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Agendas & Minutes Posted:
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LEHIGH COUNTY AUTHORITY

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BOARD MEETING AGENDA – October 28, 2024 – 12:00 p.m.

In-Person or Virtual Meeting Attendance Options Available: Meetings of the LCA Board of Directors will be held at LCA's Main Office as well as online using the Zoom Meetings application, which includes a telephone option. Public participation is welcomed both in-person or virtually. Instructions for joining the meeting online or by phone are posted on the LCA website in the morning on the day of the meeting, prior to the start of each meeting. You may also issue comment to LCA via email to LCABoard@lehighcountyauthority.org in advance of any meeting or view the meeting at a later time by visiting the LCA website. Please visit <https://www.lehighcountyauthority.org/about/lca-board-meeting-videos/> for specific instructions to join the meeting if you are attending virtually. If attending in-person at LCA's Main Office, please follow all safety and sanitation protocols posted.

1. Call to Order

- **NOTICE OF MEETING RECORDINGS**

Meetings of Lehigh County Authority's Board of Directors that are held at LCA's Main Office at 1053 Spruce Road, Wescosville, PA, may be recorded for viewing online at lehighcountauthority.org. Recordings of LCA meetings are for public convenience and internal use only and are not considered as minutes for the meeting being recorded, nor are they part of public record. Recordings may be retained or destroyed at LCA's discretion.

- *Public Participation Sign-In Request*

2. Review of Agenda / Executive Sessions

- Additions to Agenda (vote required if action will be taken)

3. Approval of Minutes

- *October 14, 2024 Board Meeting minutes*

4. Public Comments

5. Action / Discussion Items:

FINANCE AND ADMINISTRATION

- *2025 Budget (Approval) (yellow) (digital Board packet, pages 9-13)*
- *2025-2029 Capital Plan (Approval) (white) (digital Board packet, pages 14-40)*
- *Resolution 10-2024-1: Suburban Wastewater Borrowing (blue) (digital Board packet, pages 41-47)*
- *LCA Main Office Parking Lot Expansion (Approval) (salmon) (digital Board packet, pages 48-51)*

WATER

WASTEWATER

- *Allentown Division – Kline's Island WWTP – Final Settling Tanks 1-4 Upgrades (Approval) (green) (digital Board packet, pages 52-59)*

6. Monthly Project Updates / Information Items (1st Board meeting per month)

7. Monthly Financial Review (2nd Board meeting per month) (digital Board packet, pages 60-72) – **September 2024 report attached**

8. Monthly System Operations Overview (2nd Board meeting per month) (digital Board packet, pages 73-75) – **September 2024 report attached**
9. Staff Comments
10. Solicitor's Comments
11. Public Comments / Other Comments
12. Board Member Comments
13. Executive Sessions
14. Adjournment

UPCOMING BOARD MEETINGS		
November 11, 2024	November 25, 2024	December 9, 2024

PUBLIC PARTICIPATION POLICY

In accordance with Authority policy, members of the public shall record their name, address, and discussion item on the sign-in sheet at the start of each meeting; this information shall also be stated when addressing the meeting. During the Public Comment portions of the meeting, members of the public will be allowed 5 minutes to make comments/ask questions regarding non-agenda items, but time may be extended at the discretion of the Chair; comments/questions regarding agenda items may be addressed after the presentation of the agenda item. Members of the public may not request that specific items or language be included in the meeting minutes.

REGULAR MEETING MINUTES

October 14, 2024

The Regular Meeting of the Lehigh County Authority Board of Directors was called to order at 12:02 p.m. on Monday, October 14, 2024, Chairman Brian Nagle presiding. The meeting was hybrid via in-person and video and audio advanced communication technology ("ACT"), using the Zoom internet application, including telephone option. Each Board member and other attendees of the meeting were able to hear each other attendee and be heard by each other attendee. The public could also participate in the meeting in-person or via ACT, using the Zoom internet application, including telephone option. A Roll Call of Board members present was taken. Brian Nagle, Amir Famili, Ted Lyons, Jeff Morgan, Norma Cusick, and Linda Rosenfeld were present for Roll Call, and remained for the duration of the meeting. Sean Ziller entered the meeting at 1:14 p.m. and remained for the duration of the meeting.

Attorney Kevin Reid, the Authority's Solicitor, was present along with Authority Staff, Liesel Gross, Ed Klein, Chris Moughan, Andrew Moore, AJ Capuzzi, Chuck Volk, Phil DePoe, Susan Sampson, and Lisa Miller.

Chairman Nagle announced that the Board received their electronic and hard copies of the Board packet in advance. A copy of the packet is also available online.

REVIEW OF AGENDA

Chairman Nagle announced that there was an Executive Session prior to the regular meeting to discuss property acquisition.

Liesel Gross announced that there are no changes to the agenda; however, there is an additional Executive Session after the regular meeting to discuss personnel.

APPROVAL OF MINUTES

September 23, 2024 Meeting Minutes

Jeff Morgan noted grammatical errors. On a motion by Jeff Morgan, seconded by Linda Rosenfeld, the Board approved the minutes from the September 23, 2024 meeting as corrected (6-0).

PUBLIC COMMENTS

None.

Property Acquisition

Liesel Gross provided a description and map of the property at 965 N. Brookside Road, which the Authority would like to purchase. Key reasons for purchasing the property are the access to the road frontage, connection to Authority property and access road that are directly adjacent to the property, and use of the building for office space or storage. Solicitor Kevin Reid reviewed the due diligence completed to date including a title search, survey, property inspection, appraisal, and zoning review. He noted that due to the property zoning, the Authority would have the right to use the property without additional township zoning approvals.

On a motion by Linda Rosenfeld, seconded by Ted Lyons, the Board approved a motion to authorize the CEO and the CFO to take all steps necessary and convenient to acquire real property located at 965 N. Brookside Road, Allentown, PA 18106, Parcel ID #547585892509 1, for the purchase price of four hundred twenty-five thousand dollars and 00/100 (\$425,000.00), including entering an appropriate Agreement of Sale and executing all such other necessary and related documents

associated with the purchase of the property. The purchase shall be subject to the condition that the Authority obtain a clear underground storage tank scan of the property, and such other conditions as may be set forth in the Agreement of Sale (6-0).

A roll call vote was taken with the following votes cast:

Brian Nagle – yes
Amir Famili – yes
Ted Lyons – yes
Jeff Morgan – yes
Norma Cusick – yes
Linda Rosenfeld – yes

2025 Preliminary Budget

Liesel Gross stated that the Board has been provided with a complete Budget proposal and noted that today's presentation is focused on the changes from the prior presentation and the proposed rates in all divisions. Ms. Gross noted that any final revisions will be made by the October 28 meeting for final approval. The new rates will be presented for approval on November 11 and would become effective on January 1, 2025.

Ms. Gross provided a staffing update and summary of the 2025 new staffing positions. She noted that the Regional Surcharge Program Inspector / Technician positions were eliminated from the 2025 Budget proposal until the program becomes more defined. She also provided a list of the 13 staff vacancies as requested at a prior meeting.

Ed Klein reviewed the 2025 Budget summary and the key figures of the budget. He noted that the debt service coverage ratios are above 2.00 in all funds which are positive and above target. He then reviewed the changes to the funds from the presentation at the September 23 meeting. He noted that there are no changes to the Suburban Water fund budget proposal. Liesel Gross noted that the revenue for the Suburban Water fund is estimated to increase at 7.53 percent, which includes an estimated 1 percent growth in volume, leaving a 6.53 percent rate increase required to achieve the budget targets presented by Mr. Klein. She then reviewed the proposed 2025 Suburban Water rates in more detail noting each rate component, and the average residential customer rate impact, which will vary depending on usage.

Ed Klein then reviewed the changes in the Suburban Wastewater fund noting a reduction in revenue and operating expenses based on changes made to the budget proposal since the last meeting. Capital expenditures were decreased by moving the Pretreatment Plant projects beyond the 2025 Budget. Rates for the Suburban Wastewater fund will be reviewed separately during today's presentation of the User Charge Report.

For the City Division fund, the biggest change was a reduction in the capital spending due to the reduction in spending for the Inflow & Infiltration Source Reduction plan in 2025. Ted Lyons asked for an explanation of key metrics, and Mr. Klein reviewed the methodology and importance of each metric including debt service coverage, days cash on hand, and operating ratio. Liesel Gross reviewed the 2025 proposed water and sewer rates for the City Division, which are controlled by the Allentown Water & Sewer Lease. She reviewed all of the components that go into the water and sewer rates including fixed charges, volume and flow charges, which are increased based on a formula in the Lease including inflation plus an index of 2.5 percent, which equates to an increase of 6.3 percent in 2025 for those rate components. She also reviewed capital cost recovery charges for various projects, which have been controlled in recent years due to the application of grants to projects that are subject to these charges. She then showed a summary example of a customer bill

for 2025 based on the proposed rates. She then provided a summary of all Authority rates and how they compare to other communities in the Lehigh Valley as well as other urban areas in Pennsylvania.

Ed Klein continued with a review of the Capital Budgets for Administration, Suburban Water, Suburban Wastewater, and the City Division, highlighting the various projects.

Liesel Gross said that any changes to the 2025 Budget will be presented at the October 28 meeting. The Budget is scheduled to be adopted on October 28 with rate adoption on November 11.

Ted Lyons commented that he wants to be sure that the rates are increasing because they need to and not just because we are allowed to based on the Lease. Liesel Gross explained that the increases are needed to provide support for the increasing capital requirements of the system as well as to service the Lease debt that was issued in 2013. Amir Famili asked about the impact of the Pretreatment Plant decision-making process on the budget, and asked for an update on the schedule for a decision on the upgrade project. Liesel Gross explained that the decision on the future of the Pretreatment Plant has not been finalized due to the decision-making process each industrial user is working through to determine their participation in the future project. However, in 2025, the customer base will remain unchanged, so revenues can be calculated in the 2025 Budget, and this information can be used to support borrowing for critical upgrades that are needed in the near-term while the long-term project is still being considered by all parties.

Western Lehigh Interceptor (WLI) User Charge Report

Jennifer Montero, the Authority's Contracts Administrator, presented the 2025 Wastewater User Charge Report explaining the various billing rates that are charged to the users of the Western Lehigh Interceptor, Little Lehigh Relief Interceptor Phase 1, and Little Lehigh Relief Interceptor Phase 2. The rate calculation reflects the actual 2025 capital spending being recovered in the calendar year through the rates. For 2025, the rate increases will have the impact of increasing charges to an average residential customer by 6.2% percent.

Ms. Montero commented that the rates shown in this report are charged to the municipalities. The municipalities then determine their own sewer rates to their customers, so the rate impact calculated in this report may be different depending on the actual municipal sewer rates applied to the customers. The municipalities received this User Charge Report in October, and no comments were received.

There was some discussion regarding the municipal agreements and how to simplify the process.

On a motion by Linda Rosenfeld, seconded by Ted Lyons, the Board gave preliminary approval of the 2025 WLI, LLRI-Phase 1 and Phase 2 User Charges (6-0). Sean Ziller abstained due to entering the meeting in the middle of the discussion on this item.

LCA Building Optimization Study & Master Plan

Stephen Boone provided an overview of the project to develop a Master Plan for optimizing existing building space for current and future workforce needs due to the expected significant growth of the Authority's workload due to changing regulatory requirements and system growth. Mr. Boone said that the project will be very interactive with Authority staff and will include a review of the Main Office, Water Filtration Plant, Allentown Field Services, and the Pretreatment Plant facilities. The Kline's Island Wastewater Treatment Plant is excluded under this plan as it has already been studied separately. The property on Brookside Road that the Authority recently approved for acquisition will

also be studied separately. Mr. Boone reviewed the scope of work and recommended approval of a contract with HDR to complete the project.

Amir Famili asked if HDR has experience in office optimization and alternative office space utilization. Mr. Boone said this work falls well within HDR's expertise, which is why they were selected for this work, and HDR also understands the water and wastewater industry. Mr. Famili asked if other firms were reviewed for this work. AJ Capuzzi explained that there was a high-level review of the qualifications of all firms with master service agreements with the Authority, and HDR was selected for their expertise in this area. Jeff Morgan asked if the project includes review of zoning and other code requirements. Mason Beck from HDR explained that this review will be completed as part of the process of developing recommendations for the master plan.

On a motion by Linda Rosenfeld, seconded by Ted Lyons, the Board approved the Capital Project Authorization for the LCA Building Optimization Study and Master Plan in the amount of \$160,000.00 which includes the Professional Services Authorization to HDR Engineering for the LCA Building Optimization and Master Plan in the amount of \$130,000.00 (7-0).

