232	4/1/2045	2.179%	\$11,558	\$190	\$93,223	\$11,748
233	5/1/2045	2.179%	\$11,579	\$169	\$81,644	\$11,748
234	6/1/2045	2.179%	\$11,600	\$148	\$70,044	\$11,748
235	7/1/2045	2.179%	\$11,621	\$127	\$58,423	\$11,748
236	8/1/2045	2.179%	\$11,642	\$106	\$46,781	\$11,748
237	9/1/2045	2.179%	\$11,663	\$85	\$35,117	\$11,748
238	10/1/2045	2.179%	\$11,685	\$64	\$23,433	\$11,748
239	11/1/2045	2.179%	\$11,706	\$43	\$11,727	\$11,748
240	12/1/2045	2.179%	\$11,727	\$21	\$0	\$11,748
2046 Subtotal			\$139,330	\$1,650		\$140,980

Appendix G: 20-Year Rate Projections



Walnut Hill Utility Co.
Sewer Revenue Requirements with Reserve at Stonybank – Projected Rates

PROJECTED RATES																					
	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	
	Projected	Projected	Projected	Projected	Projected	Projected	Projected	Projected	Projected	Projected	Projected	Projected	Projected	Projected	Projected	Projected	Projected	Projected	Projected	Projected	
Expenses																					
Utilities	\$ 24,720	\$ 25,462	\$ 26,225	\$ 27,012	\$ 27,823	\$ 28,657	\$ 29,517	\$ 30,402	\$ 31,315	\$ 32,254	\$ 33,222	\$ 34,218	\$ 35,245	\$ 36,302	\$ 37,391	\$ 38,513	\$ 39,668	\$ 40,858	\$ 42,084	\$ 43,347	
Maintenance	143,494	146,269	149,127	152,071	155,103	158,226	161,443	164,756	168,169	171,684	175,304	179,033	182,874	186,831	190,905	195,103	199,426	203,878	208,465	213,189	
Engineering	7,472	2,546	2,623	2,701	2,782	2,866	2,952	3,040	3,131	3,225	3,322	3,422	3,524	3,630	3,739	3,851	3,967	4,086	4,208	4,335	
Professional Services	81,013	82,904	84,851	86,856	88,922	91,050	93,241	95,498	97,823	100,218	102,685	105,225	107,842	110,537	113,313	116,173	119,118	122,151	125,276	128,494	
General and Administrative	9,538	9,824	10,119	10,422	10,735	11,057	11,389	11,730	12,082	12,445	12,818	13,203	13,599	14,007	14,427	14,860	15,305	15,765	16,237	16,725	
Reserve and Taxes	42,024	43,285	44,583	45,921	47,298	48,717	50,179	51,684	53,235	54,832	56,477	58,171	59,916	61,714	63,565	65,472	67,436	69,459	71,543	73,689	
Debt Service	-	136,645	136,645	136,645	136,645	136,645	140,980	140,980	140,980	140,980	140,980	140,980	140,980	140,980	140,980	140,980	140,980	140,980	140,980	140,980	
Total Revenue Requirement	\$ 308,261	\$ 446,934	\$ 454,173	\$ 461,628	\$ 469,308	\$ 477,218	\$ 489,700	\$ 498,092	\$ 506,735	\$ 515,638	\$ 524,807	\$ 534,252	\$ 543,980	\$ 554,000	\$ 564,321	\$ 574,951	\$ 585,900	\$ 597,178	\$ 608,794	\$ 620,758	
Less Non Rate Income																					
Connection/Tapping Fees	\$ 51,000	\$ 119,000	\$ 110,500	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Misc. Sewer Income	9,600	9,600	9,600	9,600	9,600	9,600	9,600	9,600	9,600	9,600	9,600	9,600	9,600	9,600	9,600	9,600	9,600	9,600	9,600	9,600	
Late Fees	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	
Interest Income	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Legal Income	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400	
Non-Rate Income Subtotal	\$ 62,100	\$ 130,100	\$ 121,600	\$ 11,100	\$ 11,100	\$ 11,100	\$ 11,100	\$ 11,100	\$ 11,100	\$ 11,100	\$ 11,100	\$ 11,100	\$ 11,100	\$ 11,100	\$ 11,100	\$ 11,100	\$ 11,100	\$ 11,100	\$ 11,100	\$ 11,100	