Allentown Division – Large Diameter Valve Rehabilitation & Replacement Program

Chuck Volk presented the project, which is the first cycle to replace large diameter valves that are inoperable or in poor condition or inoperable. The valves proposed for replacement in this cycle of the program were identified as the highest priority in a study completed last year. The location of the valves are at 12th Street, Martin Luther King Jr. Drive and Lehigh Parkway East. Ted Lyons asked how often the valves should be checked. Chris Moughan explained the requirements of the Allentown Water & Sewer Lease to check all valves under 16 inches on a three-year cycle. There are no mandated maintenance requirements for valves larger than 16 inches due to the difficulty of exercising large valves and potential impact to water service. However, the Authority plans to place these large valves on a five-year maintenance cycle.

On a motion by Ted Lyons, seconded by Sean Ziller, the Board approved the Capital Project Authorization for Construction Phase in the amount of \$1,206,612.00 which includes the General Construction Contract to Joao & Bradley Construction Co., Inc. in the amount of \$1,058,552.00, and a Professional Services Authorization for Construction Phase Engineering Services to Gannett Fleming in the amount of \$88,060.00 (7-0).

Emergency Declaration – Emergency Sewer Repair on South Clinton Street, Allentown

Chris Moughan provided an overview of the emergency sewer repair that occurred on South Clinton Street, Allentown on September 23. While jetting the sewer line, the jet truck nozzle became lodged in the pipe and required video inspection. Through the video inspection, it was discovered that there was a broken sewer main. Scheuermann was called in to do the repairs. After the main and lateral connections were made, a sinkhole was also discovered. On September 30, Authority crews televised the sewer line and the repair and discovered several additional breaks in the line. When Scheuermann was called back to make the additional repairs, they were unable to commit to the additional work at that time. As a result, JOAO Bradley was called in to complete the emergency repair on the new pipe sections found to be collapsed.

On a motion by Jeff Morgan, seconded by Sean Ziller, the Board approved the Emergency Declaration for the Emergency Sewer Repair on South Clinton Street retroactive to September 23, 2024, to cover expenses already incurred or to be incurred as a result of this emergency, and waive standard purchasing guidelines as a result of acting as expeditiously as possible to address the emergency (7-0).

Allentown Division – Sanitary Sewer Collection System: City of Allentown Manhole Inspections

Phil DePoe provided an overview and background of the project for the next phase of manhole inspections, including approximately 1,600 manhole inspections in the Eastside Sewershed as part of the process to identify inflow and infiltration. These inspections will occur throughout the remainder of 2024 and into the third quarter of 2025. Arcadis has performed the first two rounds of inspections, and the Authority would like to continue their contract for this next round of inspections. There was some discussion about the urgency of the work as well as the increased cost per manhole for this round of inspections.

On a motion by Norma Cusick, seconded by Ted Lyons, the Board approved the Capital Project Authorization for the Allentown Division 2025 Manhole Inspections (Eastside Sewershed) in the amount of \$353,000.00 which includes the Professional Services Authorization to Arcadis for Inspection Services in the amount of \$327,000.00 (7-0).

Allentown Division – Kline's Island WWTP – Primary Sludge System Upgrades

Amy Rohrbach provided an overview of the construction phase of the project to replace the pipes in the Primary Sludge Pump Station, including installation of two new glass-lined primary sludge force mains and modifications to piping and instrumentation within the Digester Control Building. The force mains will be larger in diameter to allow for future increased sludge collection. Another component of the project, Bid Alternate 1, is to replace the pipe coupling which requires the need for bypass pumping. The work will include new magnetic flow meters and a valve tree that will allow isolation of the flow to each digester which will be beneficial during maintenance and cleanings. This work will also improve efficiency and reduce maintenance and allow for higher solids to be sent to the digesters at the Kline's Island Wastewater Treatment Plant.

Ms. Rohrbach noted that the lower bids received from some contractors may have been based on which contractors own their own pumps that are needed for the bypass pumping operation included in the Bid Alternate 1.

On a motion by Ted Lyons, seconded by Norma Cusick, the Board approved the Capital Project Authorization for the Construction Phase in the amount of \$4,439,355.00 which includes the General Construction Contract Award to Allan Myers, L.P. in the amount of \$2,215,555.00 and the Professional Services Authorization for Construction Administration to CHA Consulting, Inc. (formerly D'Huy Engineering, Inc.) in the amount of \$153,800.00 (7-0).

MONTHLY PROJECT UPDATES / INFORMATION ITEMS

Liesel Gross reviewed the October 2024 report and noted that there are numerous items for the October 28 meeting. The final Budget will be presented along with the 2025-2029 Capital Plan which will include any changes to the plan and any public comments received. She briefly highlighted other projects included in the report.

STAFF COMMENTS

Liesel Gross updated the Board on the Governance Committee meeting that took place on October 2. The discussion was productive, and a few next steps are planned including a review and finalization of a resolution for Board approval. This will be brought to the Board in either November or December. Ms. Gross announced that there are a series of Open Houses scheduled regarding the Kline's Island Sewer System. The meetings are scheduled between October 17 and October 29 for the public to hear more about the sewer system and the Act 537 plan. She also announced that

the Lead and Copper Rule compliance deadline is October 16 to submit a full inventory of service line materials to DEP as well as publish a map for the public to be able to look up their service lines to see what type of lines they have. She thanked Andrew Moore and team for their work on this project. Also on October 16, PennVEST will be holding a Board of Directors meeting to award grants and loans. The Authority has applied for a \$12 million grant for the Lead Service Line Replacement Cycle 2 project.

SOLICITOR'S COMMENTS

None.

PUBLIC COMMENTS / OTHER COMMENTS

None.

BOARD MEMBER COMMENTS

None.

EXECUTIVE SESSION

There will be an Executive Session after the regular session to discuss personnel.

ADJOURNMENT

There being no further business, the Chairman adjourned the meeting at 1:56 p.m.

Jeffrey J. Morgan
Secretary

2025 BUDGET – EXECUTIVE SUMMARY

Submitted by: Liesel M. Gross, Chief Executive Officer

October 21, 2024

Each year, the development of the upcoming year's annual budget provides an opportunity to reflect upon the progress made on key organizational strategies and goals and to envision the future. When Lehigh County Authority (LCA) looks back on 2023 and 2024, there are many success stories to share as well as indications of the new challenges that lie ahead. As proposed, the 2025 Budget offers support for the organization to continue the momentum achieved in key areas of the 2022-2027 Strategic Plan, and additional resources to address evolving regulatory requirements.

Support will be needed in 2025 to advance LCA's progress in these key areas:

Kline's Island Sewer System (KISS) Act 537 Planning – Significant progress has been made in the effort to develop a regional long-term sewage facilities plan for the 15 municipalities that are part of the KISS. The Act 537 Plan is expected to be finalized in early 2025 and submitted for regulatory review and approval. In the next decade, much of the planned work will be focused on identifying and removing sources of inflow and infiltration (I&I) in the 1,000 miles of sewer lines that make up the KISS system. To achieve program goals related to removing excess I&I and recapturing system capacity, a detailed I&I source reduction program is currently under development. This program is expected to cost \$100 million or more over the next 10 years, with an additional \$250 million required for upgrades to treatment facilities and regional interceptors.

Systems & Process Improvement – In 2024, LCA embarked on a series of projects to improve data management and enhance staff and system capabilities in the areas of financial reporting, employee and customer self-service, project management, and maintenance management. Initial phases of software implementation – Tyler EERP and ProCore – are expected to be completed by the end of 2024. In 2025, significant support for employee training on the new systems will be required, along with implementation of additional features and modules needed to achieve program goals.

Lead Program Implementation – In October 2024, the U.S. Environmental Protection Agency announced the finalization of a new set of regulations regarding lead in drinking water systems, known as the Lead & Copper Rule Improvements (LCRI). The LCRI includes several new requirements that LCA must address, including new water sampling protocols, public notification requirements, outreach to schools and daycare facilities, and replacement of all lead service lines in the system within a 10-year period. Another key component is the development of an accurate inventory of all public and private water service lines in the system. As LCA pursues grant opportunities to support the replacement of lead service lines, a parallel effort must be implemented to gather data on these service lines of unknown material through methods such as door-to-door canvassing, service line excavations, and predictive modeling. Over the compliance period, LCA expects to spend \$200 million or more to implement the new requirements of the LCRI.

Asset Management – With the completion of LCA's Strategic Asset Management Plan in 2023, efforts in 2024 have been focused on developing targeted asset management plans for selected facilities and systems. The cross-organizational team working on this program have developed the

internal processes and expertise needed to support a more robust asset management approach that LCA requires. These targeted asset management plans have focused primarily on capturing information on asset risk – the risk of failure, and the consequence of failure. This data, if captured consistently, will allow for data-driven project prioritization, preventive maintenance plans, and asset replacement planning. In 2025, the team will expand on the pilot phase completed in 2024 to a more comprehensive program that will capture data for all systems and assets over time.

Grants, Community Partnerships & Affordability – In an era of rapid expansion of regulatory requirements and capital investment needs, it is imperative that LCA expand its view on how these programs are funded and consider how customers are affected by rising costs. Almost universally, utilities across the nation are expecting water and sewer rate increases to outpace inflation consistently over the next decade or longer. The same holds true for LCA’s service area as the organization takes on major new requirements to remove lead service lines and address aging infrastructure. An important new strategy has emerged in discussions with LCA staff and its Board of Directors involving the pursuit of alternative funding approaches and grants. In addition, greater attention must be placed on the affordability of water and sewer service for LCA customers, and the development of programs and partnerships to address these concerns.

Employee Development & Safety – LCA’s workforce is the most significant success factor in achieving all the strategic objectives and expanding regulatory requirements described above. Developing a safe, productive, and harmonious work environment is paramount for LCA’s success. In addition, as unemployment has again dipped to very low levels, recruiting to fill vacant or new positions has become more challenging, at a time when workload is expanding rapidly, leading to greater levels of stress and potential employee turnover. It is important, therefore, that resources be dedicated to supporting employees at all levels of the organization through effective safety programs, employee engagement efforts, continuation of 2024’s successful inaugural internship program, and evaluation of workforce and work space requirements for the future.

The initiatives outlined above focus on key priorities that are requiring new resources in 2025 and in the years ahead. Despite these expanding demands on the organization, LCA’s 2025 Budget offers a balanced approach to adding resources now vs. later, manageable increases to customer rates, and appropriate levels of support for LCA’s strong team of water professionals.

Staff Support for Key Strategies

As described above, LCA has made significant progress on key initiatives outlined in the 2022-2027 Strategic Plan, but new challenges have required a shift in certain priorities. To support this new mix of strategic and regulatory initiatives in 2025, additional staff support has been incorporated into the 2025 Budget as described below:

I&I Program Manager – A key area of focus for the foreseeable future lies in the effort to remove leakage from the sewer collection system in Allentown and other areas within the Kline’s Island Sewer System. This work is highly detailed requiring expertise in flow monitoring and metering, rehab design, construction management, and data management. The success of this I&I source reduction program will be critical to achieving regulatory relief from current restrictions on new connections to the sewer system, and to avoid costly facility expansions in the future due to the reduction in base flow and wet-weather sewage flows.

Lead Program Staffing – As described above, the new requirements related to the identification and removal of lead services lines in LCA’s water systems represent another significant increase in workload that exceeds current staff capacity. To support the program’s implementation, LCA

envisions hiring a small team of one part-time and two full-time employees to complete work on the service line material inventory and to support customer service contacts related to this program.

Asset Management Technician – LCA’s asset management program is poised for success following the completion of an initial small set of targeted asset management plans. To expand this approach to all systems and assets, additional support is required. This new position will provide hands-on support for the development of the program, and offers a unique opportunity for a more entry-level technical position within LCA’s engineering group.

Operational Support & Service – Two additional staff positions have been added to the 2025 Budget on a contingency basis as new opportunities and requirements are emerging. One potential opportunity is currently being evaluated regarding LCA’s ability to support municipal sewer operations in a cost-effective and collaborative fashion. Separately, new legislation has been proposed to significantly increase requirements for water and sewer system location marking via the PA One Call program. Should these changes take place, staff support has been included in the 2025 Budget to allow for rapid mobilization. Otherwise, these two positions will not be filled.

Internship Program – To address long-term staff recruiting needs for the organization, an internship program was developed in 2024 and is expected to continue in 2025. This program is focused on recruiting emerging talent for operational and technical roles, with expansion into other professional areas in future years.

These proposed staff additions in 2025 will support both near-term regulatory requirements and long-term strategies as LCA seeks to increase professionalism and internal capacity across the organization. In addition, work will be completed in 2025 to further refine future workforce requirements and assess work space needs to ensure a safe and appropriate work environment for all employees.