Total Revenue Required from Rates	\$ 246,161	\$ 316,834	\$ 332,573	\$ 450,528	\$ 458,208	\$ 466,118	\$ 478,600	\$ 486,992	\$ 495,635	\$ 504,538	\$ 513,707	\$ 523,152	\$ 532,880	\$ 542,900	\$ 553,221	\$ 563,851	\$ 574,800	\$ 586,078	\$ 597,694	\$ 609,658	
Darlington Woods Revenue																					
Customer Charge Per Quarter	\$ 207.00	\$ 244.00	\$ 244.00	\$ 254.00	\$ 254.00	\$ 264.00	\$ 264.00	\$ 275.00	\$ 275.00	\$ 286.00	\$ 286.00	\$ 297.00	\$ 297.00	\$ 309.00	\$ 309.00	\$ 321.00	\$ 321.00	\$ 334.00	\$ 334.00	\$ 347.00	
Rate Increase	18%	18%	0%	4%	0%	4%	0%	4%	0%	4%	0%	4%	0%	4%	0%	4%	0%	4%	0%	4%	
Customer Count	380	380	380	380	380	380	380	380	380	380	380	380	380	380	380	380	380	380	380	380	
Sub-Total	\$ 314,640	\$ 370,880	\$ 370,880	\$ 386,080	\$ 386,080	\$ 401,280	\$ 401,280	\$ 418,000	\$ 418,000	\$ 434,720	\$ 434,720	\$ 451,440	\$ 451,440	\$ 469,680	\$ 469,680	\$ 487,920	\$ 487,920	\$ 507,680	\$ 507,680	\$ 527,440	
The Highland Reserves Revenue																					
Customer Charge Per Quarter	\$ 207.00	\$ 244.00	\$ 244.00	\$ 254.00	\$ 254.00	\$ 264.00	\$ 264.00	\$ 275.00	\$ 275.00	\$ 286.00	\$ 286.00	\$ 297.00	\$ 297.00	\$ 309.00	\$ 309.00	\$ 321.00	\$ 321.00	\$ 334.00	\$ 334.00	\$ 347.00	
Rate Increase	18%	18%	0%	4%	0%	4%	0%	4%	0%	4%	0%	4%	0%	4%	0%	4%	0%	4%	0%	4%	
Customer Count	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	
Sub-Total	\$ 14,904	\$ 17,568	\$ 17,568	\$ 18,288	\$ 18,288	\$ 19,008	\$ 19,008	\$ 19,800	\$ 19,800	\$ 20,592	\$ 20,592	\$ 21,384	\$ 21,384	\$ 22,248	\$ 22,248	\$ 23,112	\$ 23,112	\$ 24,048	\$ 24,048	\$ 24,984	
The Highlands Revenue																					
Customer Charge Per Quarter	\$ 452.00	\$ 533.00	\$ 533.00	\$ 554.00	\$ 554.00	\$ 576.00	\$ 576.00	\$ 599.00	\$ 599.00	\$ 623.00	\$ 623.00	\$ 648.00	\$ 648.00	\$ 674.00	\$ 674.00	\$ 701.00	\$ 701.00	\$ 729.00	\$ 729.00	\$ 758.00	
Rate Increase	18%	18%	0%	4%	0%	4%	0%	4%	0%	4%	0%	4%	0%	4%	0%	4%	0%	4%	0%	4%	
Customer Count	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	
Sub-Total	\$ 10,848	\$ 12,792	\$ 12,792	\$ 13,296	\$ 13,296	\$ 13,824	\$ 13,824	\$ 14,376	\$ 14,376	\$ 14,952	\$ 14,952	\$ 15,552	\$ 15,552	\$ 16,176	\$ 16,176	\$ 16,824	\$ 16,824	\$ 17,496	\$ 17,496	\$ 18,192	
The Reserve at Stonybank Revenue																					
Customer Charge Per Quarter	\$ 207.00	\$ 244.00	\$ 244.00	\$ 254.00	\$ 254.00	\$ 264.00	\$ 264.00	\$ 275.00	\$ 275.00	\$ 286.00	\$ 286.00	\$ 297.00	\$ 297.00	\$ 309.00	\$ 309.00	\$ 321.00	\$ 321.00	\$ 334.00	\$ 334.00	\$ 347.00	
Rate Increase	18%	18%	0%	4%	0%	4%	0%	4%	0%	4%	0%	4%	0%	4%	0%	4%	0%	4%	0%	4%	
Customer Count	6	20	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	
Sub-Total	\$ 4,968	\$ 19,520	\$ 32,208	\$ 33,528	\$ 33,528	\$ 34,848	\$ 34,848	\$ 36,300	\$ 36,300	\$ 37,752	\$ 37,752	\$ 39,204	\$ 39,204	\$ 40,788	\$ 40,788	\$ 42,372	\$ 42,372	\$ 44,088	\$ 44,088	\$ 45,804	
Commercial Revenue																					
Customer Charge Per Quarter	\$ 746.00	\$ 880.00	\$ 880.00	\$ 915.00	\$ 915.00	\$ 952.00	\$ 952.00	\$ 990.00	\$ 990.00	\$ 1,030.00	\$ 1,030.00	\$ 1,071.00	\$ 1,071.00	\$ 1,114.00	\$ 1,114.00	\$ 1,159.00	\$ 1,159.00	\$ 1,205.00	\$ 1,205.00	\$ 1,253.00	
Rate Increase	18%	18%	0%	4%	0%	4%	0%	4%	0%	4%	0%	4%	0%	4%	0%	4%	0%	4%	0%	4%	