Capital Budget Overview

This year’s budget proposal includes a significant increase in capital spending, driven by many of the items described in the sections above. It is notable that the 2025-2029 Capital Plan includes more than \$356 Million in capital projects over the next five years. For 2025, this equates to approximately \$69 Million in project funding, which is a 35 percent increase from the 2024 capital budget.

Projects in LCA’s Suburban Wastewater Division and City Division are driving the overall increase in 2025. Notable projects included in the 2025 Budget include:

- Completion of the Upper Western Lehigh Interceptor Pump Station & Force Main project, which will address flow-restricted areas of the interceptor.
- Significant investment in near-term upgrades at the Industrial Pretreatment Plant to address high-risk assets, along with design work for future replacement of this critical facility.
- In Allentown, the second cycle of LCA’s Lead Service Line Replacement Program will kick off, which will be partially funded by a grant from PENNVEST.
- Continued construction of Filter Upgrades at the Water Filtration Plant, which began in 2024.
- Several asset replacement projects and upgrades at the Kline’s Island Wastewater Treatment Plant, including work on an aging electrical substation, final clarifiers, and digester feed lines.
- Major programs to reduce inflow and infiltration in the Allentown sewer collection system and rehabilitate leaking manholes will continue in 2025.

These projects, and many more outlined in the 2025-2029 Capital Plan, are required to address aging infrastructure and enhance system performance in all LCA service areas. To support this expanded capital program, approximately \$14 Million in new borrowing is anticipated in 2025.

2025 Rates

This Executive Summary reviews key features of LCA’s 2025 Budget relating to updated strategic initiatives and responses to regulatory challenges. The 2025 Budget proposal also includes more than \$69 million in capital improvements, which will result in additional borrowing and rate impacts. The following summary illustrates the proposed rate changes included in this year’s budget:

City Division: 5.5% (Average residential customer impact: \$13.52 per quarter, water & sewer)

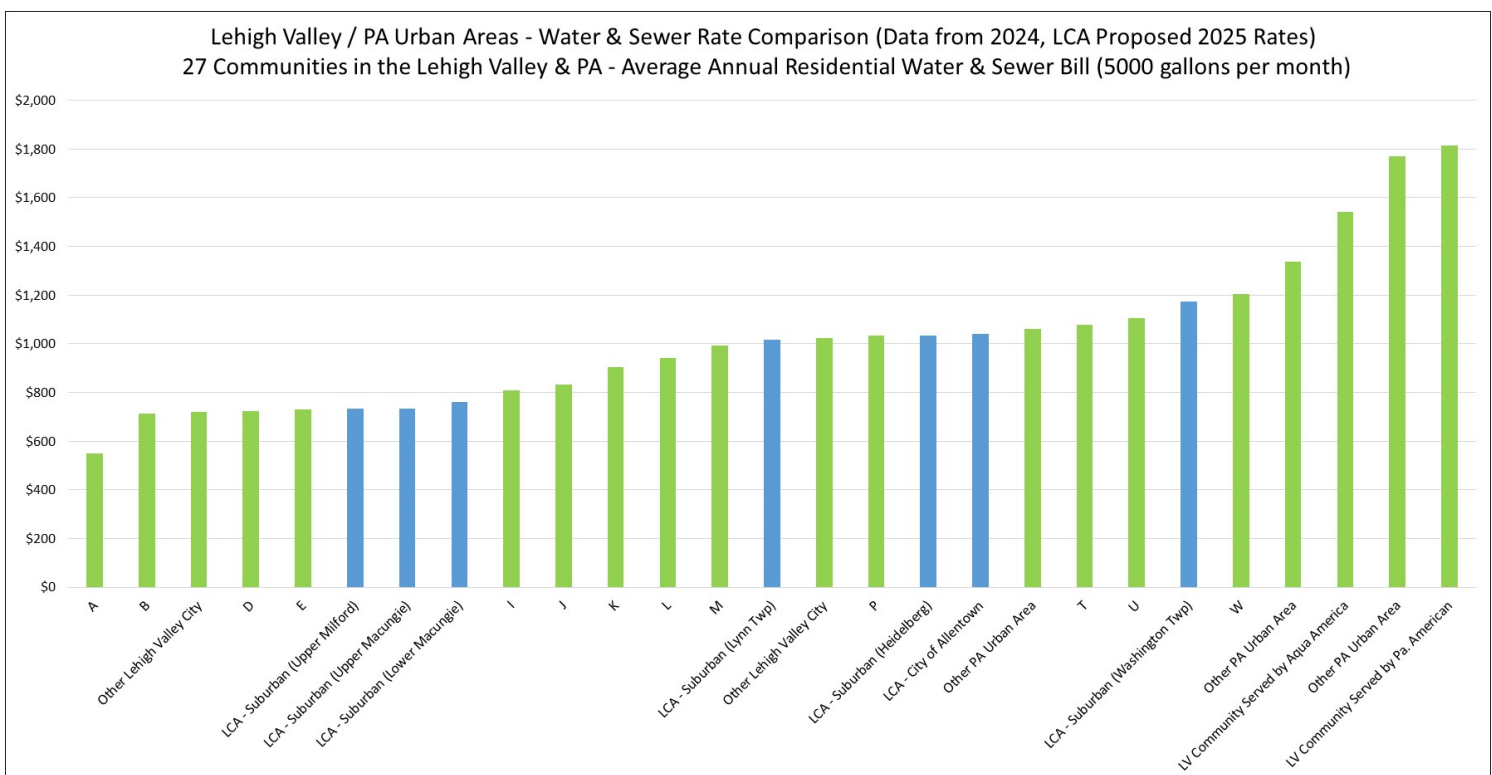
Suburban Water Division: 6.5% (Average residential customer impact: \$6.50 per quarter, water only)

Suburban Wastewater Division: 6.2% (Average residential customer impact: varies by municipality)

The differences in rate changes between LCA’s various divisions are driven primarily by contractual requirements including the Water & Sewer Lease Agreement between LCA and the City Allentown, and LCA’s wastewater signatory agreements with the municipalities served by the Kline’s Island Sewer System and Western Lehigh Interceptor.

While incorporated into this budget to calculate revenue impacts to the 2025 Budget, the proposed water and sewer rates for 2025 will be subject to a separate public input process and approval by LCA’s Board of Directors later in 2024. If approved, new rates will be effective January 1, 2025.

The graph below illustrates how LCA’s 2025 proposed rates compare to other communities in the Lehigh Valley and other urban communities in Pennsylvania. With the 2025 increases included, LCA customers will continue to enjoy reasonable water and sewer rates that are well aligned with the cost of these services across the region and the Commonwealth.



2025 BUDGET – SUMMARY OF EXPECTED RESULTS

The sections above describe the breadth of issues that were evaluated and discussed through the development of the 2025 Budget. The summary below shows that the 2025 Budget is presented with positive cash flows, meeting debt service requirements, and providing alternative funding for capital improvements that limits the borrowing required to pay for these investments. In 2025, LCA will also achieve strong operational cash balances, which supports overall financial sustainability of the organization.

Budget Overview	Suburban Water	Suburban Wastewater	City Division	Total
Operating, Non-Operating & Other Revenue	\$ 20,258,604	\$ 21,516,587	\$ 79,478,843	\$ 121,254,034
Operating Expenses (net of depreciation)	\$ 12,409,238	\$ 16,224,056	\$ 26,998,323	\$ 55,631,617
Net Revenues Available for Debt Service	\$ 7,849,366	\$ 5,292,531	\$ 52,480,520	\$ 65,622,417
Debt Service	\$ 3,474,867	\$ 2,176,924	\$ 17,765,690	\$ 23,417,481
Debt Service Coverage Ratio (indenture based)	2.26	2.43	2.03	2.10
Capital Budget Overview	Suburban Water	Suburban Wastewater	City Division	Total
Capital Expenses	\$ 4,774,500	\$ 13,738,000	\$ 50,580,000	\$ 69,092,500
Funding from 2025 Revenue & Operating Reserves	\$ 4,774,500	-	\$ 24,580,000	\$ 29,354,500
Funding from Existing Project Reserves	-	-	\$ 26,000,000	\$ 26,000,000
Funding from New Borrowing	-	\$ 13,738,000	-	\$ 13,738,000
Year-End Project Reserve Balance	-	\$ 1,112,000	\$ 21,439,828	\$ 22,551,828
Total Cash Flow	Suburban Water	Suburban Wastewater	City Division	Total
Beginning Operations Cash Balance (2024 forecast)	\$ 11,649,641	\$ 11,545,394	\$ 27,788,270	\$ 50,983,305
2025 Surplus	\$ 4,374,500	\$ 3,115,607	\$ 34,714,829	\$ 42,204,936
Provided From (To) Capital	\$(4,774,500)	-	\$(24,580,000)	\$(29,354,500)
Ending Operations Cash Balance	\$ 11,249,641	\$ 14,661,001	\$ 37,923,099	\$ 63,833,741
Operating Days Cash on Hand	331	330	539	429
Project Reserve Balance	-	\$ 1,112,000	\$ 21,439,828	\$ 22,551,828
Other Reserves & Investments (includes restricted)	\$ 5,149,730	\$ 7,363,529	\$ 63,306,128	\$ 75,819,387
Ending Total Fund Balance – 2025 Budget	\$ 16,399,371	\$ 23,136,530	\$ 122,669,055	\$ 162,204,956

MEMORANDUM

TO: LCA Board of Directors
FROM: Liesel Gross, CEO
DATE: October 21, 2024
RE: Final Draft Capital Plan (2025-2029) – All Divisions

Attached: Public Comments & LCA Response
Capital Plan Financial Justifications – Updated: Suburban Wastewater & City Division
Capital Plan Summary Sheets – All

In August 2024, Lehigh County Authority staff presented the draft Capital Plan for the years 2025 to 2029 for Suburban and Allentown Divisions. The plans were also distributed to various external stakeholders including municipalities within LCA's service area, the Lehigh County Board of Commissioners, Lehigh Valley Planning Commission, and the City of Allentown. This memo provides an overview of the Final Draft Capital Plan and summarizes the comments received for Board consideration for approval at the October 28, 2024 meeting.

It is important to note that approval of the Plan by LCA's Board does not indicate authorization for Plan funding. Such authorization occurs through several other mechanisms including:

Annual Budget – The LCA Board approves the capital budget for the upcoming calendar year as part of the annual budget process that is completed in October each year. This approval provides authorization for routine/recurring capital expenses that fall within LCA's purchasing guidelines.

Project Authorizations – The LCA Board approves individual capital projects and expenditures at the time they are more concretely developed with a full project scope, project budget, cost justification and alternatives analysis if required.

Project Financing – The LCA Board approves all new debt issuances including new loans or grant applications that may be secured to fund the capital program.

At each of these approval stages, the LCA staff and Board may discuss and adjust project scope and prioritization. However, this Capital Plan should be viewed as the guiding document for moving forward on system improvements that are required for the provision of safe and reliable service to the communities we serve.

The 2025-2029 Capital Plan also includes financial analysis of the impacts to revenue requirements that will drive annual rate-making decisions. This analysis includes a review of funding sources for all projects, movement toward self-funding annual and recurring asset rehabilitation via operating revenues, expected inflation of operating expenses, and achievement of key financial metrics including debt service coverage ratio and operating cash reserve requirements.

Final Draft Capital Plan (2025-2029) – All Divisions

Board members should refer to the draft Plan documents presented previously. However, the Financial Justification sections and Summary sheets are attached to this memo as a supplement to the prior Plan distribution. Changes to the Plan since the initial Board presentations in August include:

- **Pretreatment Plant Upgrades and Replacement (SD-S-12)**: Adjusted project timing with a reduction in 2025 expense from \$5 million to \$1 million, and extending the project timeline into 2028.
- **Park Pump Station Upgrade – Phase 2 (SD-S-40)**: Additional \$500,000 added in year 2025 to reflect a refined project completion schedule based on equipment delivery schedules.
- **Source Reduction Plan – I/I Reduction Program (AD-2-25)**: Reduction in 2025 expense from \$8 million to \$3 million to reflect change in scope, with greater focus placed on sanitary sewer evaluation study work to be completed next year, which will be used to ensure effective project design in future years.
- **Selected Act 537 Projects Eliminated**: Four projects were removed from the Capital Plan following receipt of regulatory feedback on the timing and sequence of projects included in the Act 537 Plan. These projects will be reflected in the Act 537 Plan, but will now fall outside of the current Capital Plan period of 2025-2029:

Project Removed	2025-2029 Expense Removed
Park Pump Station Force Main Ext. – WWTP Improvements (AD-S-27)	\$8,200,000
Park Pump Station Force Main Extension (AD-S-28)	\$3,700,000
KIWWTP Wet Weather Improvements Project Phase 2 (AD-S-29)	\$29,500,000
KISS Relief Interceptor (AD-S-30)	\$25,750,000

- **Financial Justification Sections**: Each section was reviewed and updated to reflect minor adjustments in planned borrowing to achieve financial targets, and reflecting updated revenues and expenses developed as part of the 2025 Budget process.

Plan Summary:

While the presentation and publication of the LCA Capital Plan is divided into budgetary categories of Administrative, Suburban Water, Suburban Wastewater and Allentown Division, implementation is viewed holistically in the summary below to illustrate the categories and breadth of investment required to maintain and enhance the large regional water and sewer system that LCA operates.

<u>Project Category</u>	<u>2025-2029 Investment</u>
System Planning & Studies	\$ 2,640,000
Technology Upgrades	3,200,000
Small Systems Upgrades	5,520,000
Water Metering Upgrades	8,000,000
Major Water Facility Upgrades	17,465,000
Water Main Replacements	37,900,000

<u>Project Category</u>	<u>2025-2029 Investment</u>
Annual Maintenance & Rehab Projects	43,814,500
Sewer Wet-Weather Projects	59,900,000
Major Wastewater Facility Upgrades	81,200,000
NEW Programs / Regulatory Driven Projects	96,660,000
TOTAL	\$356,299,500
<hr/>	
Prior 5-Year Plan Total (2024-2029 Plan)	\$261,102,000

This information reflects a significant increase in capital requirements when compared to the prior five-year plan presented in 2023. Drivers for this change relate to new programs and projects associated with addressing wet-weather challenges within LCA's sewer system and addressing new regulatory requirements. These are described in the project highlights below.

Project Highlights:

System Planning and Studies → The primary cost driver in this category relates to work required over the next few years to finalize the regional Act 537 Plan for the Kline's Island Sewer System. Other projects in this category include water capacity and quality studies and a sewage facility study in North Whitehall Township.

Small Systems Upgrades → Eight important projects to upgrade smaller wastewater systems that LCA has acquired over the past several decades. These are important upgrades to address environmental and regulatory compliance issues in these under-served areas of the County.

Major Water Facility Upgrades → Projects in this category are larger upgrades that will have broad system benefit to LCA water customers. Examples include complete filter system upgrade and developing a redundant power supply at the Allentown Water Filtration Plant, and water supply capacity to increase reliability within the northern portions of LCA's Central Lehigh Division.

Major Wastewater Facility Upgrades → Projects in this category are larger wastewater system upgrades that will have broad system benefit to LCA, focusing primarily on repairing or replacing aging systems. Examples include replacing aging electrical equipment and rehabilitating clarifiers at the Allentown Kline's Island Wastewater Treatment Plant, and completing important upgrades at the Spring Creek and Park Pump Stations. Also included in this category is an important project to upgrade and replace the Industrial Pretreatment Plant in Fogelsville.

Annual Projects, Metering Upgrades & Water Main Replacements → Combined, projects in these categories make up 25 percent of the LCA's planned capital investment over the next five years. This work represents the ongoing system rehabilitation and maintenance work that is required to maintain an aging system.

Sewer Wet-Weather Projects → This category of projects includes seven major programs or projects to address the impact of wet weather on LCA's sewer system. These projects fall into two major categories: A) addressing inflow and infiltration (I&I) in the sewer collection systems (\$29.5 million); and B) completing major projects to increase capacity at the Allentown Kline's Island Wastewater Treatment Plant and within the interceptor system to address peak wet-weather flows (\$30.4 million).

NEW Programs / Regulatory-Driven Projects → New programs have been added to the Plan over the last two years to address new regulatory requirements. In the years ahead, including the years captured by this Plan, LCA will be required to address per-/poly-fluoroalkyl substances (PFAS) in drinking water and wastewater. In addition, the removal of all lead service lines from the water system will become a new requirement. These new programs will be the focus of LCA's efforts to seek grant funding over the next five years.

Capital Financing:

Over the past several years, LCA has shifted its capital financing strategy to reflect the realities of an aging utility with significant ongoing system rehabilitation work that will be required for the foreseeable future. The updated strategy has included a series of rate increases to boost LCA's capacity to fund its ongoing capital program, and a target of limiting borrowing for selected projects based on economic or other factors. Despite the significant increase in capital investment required, LCA staff are pleased to present a plan that includes funding from current revenues and reserves covering 46 percent of the total plan cost. This strategy will continue to be refined as additional large-scale projects are phased into future capital plans.

Sources of funding planned to support the 2025-2029 Capital Plan are:

Operating Revenues / Current Cash Flows	\$ 164,060,672	46%
New / Prior Borrowing	\$ 147,038,828	41%
Grants*	\$ 45,200,000	13%
TOTAL	\$ 356,299,500	

* Grants include:

- \$1.2 million from City of Allentown American Rescue Plant Act (ARPA) allocation to specific Allentown Division projects, and reimbursements for sewer related expenses
- \$3.4 million from PENNVEST awarded in 2023 for the planned 2024-2025 lead service line replacement project
- \$6.3 million from PENNVEST awarded in 2024 for the planned 2025-2026 lead service line replacement project
- \$3.0 million from the H2O PA program awarded in 2023 for the planned 2024-2025 inflow and infiltration source reduction project.
- \$31.3 million in estimated future PENNVEST grants for additional lead service line replacements and PFAS remediation projects

NOTE: Grant opportunities will be pursued proactively for other projects throughout the Plan period. In addition, if grants are not awarded, LCA staff may recommend scaling projects differently, or adjustment implementation schedules to lessen customer rate burden of these projects.

To complete the projects included in the Plan in accordance with the financial strategy described above, the following annual revenue increases will be required:

LCA's Suburban Water systems → 4.0% to 5.0% per year
LCA's Suburban Wastewater systems → 2.5% to 6.5% per year, via intermunicipal agreements
LCA's Allentown Division water and sewer systems → Current lease rates increase by inflation (CPI-U) plus 2.5%, with additional rate increases for capital cost recovery for selected projects.

Public Comments Received

LCA's 2025-2029 Capital Plan was presented to the Board of Directors in August 2024 and sent to municipalities served by LCA water and/or sewer systems. The Plan was also posted on LCA's website with a 30-day window available for public comment. The Plan was sent to various other organizations and agencies who were expected to have an interest in LCA's upcoming plans and programs.

Lehigh Valley Planning Commission: The planning commission reviews LCA's Capital Plan annually and provides comment. The Commission's letter for LCA's draft 2025-2029 Capital Plan is attached noting that the new projects included in the plan are consistent with the regional comprehensive plan.

City of Allentown: City officials review the Allentown Division Capital Plan annually and provide comments, primarily on upcoming projects that may have an impact on user rates, or considerations for sequencing of certain projects. The City's letter for LCA's draft 2025-2029 Capital Plan is attached along with LCA's staff response to the City.



Lehigh Valley Planning Commission

DR. CHRISTOPHER R. AMATO
Chair

CHRISTINA V. MORGAN
Vice Chair

ARMANDO MORITZ-CHAPELLIQUEN
Treasurer

BECKY A. BRADLEY, AICP
Executive Director

September 27, 2024

Mr. Charles Volk, PE
Chief Capital Works Officer
Lehigh County Authority
P.O. Box 3348
Allentown, Pennsylvania 18106-0348

Re: LCA Preliminary Capital Plans - Allentown and Suburban Divisions 2025-2029

Dear Mr. Volk:

The Lehigh Valley Planning Commission (LVPC), at its regular monthly meeting on September 26, 2024, reviewed the above-referenced plans and offer the following comments. The comments, as shown on the attached page, are provided for both water and wastewater projects appearing for the first time and significantly modified projects from previous Capital Plans. The Allentown Division Plan includes ten new projects and two significantly modified projects, and the Suburban Division Plan includes seven new projects and three significantly modified projects for which comments are provided.

Please call me if you have any questions.

Sincerely,

Corinne Ruggiero
Environmental Planner

Attachment

cc: Lehigh County Commissioners



Lehigh Valley Planning Commission

LCA New and Significantly Modified Projects 2025-2029

Project	Municipality	Statement of Purpose	LVPC Comment
Lehigh County Authority - Preliminary Capital Plan (2025-2029)	ALLENTOWN DIVISION	<ul style="list-style-type: none">City Cloud Based AMI Meter Reading System: Includes evaluation of upgrading the city automated meter reading (AMR) system program to a cloud-based technology advanced metering infrastructure system to have a wireless AMR system to enable real-time monitoring of water use throughout the system.WFP HVAC Upgrade Project: Replacement of the current aging HVAC system at the Water Filtration Plant (WFP).WFP Roof Replacement Project: Once HVAC system is upgraded at the Water Filtration Plant (WFP), new roofs will be installed due to previous roofing being aged and leaking.WFP Raw Water Line and Influent Channel Upgrades: Proposed redundant raw water line to improve plant resiliency and enable maintenance activities. Also includes modifications to the influent channel to the primary clarifiers, which is connected to the raw water line, to help maintain adequate velocity and reduce solids deposition.City 2024/2025 Water Meter Replacement Project: Project includes replacement of 4,000 Badger water meters with outdated encoder receiver transmitters that monitor water consumption in the City to meters with radio read capability.Wastewater WWTP Facilities Improvements: Offices, meeting space, locker rooms, lab and break room space at the Kline's Island WWTP are in need of evaluation, space optimization and upgrades/renovations. Modifications to existing and new buildings are being proposed to allow for better utilization of existing spaces as well as create a multi-use space.WWTP Final Clarifier 1-4 Rehabilitation: Includes upgrades to four aging final settling tanks to replace existing mechanisms, drive units and electrical main controls center. Other upgrades include modifications to final settling tank #3 for leachate receiving.WWTP Solids Process Improvements: Includes installation of chemically enhanced primary treatment (CEPT), construction of a sludge holding tank and associated pumps/piping, digester mixing improvements and dewatering capacity improvements to handle the additional BOD and TSS load.	Evaluating/providing system improvements to provide safe, reliable and efficient service supports FutureLV actions to 'improve the utility and mobility infrastructure of the region' and 'integrate efficiency measures and emerging technologies' (of Policy 1.1) and 'protect the quality and quantity of surface water and groundwater' (of Policy 3.2).

LCA New and Significantly Modified Projects 2025-2029

Project	Municipality	Statement of Purpose	LVPC Comment
Lehigh County Authority - Preliminary Capital Plan (2025-2029)	ALLENTOWN DIVISION	<p>Wastewater Projects Continued</p> <ul style="list-style-type: none"> Park Pump Station Force Main Extension – WWTP Improvements: Consists of the construction of a 20 mgd screening facility for the flow from the Park Pump Station Force Main Extension and installation of two additional effluent pumps to enable plant effluent to be discharged during high water levels in the Lehigh River when gravity discharge is not possible. Park Pump Station Force Main Extension: As part of the original force main design, a capped 30-inch wye was installed for a future connection, which could be potentially used for the proposed main extension. Extending the force main directly to the Kline's Island WWTP will mitigate a hydraulic bottleneck in the 54-inch line and enable approximately 21 mgd of additional flow to be conveyed directly to Kline's Island WWTP. This extension is required to meet the proposed Kline's Island WWTP wet weather improvements for the Act 537 Plan. WWTP Wet Weather Improvements Project – Phase 2: Wet weather improvements are required to achieve regulatory compliance during peak wet weather events. Improvements will occur in two phases. The first phase will increase the peak wet weather capabilities from 87 to 100 mgd. The second phase will increase the peak wet weather capabilities from 100 to 132 mgd. 112 mgd of the 132 mgd can be achieved via the proposed main pump/auxiliary pump station improvements underway with the 100 mgd project in Phase 1. The remaining 20 mgd will be achieved via the proposed Park Pump Station Force Main Extension. Some other improvements include construction of one additional aerated grit chamber as well as construction of two supplemental primary settling tanks for use during severe storm events. KISS Relief Interceptor (KRI): The new 54-inch interceptor, which is needed to convey both dry and wet day flows from all of the Signatories to the Kline's Island Sewer System (KISS) is named the KISS Relief Interceptor. It is designed to handle flows through at least the 2050 and will be capable of conveying all the peak wet weather flow during a 5-year design event from the KISS collection system to the Kline's Island WWTP without overflow. 	<p>Evaluating/providing system improvements to provide safe, reliable and efficient service supports FutureLV actions to 'improve the utility and mobility infrastructure of the region' and 'integrate efficiency measures and emerging technologies' (of Policy 1.1) and 'protect the quality and quantity of surface water and groundwater' (of Policy 3.2).</p>