Sub-Total	\$ 8,949	\$ 10,560	\$ 10,560	\$ 10,982	\$ 10,982	\$ 11,422	\$ 11,422	\$ 11,879	\$ 11,879	\$ 12,354	\$ 12,354	\$ 12,848	\$ 12,848	\$ 13,362	\$ 13,362	\$ 13,896	\$ 13,896	\$ 14,452	\$ 14,452	\$ 15,030	
Total Rate Revenue																					
Darlington Woods Revenue	\$ 314,640	\$ 370,880	\$ 370,880	\$ 386,080	\$ 386,080	\$ 401,280	\$ 401,280	\$ 418,000	\$ 418,000	\$ 434,720	\$ 434,720	\$ 451,440	\$ 451,440	\$ 469,680	\$ 469,680	\$ 487,920	\$ 487,920	\$ 507,680	\$ 507,680	\$ 527,440	
The Highland Reserves Revenue	14,904	17,568	17,568	18,288	18,288	19,008	19,008	19,800	19,800	20,592	20,592	21,384	21,384	22,248	22,248	23,112	23,112	24,048	24,048	24,984	
The Highlands Revenue	10,848	12,792	12,792	13,296	13,296	13,824	13,824	14,376	14,376	14,952	14,952	15,552	15,552	16,176	16,176	16,824	16,824	17,496	17,496	18,192	
The Reserve at Stonybank Revenue	4,968	19,520	32,208	33,528	33,528	34,848	34,848	36,300	36,300	37,752	37,752	39,204	39,204	40,788	40,788	42,372	42,372	44,088	44,088	45,804	
Commercial Revenue	8,949	10,560	10,560	10,982	10,982	11,422	11,422	11,879	11,879	12,354	12,354	12,848	12,848	13,362	13,362	13,896	13,896	14,452	14,452	15,030	
Total	\$ 354,309	\$ 431,320	\$ 444,008	\$ 462,174	\$ 462,174	\$ 480,382	\$ 480,382	\$ 500,355	\$ 500,355	\$ 520,370	\$ 520,370	\$ 540,428	\$ 540,428	\$ 562,254	\$ 562,254	\$ 584,124	\$ 584,124	\$ 607,764	\$ 607,764	\$ 631,450	
Total Revenue from Rates	354,309	431,320	444,008	462,174	462,174	480,382	480,382	500,355	500,355	520,370	520,370	540,428	540,428	562,254	562,254	584,124	584,124	607,764	607,764	631,450	
Net Position	\$ 108,148	\$ 114,486	\$ 111,435	\$ 11,646	\$ 3,966	\$ 14,264	\$ 1,782	\$ 13,363	\$ 4,720	\$ 15,832	\$ 6,662	\$ 17,276	\$ 7,548	\$ 19,353	\$ 9,033	\$ 20,273	\$ 9,324	\$ 21,686	\$ 10,070	\$ 21,792	
Replacement Reserve Beginning Balance	380,917	431,089	488,860	544,878	502,445	453,710	416,691	368,652	333,699	291,653	262,317	225,456	200,903	168,367	149,434	122,032	107,777	84,537	75,683	57,296	
Replacement Reserve Deposits	42,024	43,285	44,583	45,921	47,298	48,717	50,179	51,684	53,235	54,832	56,477	58,171	59,916	61,714	63,565	65,472	67,436	69,459	71,543	73,689	
Assumed Replacement Reserve Withdrawals	-100,000	-100,000	-100,000	-100,000	-100,000	-100,000	-100,000	-100,000	-100,000	-100,000	-100,000	-100,000	-100,000	-100,000	-100,000	-100,000	-100,000	-100,000	-100,000	-100,000	
Annual Revenue Deposit/(Withdrawal)	108,148	114,486	111,435	11,646	3,966	14,264	1,782	13,363	4,720	15,832	6,662	17,276	7,548	19,353	9,033	20,273	9,324	21,686	10,070	21,792	
Replacement Reserve Ending Balance	\$ 431,089	\$ 488,860	\$ 544,878	\$ 502,445	\$ 453,710	\$ 416,691	\$ 368,652	\$ 333,699	\$ 291,653	\$ 262,317	\$ 225,456	\$ 200,903	\$ 168,367	\$ 149,434	\$ 122,032	\$ 107,777	\$ 84,537	\$ 75,683	\$ 57,296	\$ 52,777	

Appendix H: 20-Year No-Rate Increase Projections



Sewer Revenue Requirements with Reserve at Stoneybank – Existing Rates

[illegible]

Notes:

Assumes growth of 6, 14 and 13 additional residential customers (totaling 33 additional residential customers) for 2026, 2027 and 2028, respectively for the Reserve at Stoneybank. Tapping fees and additional revenue are properly allocated per respective year.

Replacement Reserve Fund beginning balance based on December 31, 2024 balance.