LCA New and Significantly Modified Projects 2025-2029

Project	Municipality	Statement of Purpose	LVPC Comment
Lehigh County Authority - Preliminary Capital Plan (2025-2029)	SUBURBAN DIVISION	<p>Water</p> <ul style="list-style-type: none"> Suburban Cloud Based AMI Meter Reading System: Includes evaluation of upgrading the Suburban automated meter reading (AMR) system program to a cloud-based technology advanced metering infrastructure system to have a wireless AMR system to enable real-time monitoring of water use throughout the system. Suburban Water Systems Master Planning and Water Quality Studies: In addition to the previous water supply studies for two major Suburban Water Systems (Central Lehigh and North Whitehall Division) to review supply capacity requirements, engineering work will follow to develop and design water supply projects that enhance the region's water system resiliency and redundancy. This project also includes additional studies such as the continuation of pipeline assessment and comprehensive storage assessment as well as the development of a Master Plan for LCA's numerous small water systems that will include water quality studies to comply with evolving state and federal water quality standards. Central Lehigh System Supply Improvements: A source water assessment study in June 2024 identified vulnerabilities in emergency supply if the largest water source, Schantz Spring, were to be taken out of service. This project consists of re-establishing the Bortz interconnect with South Whitehall Township and re-establishing the Schantz Spring Secondary Booster Station as two alternatives for additional emergency supply that were identified in the study. Buss Acres Water Quality Upgrade: Water quality analysis of the two wells serving the Buss Acres Water System show some levels of exceedance of PFAS maximum contaminant levels. This project would include a study to identify PFAS treatment options for the two wells as well as an option to connect Buss Acres to the Central Lehigh Division system. This project will also implement the option selected from that study. Applewood Pump Station Upgrade: Mechanical upgrades to the Applewood Pump Station include replacing pumps and control valves which have reached the end of their useful service life. Other upgrades include hypochlorite system improvements at several well station sites within the Central Lehigh Division. 	<p>Evaluating/providing system improvements to provide safe, reliable and efficient service supports FutureLV actions to 'improve the utility and mobility infrastructure of the region' and 'integrate efficiency measures and emerging technologies' (of Policy 1.1) and 'protect the quality and quantity of surface water and groundwater' (of Policy 3.2). The LVPC will provide comments on the draft LCA Western Lehigh Interceptor Parallel Alignment Act 537 Special Study upon completion, per Act 537 requirements.</p>

LCA New and Significantly Modified Projects 2025-2029

Project	Municipality	Statement of Purpose	LVPC Comment
Lehigh County Authority - Preliminary Capital Plan (2025-2029)	SUBURBAN DIVISION	<p>Wastewater</p> <ul style="list-style-type: none"> Pretreatment Plant Critical Upgrades: Upgrades to four primary process areas that have equipment that has reached the end of its useful service life. These primary process areas include aeration (air deck mixers and instrumentation), final settling (final clarifier mechanical equipment), cryogenic plant (mechanical equipment) and solids processing (solids buildings HVAC systems). Pretreatment Plant Upgrade and Replacement: This project assumes only 3 major industries are participating in the pretreatment replacement instead of 5 major industries. In addition, the new plant will also treat hauled-in waste. The new treatment facility will include an anaerobic process, moving bed bioreactor and dissolved air flotation. A combined heat and power unit will also be installed to convert biogas to electricity and heat. A new solids handling facilities is also planned and proposed in this project to handle hauled waste. To convey the wastewater to the plant, a new dedicated pump station and force main for each major industry is planned. Domestic and commercial waste will bypass the new facility and receive treatment at the Kline's Island WWTP. Western Lehigh Interceptor Parallel Alignment (Special Act 537 Study): Consists of an Act 537 Special Study of the proposed Western Lehigh Interceptor parallel in order to finalize the alignment. Wynnewood Wastewater Treatment Plant Expansion: A feasibility study confirmed that the Wynnewood WWTP has limited reserve capacity and must be expanded to accommodate the build out of the proposed Rising Sun Road development. This project includes design, permitting and construction of the capacity expansion of the existing WWTP along with dedicated conveyance facilities to include a proposed pump station and force main. Arcadia West WWTP Mechanical Screen: Consists of installation of two automatic mechanical screening units at the head of each sequenced batch reactor tank at the WWTP. This project also includes construction of above-grade platforms and enclosures to support the screening systems and protect against weather. 	<p>Evaluating/providing system improvements to provide safe, reliable and efficient service supports FutureLV actions to 'improve the utility and mobility infrastructure of the region' and 'integrate efficiency measures and emerging technologies' (of Policy 1.1) and 'protect the quality and quantity of surface water and groundwater' (of Policy 3.2). The LVPC will provide comments on the draft LCA Western Lehigh Interceptor Parallel Alignment Act 537 Special Study upon completion, per Act 537 requirements.</p>



Mark Shahda

Director of Public Works

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Allentown PA 18103

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September 23, 2024

Charles Volk, P.E.
Chief Capital Works Officer
Lehigh County Authority
P.O. Box 3348
1053 Spruce Street
Allentown, PA 18106-0348

RE: Draft 5-Year Capital Plan, Allentown Division, 2025-2029

Dear Mr. Volk,

Pursuant to Article 4 of the *Allentown Water and Sewer Utility System Amended and Restated Concession and Lease Agreement* (Lease), the City of Allentown (City) is responding to your *Draft 5-Year Capital Plan, Allentown Division, 2025-2029 (Plan)* received August 14, 2024.

General note: In the glossary of Acronyms and Terms under project funding there is no designation for Change of Law.

WATER

AD-W-20 Water Main Replacements

The first assessment of the leak detection efforts to determine the next four year's mileage requirement, is to occur in 2024 per the *Amended and Restated Concession Lease Agreement (CLA)*, 6.19.2b *Evaluation and Replacement Requirements* section.

AD-W-22 WFP Raw Water Line and Influent Channel Upgrades

The referenced project includes two separate projects, the Raw Water Line (RWL) and the Influent Channel (IC). The City will require much more and separate details on the project scopes before considering this project or these projects as a qualifying MCIP. Refer to the revised Aggregation definition in the CLA.

Influent Channel (IC)

The 2017 WFP Master Plan termed the project as *Flocculation Influent Channel Improvements* and indicated that it should be made in Years 5-10 (2022-2027). The 2022 WFP Master Plan also identified the need to address the problem of premature sludge deposition and periodic resuspension under certain flow conditions. The project was titled *Clarifier Influent Modifications* and recommended modifications to achieve 10 States Standard velocity of 0.5-1.5 ft/sec.

The IC project represents a recognized need. The Detailed Project Description indicates the Influent Channel Modifications will be included but does not specify the separate costs for the modification. The cost of the IC project and what portion of the \$1,600,000 total cost it covers needs to be provided.

Raw Water Line (RWL)

The City is not clear on what LCA is envisioning as a redundant raw water line. A description and drawing would be helpful.

The *2022 Master Plan* did not discuss or recommend a redundant raw water line. Adding another line does not address the increase in discharge pump pressures and the assumed deposited debris which is causing the pressure problem noted in reports submitted by LCA. The cause(s) of the problem need to be determined and corrected to avoid potentially having two RWL with the same problem in the future.

LCA's *1/1/22-12/31/22 Internal Review of Water & Wastewater Systems* under the subject Raw Water Pipelines stated that, "The WFP has been experiencing elevated raw water discharge pressures." The narrative details the increases and the belief that the problem is due to collected debris. The report states, "An inspection of these lines is forthcoming..."

LCA's *1/1/23-12/31/23 Internal Review of Water & Wastewater Systems* under Raw Water Pipelines is a duplication of the prior year's statements but adds, "CCTV is planned as the preliminary approach to investigate the raw water lines."

What were the results of the CCTV investigation? Was a corrective action plan developed based on the investigation? What other investigation approaches are planned? LCA should evaluate and determine the cause(s) of the pressure problem before developing a project. As with the IC, the costs of the RWL and its portion of the \$1,600,000 should be provided.

Little Lehigh Intake

The City notes that there is not a Little Lehigh Intake project included in the *2025-2029 Draft Capital Plan*. On 9/29/23, the City sent a *2024-2028 Allentown Division Capital Plan comment letter* to LCA that included concerns about AD-S-23 Intake Upgrades. LCA provided a response letter on 10/11/23 that noted "short-term asset management improvements were performed on the mechanical screen in 2021.... the schedule for the Little Lehigh intake mechanical screen replacement was pushed out in the Capital Plan to reflect the *2022 Master Plan* recommendation for design to commence within five years and construction in 6 to 10. Moving forward LCA will closely monitor the condition and performance of the rehabilitated screen and update the project schedule as necessary for the screen replacement."

The City's concern is related to the RWL and the opinion of the evaluating engineer that the screens are a contributing factor or the cause of the RWL problems. The *2022 WFP Master Plan in Exhibit D, Problem Statement and Definition* states, "Little Lehigh Intake A (1953) includes one traveling screen and has no redundancy. Furthermore, the design velocity of the intake screen exceeds current design standards. As a result, LCA staff note that leaves/debris will often bypass the screens and clog the downstream low lift pumps." As future flows increase due to increased demand, the velocity through the intake screen will increase, and the passage of leaves/debris can also be expected to increase. Similarly, in LCA's *Internal Review of Water Wastewater System 2023 (OSA21)*, "Manual Removal of Debris at the WTP Intake: Removing debris manually from the intake trash rack has limited our ability to withdrawal water from the Little Lehigh. During the wet and fall leaf season, large amounts of debris accumulate at the intake and operators have the laborious task of keeping it clear. An automatic system should be investigated to help prevent premature plant shutdowns due to intake and raw water pump blockages."

Has LCA closely monitored the condition and performance of the rehabilitated screen and determined that there is no problem with, nor impact from the screens in providing necessary treatment? Please advise.

WASTEWATER

AD-S-22 WWTP Primary Sludge Digester Feed Line Replacement

AD-S-22 is anticipated to be completed in Q4 2025. The scope of the project involves the installation of glass-lined pipes from the Primary Settling Tanks (PST) to the digesters for the purpose of increasing the percent total solids in the PST sludge. The glass-lined pipes should facilitate the pumping of heavier sludge, ranging from 5.5% to 6% solids. After the project is completed, it would seem prudent to allow plant operators to use the glass-lined pipes for a period of time to gather data for an understanding of the improvements and impacts on the primary and secondary digesters and dewatering. This will occur in 2026. The data will significantly assist in the development of project AD-S-26 WWTP Solids Process Improvements.

AD-S-24 WWTP Plastic Media Trickling Filter Rehabilitation Project

The Detailed Project Description asserts that, "The plastic media in the four trickling filter towers is over 50 years old and is believed to have reached the end of its service life." However, the term "believed" does not provide sufficient justification for a project of this magnitude, with an estimated cost of \$5 million. If the age of the media were the sole criterion, it is noted that the media is at least four years short of reaching the 50-year life expectancy with the original media being installed in 1978.

The upper layer of media on all four PMTFs was replaced in the mid-1990s due to damage from walking on the media during maintenance and particularly during air velocity testing when the odor control systems were being installed. The replacement media was sturdier and selected due to its resistance to ultraviolet light. Gratings were also installed to prevent damage during maintenance. Furthermore, the trickling filter towers operate with minimal mechanical forces, as the process involves sewage trickling through the media. There are no moving parts that could experience wear and tear.

Additionally, the KIWWTP operating data does not show a deterioration of the functionality and performance of the treatment capabilities of the PMTF. The PMTFs are the primary treatment units for reducing biochemical oxygen demand (BOD). The NPDES permit limit is 20mg/l. The plant effluent has consistently been between 4-6mg/l of BOD month after month. There's been no analytical indication of deterioration.

The *2019 KIWWTP Master Plan* listed the follow:

Term CIP (0-10 years):

- Plastic Media Trickling Filter (PMTF)- Replace effluent flushing water line (Years 0-5)
- PMTF Support Steel- Repair lower steel girts and connections and lower support steel column anchors (Years 5-10)

Mid -Term (10-25 years):

- Plastic Media Trickling Filters- Replace distributors and media.
- The engineering assessment within the Master Plan did not indicate a need for media replacement until 2029 - 2044.

LCA needs to provide support for inclusion of this project in 2025.

AD-S-26 WWTP Solids Process Improvements

The \$500,000 expenditure projected for 2025 should be reevaluated. LCA has, or will soon, award a contract to AECOM for conducting plant-scale pilot testing of Chemically Enhanced Primary Treatment (CEPT). A report of the pilot testing, which will need to be subsequently reviewed, is expected to be issued in September 2025. A proposal for any subsequent work developed from the report must be prepared, reviewed, and approved by the Board. As a result, work on a capital improvement project should not commence until 2026. Therefore, the projected expenditure for 2025 should be adjusted accordingly.

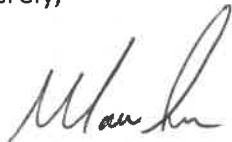
A more appropriate approach is to defer AD-S-26 until the AD-S-22 glass-lined pipe system becomes operational and has been evaluated and the CEPT pilot testing completed so a more comprehensive and accurate assessment of the interactions and impacts on the plant's processes, particularly BOD reduction, digestion, and dewatering can be made. It is probable that this approach will provide better guidance on needed improvements under AD-S-26.

AD-S-25 Source Reduction Plan- I/I Elimination Plan

Although noted and acknowledged in the 2024-2028 Capital Plan review process, this project title has not replaced, "Elimination" with "Reduction" so that it reads, "I/I Reduction Plan".

As prior practice, the City will anticipate LCA's response to these comments and after receipt of which the City may request a meeting to review the comments and positions of LCA and the City. Thank you for providing your proposed program and for your continued cooperation.

Sincerely,

A handwritten signature in dark ink, appearing to read 'Mark Shahda', is positioned above the printed name and title.

Mark Shahda
Director of Public Works

CC: Liesel Gross, LCA
Ed Klein, LCA
A.J. Capuzzi, LCA
Daniel Koplish, COA
Office of Compliance, COA



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October 2, 2025

Mark Shahda, Director of Public Works
Department of Public Works
641 S. 10th Street, 3rd floor
Allentown, PA 18103

RE: Draft 2025-2029 Allentown Division Capital Plan City Comments

Dear Mr. Shahda:

We are in receipt of your letter dated September 23, 2024, that contains the City's review comments on the draft 2025-2029 LCA Allentown Division Capital Plan ("Plan"). This submission includes our responses to the City's comments, and we welcome any additional discussion that may be needed.

General Note: In 2024, LCA reviewed the format and process for developing the five-year capital plan, which included a review of all acronyms and funding codes, in anticipation that this effort may resolve some of the City's comments regarding clarity of funding sources for each project.

1) **AD-W-20 Water Main Replacements:**

LCA will schedule a meeting with the City prior to the end of the year to discuss an assessment of leak detection efforts to determine the next four years' mileage requirement per the Amended Lease Agreement.

2) **AD-W-22 WFP Raw Water Line and Influent Channel Upgrades:**

We acknowledge that this project is comprised of two separate efforts, and we do not intend to combine them into one MCI submission as that would constitute aggregation from the City's perspective.

The current option being explored for resolving the influent channel settling problem is to install spray nozzles using finished water to keep particulate matter in flotation to eliminate debris accumulation in the channels. This is a much more economical approach compared to structural modifications of the influent channels to increase slope and/or reduce cross sectional area in order to increase velocity.

In 2024 LCA hired a consultant (HDR) to perform a feasibility study for inspection and condition assessment of the existing raw water line in order to determine the cause of higher raw water discharge pressure. The investigation revealed difficulties with accessing the existing line in order to insert a camera (utilizing up to date technology camera equipment), while minimizing disruptions to plant operations. Therefore, a CCTV inspection has not been performed to date. As this line is a single point of failure with a high consequence of failure, the alternative to

construct a redundant line was selected. Following the construction of the new line, the existing raw water line may be taken off-line, inspected, and cleaned/rehabilitated.

Regarding the Little Lehigh Intake, which is not a current project in the 2025-2029 Capital Plan, the short-term asset management improvements that were performed on the mechanical screen in 2021 to extend the service life of the unit and significantly reduce the risk of failure facilitated replacing that project with the Big Lehigh Intake Improvements Project in the Capital Plan. Following completion of the Big Lehigh Improvements, the Little Lehigh Intake screen can be taken off-line in order to perform a comprehensive condition assessment. Following that investigation, a project to rehabilitate or replace the Little Lehigh Intake Screen may be added back into a future Capital Plan.

Moving forward, LCA will closely monitor the performance of the rehabilitated screen and update the project schedule as necessary for the screen replacement. Other phases of upgrades to the intakes as described in the Water Master Plan fall outside of the current five-year Plan. Discussion with the City about the logistics and project approaches for those additional phases will occur at a later date.

3) **AD-S-22 WWTP Primary Sludge Digester Feed Line Replacement:**

LCA acknowledges the City's comments on this project. There are several projects occurring simultaneously at the Kline's Island Wastewater Treatment Plant that may affect performance moving forward. In addition, LCA is planning ahead for the potential increase in solids loading to the plant that may result from future changes to the industrial pretreatment plant in Fogelsville. Therefore, LCA recommends continued open discussion with the City about project coordination and timing.

4) **AD-S-24 WWTP Plastic Media Trickling Filter (PMTF) Rehabilitation Project:**

LCA staff contacted the plastic media manufacturer, Brentwood, in early 2024 to perform an inspection and evaluation of the plastic media in one tank. A report was provided by the manufacturer dated 3/22/24, which indicated poor condition of the top two layers, with excessive brittleness observed. Concern was raised over the observed brittleness of the second layer, as that layer is not exposed to UV rays. Also, the glue joint testing of both layers (to gauge the resistance to an applied load) resulted in numerous breakages, leading to a concern of compromised pack integrity.

In 2025, a comprehensive condition assessment of one (representative) trickling filter tower is to be performed. This will require the removal and inspection of all layers of plastic media. Given the age of the plastic media and the opinion provided by the manufacturer, the 2025 project in the Capital Plan includes replacement of all of the media in the first tank along with interior tank and piping repairs (as necessary) following the tank inspection. The prospect of replacing the original media (that is approaching 50 years of age) following the tank inspection is not recommended due to the likely brittle condition of the plastic. Rehabilitation of the other three PMTFs will be contingent upon the results of the first tank inspection and rehabilitation.

5) **AD-S-26 WWTP Solids Process Improvements:**

City comments are acknowledged regarding the timing of the CEPT study. Please refer to comment number 3 listed above, as projects AD-S-22 and AD-S-26 are interrelated in terms of impact to plant performance.

6) **AD-S-25 Source Reduction Plan – I/I Elimination Plan:**

City comments are acknowledged and the word “elimination” will be struck from the project title to read “I/I Reduction Plan”.

If you have any questions about this response or wish to discuss any project included in the Plan in more detail, please don’t hesitate to contact me.

Sincerely,

Charles E. Volk, P.E.
Chief Capital Works Officer

Cc: Liesel Gross, CEO
Edward Klein, CFO
coalease

**LEHIGH COUNTY AUTHORITY
SUBURBAN DIVISION
WASTEWATER
5-YEAR CAPITAL PLAN
2025–2029**

CAPITAL FINANCING JUSTIFICATION

Capital additions to the Wastewater System are justified by calculating the operating cash available based upon projections of revenues over the five-year period. Beyond the operating cash available, remaining sources are project reserves from previous debt issuance and any new borrowing required.

The table below summarizes the capital project sourcing by year and each major financial sourcing category:

CAPITAL FINANCING SOURCES						
	2025	2026	2027	2028	2029	TOTAL
Project Costs	13,825,500	\$21,818,000	\$20,483,000	\$7,128,000	\$1,238,000	\$63,992,500
<i>Sources of Funding:</i>						
Current Cash Flows	\$2,725,500	\$4,218,000	\$4,083,000	\$4,155,283	\$1,238,000	\$16,419,783
Cash Reserves		-	-	\$2,972,717	-	\$2,972,717
New Borrowing	\$10,600,000	\$17,600,000	\$16,400,000	-	-	\$44,600,000
TOTAL FUNDING	\$13,325,500	\$21,818,000	\$20,483,000	\$7,128,000	\$1,238,000	\$63,992,500

Total spending on capital projects for the five-year period totals \$63,992,500. Current cash flows and cash reserves over the period will provide \$19,392,500 for capital projects. New borrowing will provide \$44,600,000 of project funding. This approach is recommended to allow for continued growth of reserves, which will be needed in the future as additional projects are incorporated into the plan as a result of the regional Act 537 Plan that is currently under development. The regional Act 537 Plan will provide details for sewage facility plans and significant capital improvements in the Suburban Division to address sanitary sewer overflows and overall capacity challenges of the system. The Act 537 Plan is expected to be submitted to state regulators in 2025 for review and approval and will include a separate detailed financial analysis outlining intermunicipal cost-sharing approaches for these projects as well as financing strategies and an analysis of rate impacts. This financial analysis and full plan overview will be presented later in 2024. However, due to the project timing, including some projects commencing in 2025, LCA has incorporated these projects into this Capital Plan to offer a preliminary view of borrowing and rate impacts. This information will be further refined in the Act 537 Plan and subsequent Capital Plans.

Revenue requirements will also be impacted by inflation for both the Western Lehigh Interceptor (WLI) group along with other users of the system. Signatory Revenue increases by year to support the Capital Plan are as shown below, but do not include and analysis of pass-through costs from the Allentown Division projects at this time:

	2025	2026	2027	2028	2029
Projected WLI Rate Increase	6.4%	2.9%	2.7%	2.4%	2.4%

CONDENSED CASH FLOW - SUBURBAN WASTEWATER

Dollars	2025	2026	2027	2028	2029
User Charges	20,281,604	21,757,832	23,137,287	23,414,347	23,698,333
Other Operating Revenues	273,624	273,624	273,624	273,624	273,624
Non-Operating Revenues	1,691,216	1,691,216	1,691,216	1,691,216	1,691,216
Operating expenses	(15,673,794)	(16,144,009)	(16,587,971)	(17,002,671)	(17,427,738)
Debt Service - Current Debt	(1,196,420)	(1,196,420)	(1,196,420)	(1,196,420)	(1,196,420)
Debt Service - NEW Debt	(699,888)	(1,861,967)	(2,944,813)	(2,944,813)	(2,944,813)
Investments Converting to Cash	-	-	-	-	-
Proceeds From NEW Debt	10,600,000	17,600,000	16,400,000	-	-
Capex	(13,738,000)	(21,941,750)	(20,586,750)	(7,208,000)	(1,318,000)
NET FUND FLOWS	1,538,342	178,526	186,173	(2,972,717)	2,776,202
User Charge Revenue Increase %	5.6%	7.3%	6.3%	1.2%	1.2%
Unrestricted Cash Balance	12,529,718	12,708,244	12,894,417	9,921,700	12,697,902
Unrestricted Investments	6,465,467	6,465,467	6,465,467	6,465,467	6,465,467
Total Unrestricted Balances	18,995,185	19,173,711	19,359,884	16,387,167	19,163,369
Unrestricted Cash - Days on Hand	292	287	284	213	266
DEBT SERVICE COVERAGE RATIO	3.47	2.48	2.06	2.02	1.99

Sourcing of Projects and Debt Service related to various systems is as follows:

BY SYSTEM	TOTAL	CURRENT CASH FLOWS	RESERVES	NEW DEBT
Annual Projects	\$3,182,500	\$3,182,500	-	-
Western Lehigh Interceptor	\$7,000,000	\$7,000,000	-	-
LCA Wastewater Pretreatment Plant	\$47,400,000	-	\$2,800,000	\$44,600,000
Common Rate Collector Systems	\$3,690,000	\$3,528,342	\$161,658	-
Arcadia West	\$620,000	\$620,000	-	-
Lynn Township	\$1,300,000	\$1,300,000	-	-
Little Lehigh Relief Interceptor System	\$800,000	\$788,941	\$11,059	-
	\$63,992,500	\$16,419,783	\$2,972,717	\$44,600,000

**LEHIGH COUNTY AUTHORITY
ALLENTOWN DIVISION
CAPITAL PLAN
2025–2029**

SUMMARY

The Allentown Division Capital Plan (Plan) is a five-year plan that covers the years 2025 through 2029. The Plan includes water and wastewater projects to ensure facility / infrastructure reliability and to comply with the Allentown Water & Sewer Lease (Lease) required projects. It also includes projects and studies deemed necessary by LCA, where the latter will identify and evaluate upgrades and improvements that will be incorporated in future Capital Plans. The Lease requires that LCA submit a 5-year Capital Plan to the City of Allentown annually for review and approval.

The projects identified in the Plan fall into to two primary categories, those funded by LCA and those funded by the City in the form of grants or reimbursements. For this Plan, reimbursements from the City are restricted to those expenses related to developing the regional Act 537 Plan for the Kline’s Island Sewer System, which is a requirement of the Pa. Department of Environmental Protection stemming from a prior Chapter 94 violation. Grants from the City are expected contributions provided from the City’s allocation of American Rescue Plan Act funding, which the City has agreed to use a portion to offset ratepayer impacts of water system capital costs.

TABLE 1 – CAPITAL FUNDING OVERVIEW 2025-2029					
Budget Area	LCA	CITY			TOTALS
		Grants	Reimburse	Sub-Total	
Water	\$148,510,000	\$850,000	\$0	\$850,000	\$149,360,000
Wastewater	\$101,705,000	\$0	\$350,000	\$350,000	\$102,055,000
Totals	\$250,215,000	\$850,000	\$350,000	\$1,200,000	\$251,415,000

Water Projects: Focus on regulatory compliance, asset management, immediate and future needs at the Water Filtration Plant (WFP) and addressing the Lease operating standards. The recently completed WFP Master Plan identified capital improvements to address future regulatory requirements and/or operational needs. Lease requirements include the annual replacement of 1 mile of water mains through 2024, followed by a study and/or increase to 2 miles of water main replacement per year thereafter.

Wastewater Projects: Projects focus on regulatory compliance, asset management, immediate and future needs at the Wastewater Treatment Plant (WWTP) and addressing the Lease operating standards. Projects of note include the replacement of the solids process boiler and HVAC upgrade project and replacement of electrical substation no. 1. In addition,

annual funding is included in the Plan for the rehabilitation of defective sewer mains and a City-wide manhole rehabilitation program to remove sources of inflow and infiltration.

Regional Sewer Plan (Act 537) Projects: The City and LCA are collaborating on the development of a regional Act 537 Plan, which will provide details for sewage facility plans and significant capital improvements in the Allentown Division to address sanitary sewer overflows and overall capacity challenges of the system. The Act 537 Plan is expected to be submitted to state regulators in 2025 for review and approval and will include a separate detailed financial analysis outlining intermunicipal cost-sharing approaches for these projects as well as financing strategies and an analysis of rate impacts. This financial analysis and full plan overview will be presented later in 2024. However, due to the project timing, including some projects commencing in 2025, LCA has incorporated these projects into this Capital Plan to offer a preliminary view of borrowing and rate impacts. This information will be further refined in the Act 537 Plan and subsequent Capital Plans.

Additional information regarding these and other projects can be found in the Plan's individual Project Detail Sheets.

Supplemental Revenues: Under the Lease agreement, LCA is able to recover certain capital expenses through Capital Recovery Fees (Tapping Fees) applied to new customers and Capital Cost Recovery Charges applied to ratepayers. These charges will be applied to all Major Capital Improvements (MCI), which are defined as projects exceeding \$1 million (indexed for inflation) within the proposed Plan. Additional charges may be applied to recover costs for projects driven by regulatory changes or other changes in law. The designation of certain projects for cost recovery through these mechanisms is noted in the Plan's summary sheets for each section of the Plan.

FINANCIAL JUSTIFICATION

LCA's draft 2025-2029 Capital Plan is expected to be funded through a mix of operating revenues, project reserves, grants, and new borrowing, as outlined below. A more detailed cash-flow evaluation showing the impact of this funding approach is shown on the next page.

TABLE 2 – 2025-2029 Capital Plan Allentown Division Funding Sources

	LCA SOURCES				CITY SOURCES (see Table 1)	
Budget Area	Grants	Operating/Capital Reserves	Prior Borrowing	New Borrowing	Grants & Reimb	Total Sources
Water	\$40,000,000	\$60,871,172	\$29,638,828	\$18,000,000	\$850,000	\$149,360,000
Wastewater	\$4,000,000	\$62,605,000	\$17,800,000	\$17,300,000	\$350,000	\$102,055,000
Totals	\$44,000,000	\$123,476,172	\$47,438,828	\$35,300,000	\$1,200,000	\$251,415,000

GRANT REVIEW

LCA has applied for (or will apply for) grants to support this Plan in the following areas:

- I&I Source Reduction Plan – H2O PA grant awarded in January 2024 for \$3,000,000. Additional grant application for \$4,197,000 submitted to the Rep. Wild and Sen. Casey Community Project Funding programs, awaiting decision.
- Lead Service Line Replacement Program – PENNVEST grant of \$3,383,892 awarded in July 2023. Additional grant application for \$11,998,000 submitted in July 2024. Annual grant applications to be submitted until Bipartisan Infrastructure Law funding expires in 2026.
- PFAS Compliance Planning & Treatment Upgrades – Grant funding will be sought for the \$95,000,000 in estimated costs included in this plan.

To present a realistic financial outlook, assuming a 100% grant award will not occur, LCA has captured approximately 60% of this potential grant funding source in this analysis. Project costs that are not covered via grants will be incorporated into the additional project financing.

CONDENSED CASH FLOW - CITY DIVISION					
US DOLLARS	2025	2026	2027	2028	2029
User Charges	62,014,031	67,592,522	73,404,324	78,009,148	81,805,691
Other Operating Revenues	373,304	373,304	373,304	373,304	373,304
Non-Operating Revenues	2,218,271	2,068,271	1,968,271	1,968,271	1,968,271
Operating expenses	(25,030,987)	(25,884,917)	(26,702,584)	(27,478,627)	(28,276,782)
Annual Lease & Other Payments		(1,010,070)	(1,037,846)	(1,063,793)	(1,090,387)
Debt Service - Current Debt	(17,679,490)	(18,247,905)	(18,836,405)	(20,197,155)	(20,834,905)
Debt Service - NEW Debt	(86,200)	(86,200)	(2,405,479)	(2,405,479)	(2,405,479)
Investments Converting to Cash	-	-	-	-	-
Grants	15,000,000	12,500,000	17,350,000	-	-
Proceeds From NEW Debt	-	-	35,300,000	-	-
Capex	(50,580,000)	(64,317,500)	(73,077,500)	(33,705,000)	(31,610,000)
NET FUND FLOWS	(13,771,071)	(27,012,495)	6,336,085	(4,499,330)	(70,287)
Lease Rate Increases	6.30%	5.50%	5.25%	5.00%	5.00%
Project Cost Recovery Charges	2.62%	3.59%	3.84%	3.83%	3.20%
Total User Charge Increase	8.92%	9.09%	9.09%	8.83%	8.20%
Unrestricted Cash Balance	48,831,411	21,391,952	27,319,203	22,431,851	21,962,486
Unrestricted Investments	-	-	-	-	-
Total Unrestricted Balances	48,831,411	21,391,952	27,319,203	22,431,851	21,962,486
Days Operating Cash on Hand	186	302	243	220	283
DEBT SERVICE COVERAGE RATIO	2.14	2.35	2.26	2.29	2.36

LEHIGH COUNTY AUTHORITY
ADMINISTRATION
2025-2029 CAPITAL PROGRAM

Project #	Name or Title of Proposal	Prj. Category	(1) Prj. Funding	Approvals Stage (1)		This Capital Program					
					2024 Budget Approved	2025 Year 1	2026 Year 2	2027 Year 3	2028 Year 4	2029 Year 5	2025-2029 Total
CON-A-1*	Computer System Hardware & Software Upgrades	AM - High	LCA	A	\$ 50,000	\$ 50,000	\$ 30,000	\$ 20,000	\$ 20,000	\$ 20,000	\$ 140,000
CON-A-2*	Geographic Information System (GIS) Upgrades & Application Development	Efficiency	LCA	V	\$ 35,000	\$ 50,000	\$ 50,000	\$ -	\$ -	\$ -	\$ 100,000
CON-A-3*	Information Technology Master Plan Update	Planning	LCA	A	\$ 50,000	\$ 50,000	\$ 20,000	\$ -	\$ -	\$ -	\$ 70,000
CON-A-4*	Document Management	Efficiency	LCA	V	\$ 50,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 5,000	\$ 5,000	\$ 85,000
CON-A-5*	Disaster Recovery/Security Upgrades	Efficiency	LCA	A	\$ 75,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 25,000	\$ 25,000	\$ 350,000
CON-A-6*	CMMS Upgrades	Efficiency	LCA	A	\$ 185,000	\$ 40,000	\$ 20,000	\$ 20,000	\$ 20,000	\$ 20,000	\$ 120,000
CON-A-7	New Munis Implementation	Efficiency	LCA	C	\$ 800,000	\$ 385,000	\$ -	\$ -	\$ -	\$ -	\$ 385,000
CON-A-8*	Main Office Improvements	Efficiency	LCA	P	\$ 550,000	\$ 950,000	\$ 250,000	\$ 250,000	\$ 250,000	\$ 250,000	\$ 1,950,000
GRAND TOTAL					\$ 1,795,000	\$ 1,650,000	\$ 495,000	\$ 415,000	\$ 320,000	\$ 320,000	\$ 3,200,000

(*) CON = a Project that benefits both the Allentown and Suburban Divisions. All projects are LCA funded.

(1) Reference Glossary of Acronyms & Terms found immediately after the Table of Contents

(2) If blank project cost is not applicable (annual project) or to be determined

LEHIGH COUNTY AUTHORITY
SUBURBAN DIVISION
2025-2029 CAPITAL PROGRAM
WATER

Project #	Name or Title of Proposal	Category Pjt.	(1) Pjt. Funding	Approval Stage (1)		This Capital Program					
					2024 Budget Approved	2025 Year 1	2026 Year 2	2027 Year 3	2028 Year 4	2029 Year 5	2025-2029 Total
SD-W-A	Annual Projects	AM - Varies	LCA	A	\$ 2,367,000	\$ 2,492,000	\$ 2,512,500	\$ 2,162,500	\$ 2,012,500	\$ 2,622,500	\$ 11,802,000
SD-W-10	Water Main Replacement Projects	AM - Varies	LCA	V	\$ 2,900,000	\$ -	\$ 3,000,000	\$ 3,000,000	\$ 3,150,000	\$ 3,150,000	\$ 12,300,000
SD-W-11	North Whitehall Division Water System Supply Study & Improvements	Sys Imp	LCA	S	\$ 100,000	\$ 120,000	\$ 1,250,000	\$ 1,780,000	\$ -	\$ -	\$ 3,150,000
SD-W-12	Water Systems Master Planning and Water Quality Studies	Sys Imp	LCA	S	\$ 200,000	\$ 150,000	\$ 150,000	\$ 50,000	\$ -	\$ -	\$ 350,000
SD-W-13	Upper System Pump Station & Water Main Extension	New Cust	LCA	D	\$ 50,000	\$ 50,000	\$ 900,000	\$ 1,100,000	\$ -	\$ -	\$ 2,050,000
SD-W-14	Water Meter Replacement Program	AM-Rev Opprt	LCA	C	\$ 800,000	\$ 1,000,000	\$ 1,050,000	\$ 1,050,000	\$ 1,050,000	\$ 1,000,000	\$ 5,150,000
SD-W-15	Central Lehigh System Supply Improvements	Sys Imp	LCA	S	\$ 100,000	\$ 180,000	\$ 330,000	\$ 20,000	\$ -	\$ -	\$ 530,000
SD-W-16	Buss Acres Water Quality Upgrade	Sys Imp	LCA	S	\$ 50,000	\$ 270,000	\$ 750,000	\$ 640,000	\$ -	\$ -	\$ 1,660,000
SD-W-17	Applewood Pump Station Upgrade	Sys Imp	LCA	D	\$ -	\$ 100,000	\$ 500,000	\$ 100,000	\$ -	\$ -	\$ 700,000
	GRAND TOTAL				\$ 6,567,000	\$ 4,362,000	\$ 10,442,500	\$ 9,902,500	\$ 6,212,500	\$ 6,772,500	\$ 37,692,000

(1) Reference Glossary of Acronyms & Terms found immediately after the Table of Contents. All projects are LCA funded
(2) If blank , cost is not applicable (annual project) or to be determined

LEHIGH COUNTY AUTHORITY
SUBURBAN DIVISION
2025-2029 CAPITAL PROGRAM
WASTEWATER

Project #	Name or Title of Proposal	Prj. Category	(1) Prj. Funding	Approval Stage (1)	This Capital Program						
					2024 Budget Approved	2025 Year 1	2026 Year 2	2027 Year 3	2028 Year 4	2029 Year 5	2025-2029 Total
	<u>Operating/Capital Reserve Funds</u>										
	<u>Annual</u>										
SD-S-A	Annual Projects	AM - Varies	LCA	A	\$ 912,500	\$ 835,500	\$ 948,000	\$ 378,000	\$ 593,000	\$ 428,000	\$ 3,182,500
	Subtotal				\$ 912,500	\$ 835,500	\$ 948,000	\$ 378,000	\$ 593,000	\$ 428,000	\$ 3,182,500
	<u>Pretreatment Plant</u>										
SD-S-10	Pretreatment Plant Improvements	AM - Varies	LCA	A	\$ 1,000,000	\$ 600,000	\$ 500,000	\$ 500,000	\$ 400,000	\$ 300,000	\$ 2,300,000
SD-S-11	Pretreatment Plant Critical Upgrades	AM - Varies	LCA	A	\$ -	\$ 4,000,000	\$ 3,500,000	\$ -	\$ -	\$ -	\$ 7,500,000
SD-S-12	Pretreatment Plant Upgrades and Replacement	AM - Varies	LCA	A	\$ -	\$ 1,000,000	\$ 15,000,000	\$ 16,600,000	\$ 5,000,000	\$ -	\$ 37,600,000
	Subtotal				\$ 1,000,000	\$ 5,600,000	\$ 19,000,000	\$ 17,100,000	\$ 5,400,000	\$ 300,000	\$ 47,400,000
	<u>Western Lehigh Interceptor</u>										
SD-S-20	Central Lehigh County WW Capacity Planning & Expansion	New Cust	LCA	S	\$ 325,000	\$ 400,000	\$ 150,000	\$ 150,000	\$ 150,000	\$ 150,000	\$ 1,000,000
SD-S-21	WLI Major Rehabilitation and Repairs	Regulatory	LCA	V	\$ 225,000	\$ 50,000	\$ -	\$ -	\$ -	\$ -	\$ 50,000
SD-S-22	Spring Creek Force Main Condition Assessment	AM-High	LCA	S	\$ 150,000	\$ 100,000	\$ -	\$ -	\$ -	\$ -	\$ 100,000
SD-S-23	Spring Creek Pump Station Upgrades	AM-High	LCA	C	\$ 700,000	\$ 1,000,000	\$ -	\$ -	\$ -	\$ -	\$ 1,000,000
SD-S-24	Spring Creek Force Main Relocation	Regulatory	LCA	D	\$ 100,000	\$ 900,000	\$ -	\$ -	\$ -	\$ -	\$ 900,000
SD-S-25	Signatory I & I Investigation & Remediation Program	Regulatory	LCA	V	\$ 1,000,000	\$ 500,000	\$ 200,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 1,000,000
SD-S-26	Upper Western Lehigh Interceptor Pump Station & Force Main	Regulatory	LCA	C	\$ 3,500,000	\$ 1,300,000	\$ -	\$ -	\$ -	\$ -	\$ 1,300,000
SD-S-27	Western Lehigh Interceptor Parallel Alignment (Special Act 537 Study)	Regulatory	LCA	S	\$ -	\$ -	\$ -	\$ 750,000	\$ 750,000	\$ 150,000	\$ 1,650,000
	Subtotal				\$ 6,000,000	\$ 4,250,000	\$ 350,000	\$ 1,000,000	\$ 1,000,000	\$ 400,000	\$ 7,000,000
	<u>Satellite Systems</u>										
SD-S-30	Wynnewood I & I Investigation & Remediation Program	AM - Varies	LCA	C	\$ 125,000	\$ 150,000	\$ 150,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 375,000
SD-S-31	Wynnewood Wastewater Treatment Plant Expansion	New Cust	LCA	D	\$ -	\$ 50,000	\$ 500,000	\$ 1,750,000	\$ -	\$ -	\$ 2,300,000
SD-S-32	Arcadia West WWTP Mechanical Screen	Efficiency	LCA	D	\$ 75,000	\$ 220,000	\$ 400,000	\$ -	\$ -	\$ -	\$ 620,000
SD-S-33	North Whitehall Township Act 537 Sewage Facilities Planning	Regulatory	LCA	S	\$ 70,000	\$ 70,000	\$ 20,000	\$ -	\$ -	\$ -	\$ 90,000
SD-S-34	Heidelberg Heights I & I Investigation & Remediation Program	AM - Varies	LCA	D	\$ 350,000	\$ 300,000	\$ 100,000	\$ 50,000	\$ 50,000	\$ 25,000	\$ 525,000
SD-S-35	Heidelberg Heights WWTP Rehabilitation	AM - Varies	LCA	S	\$ 160,000	\$ 25,000	\$ 50,000	\$ 75,000	\$ 25,000	\$ 25,000	\$ 200,000
SD-S-36	Sand Spring WWTP improvements	Regulatory	LCA	C	\$ 100,000	\$ 100,000	\$ 50,000	\$ 30,000	\$ 10,000	\$ 10,000	\$ 200,000
SD-S-37	Lynn Township WWTP Improvements	AM - High	LCA	C	\$ 500,000	\$ 900,000	\$ 150,000	\$ 50,000	\$ -	\$ -	\$ 1,100,000
SD-S-38	Lynn Township I & I Investigation & Remediation Program	Regulatory	LCA	P	\$ 50,000	\$ 25,000	\$ 100,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 200,000
	Subtotal				\$ 1,430,000	\$ 1,840,000	\$ 1,520,000	\$ 2,005,000	\$ 135,000	\$ 110,000	\$ 5,610,000
<u>Little Lehigh Relief Interceptor System</u>											
SD-S-40	Park Pump Station Upgrade - Phase 2	AM - High	LCA	C	\$ 2,300,000	\$ 800,000	\$ -	\$ -	\$ -	\$ -	\$ 800,000
	Subtotal				\$ 2,300,000	\$ 800,000	\$ -	\$ -	\$ -	\$ -	\$ 800,000
	GRAND TOTAL WASTEWATER PROJECTS				\$ 11,642,500	\$ 13,325,500	\$ 21,818,000	\$ 20,483,000	\$ 7,128,000	\$ 1,238,000	\$ 63,992,500

(1) Reference Glossary of Acronyms & Terms found immediately after the Table of Contents. All projects are LCA funded.

(2) If blank , cost is not applicable (annual project) or to be determined

LEHIGH COUNTY AUTHORITY
ALLENTOWN DIVISION
2025-2029 CAPITAL PROGRAM
WATER

Project	Name or Title of Proposal	Prj. Category	Funding (1)	Approval Stage (1)	This Capital Program						
					2024 Budget Approved	2025 Year 1	2026 Year 2	2027 Year 3	2028 Year 4	2029 Year 5	2025-2029 Total
	OPERATING/CAPITAL RESERVE FUNDS										
	ANNUAL PROJECTS										
AD-W-A	Annual Projects	AM - Varies	LCA	A	2,715,000	2,555,000	2,180,000	2,285,000	2,205,000	2,150,000	11,375,000
	Sub-total Annual				\$ 2,715,000	\$ 2,555,000	\$ 2,180,000	\$ 2,285,000	\$ 2,205,000	\$ 2,150,000	\$ 11,375,000
	NON-CCRC PROJECTS										
AD-W-10	Indenture Report Improvements	AM-High	LCA	C	\$ 200,000	\$ 200,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 600,000
AD-W-11	Master Plan Studies	CA/OS	LCA	S	\$ -	\$ -	\$ -	\$ 200,000	\$ -	\$ -	\$ 200,000
AD-W-12	WFP Redundant Power Supply	Regulatory	LCA	D	\$ 80,000	\$ 835,000	\$ -	\$ -	\$ -	\$ -	\$ 835,000
AD-W-13	Tank and Reservoir Rehabilitation	AM-High	LCA	V	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ 1,000,000
AD-W-14	Large Diameter Valve Replacement Project	AM-High	LCA	D	\$ 350,000	\$ 300,000	\$ 400,000	\$ 400,000	\$ 300,000	\$ 300,000	\$ 1,700,000
AD-W-15	WFP HVAC Upgrade Project	Efficiency	LCA	C	\$ -	\$ 500,000	\$ 750,000	\$ 500,000	\$ -	\$ -	\$ 1,750,000
AD-W-16	WFP Roof Replacement Project	AM-High	LCA	S	\$ -	\$ -	\$ 50,000	\$ 600,000	\$ -	\$ -	\$ 650,000
	TOTAL NON-CCRC PROJECTS				\$ 830,000	\$ 2,035,000	\$ 1,500,000	\$ 2,000,000	\$ 600,000	\$ 600,000	\$ 6,735,000
	Large Projects and CCRC Projects (3)										
AD-W-20	Annual Water Main Replacements	CA/OS	CCRC	C	\$ 4,800,000	\$ 5,000,000	\$ 5,000,000	\$ 5,200,000	\$ 5,200,000	\$ 5,200,000	\$ 25,600,000
AD-W-21	PFAS Compliance Planning and Upgrades	Regulatory	CCRC (2)	S	\$ 250,000	\$ 300,000	\$ 5,000,000	\$ 14,700,000	\$ -	\$ -	\$ 20,000,000
AD-W-22	WFP Raw Water Line and Influent Channel Upgrade	Efficiency	CCRC (2)	S	\$ -	\$ 100,000	\$ 500,000	\$ 1,000,000	\$ -	\$ -	\$ 1,600,000
AD-W-23	Water Meter Replacement Project	AM-High	LCA	C	\$ 800,000	\$ 2,000,000	\$ 100,000	\$ -	\$ 750,000	\$ -	\$ 2,850,000
AD-W-24	WFP Filter Upgrades	Master Plan	CCRC/City ARPA	C	\$ 2,350,000	\$ 3,600,000	\$ 1,750,000	\$ -	\$ -	\$ -	\$ 5,350,000
AD-W-25	Big Lehigh Intake & Transmission Upgrades	Master Plan	LCA	S	\$ 200,000	\$ 100,000	\$ 500,000	\$ 250,000	\$ -	\$ -	\$ 850,000
AD-W-26	Lead Service Line Replacement Program	Regulatory	CCRC	C	\$ 5,000,000	\$ 15,000,000	\$ 15,000,000	\$ 15,000,000	\$ 15,000,000	\$ 15,000,000	\$ 75,000,000
	TOTAL CCRC PROJECTS				\$ 13,400,000	\$ 26,100,000	\$ 27,850,000	\$ 36,150,000	\$ 20,950,000	\$ 20,200,000	\$131,250,000
	GRAND TOTAL				\$ 16,945,000	\$ 30,690,000	\$ 31,530,000	\$ 40,435,000	\$ 23,755,000	\$ 22,950,000	\$ 149,360,000

(1) Reference Glossary of Acronyms and Terms found after Table of Contents
(2) Project to be reviewed by the City for Major Capital Improvement/CCRC approval
(3) Includes projects that have not been reviewed by the City for MCI/CCRC approval

LEHIGH COUNTY AUTHORITY
ALLENTOWN DIVISION
2025-2029 CAPITAL PROGRAM
WASTEWATER

Project	Name or Title of Proposal	Proj. Category	Funding (1)	Approval Stage (1)	2024 Budget Approved	This Capital Program					
						2025 Year 1	2026 Year 2	2027 Year 3	2028 Year 4	2029 Year 5	2025-2029 Total
	Operating/Capital Reserve Funds										
	<u>ANNUAL PROJECTS</u>										
AD-S-A	Annual Projects	AM - Varies	LCA	A	\$ 2,706,000	\$ 2,715,000	\$ 2,065,000	\$ 2,035,000	\$ 2,165,000	\$ 1,975,000	\$ 10,955,000
	Sub-total Annual				\$ 2,706,000	\$ 2,715,000	\$ 2,065,000	\$ 2,035,000	\$ 2,165,000	\$ 1,975,000	\$ 10,955,000
	<u>Non-CCRC Projects</u>										
AD-S-10	Indenture Report Improvements	AM - Varies	LCA	C	\$ 300,000	\$ 250,000	\$ 200,000	\$ 150,000	\$ 150,000	\$ 150,000	\$ 900,000
AD-S-11	WWTP Master Plan	CA/OS	LCA	S	\$ 160,000	\$ -				\$ 250,000	\$ 250,000
AD-S-12	Manhole Inspection and Sealing Program	Regulatory	LCA	S	\$ 2,000,000	\$ 1,000,000	\$ 1,000,000	\$ 1,000,000	\$ 1,000,000	\$ 1,000,000	\$ 5,000,000
AD-S-13	WWTP Redundant Power Supply	Efficiency	LCA	S	\$ -	\$ -	\$ 50,000	\$ 850,000	\$ 100,000	\$ -	\$ 1,000,000
AD-S-14	WWTP Facilities Improvements	Efficiency	LCA	S	\$ -	\$ 100,000	\$ 700,000	\$ -	\$ -	\$ -	\$ 800,000
	Sub-total Allentown Division Wastewater Capital Funded by LCA				\$ 2,460,000	\$ 1,350,000	\$ 1,950,000	\$ 2,000,000	\$ 1,250,000	\$ 1,400,000	\$ 7,950,000
	<u>Large Projects and CCRC Projects</u>										
AD-S-20	WWTP Electrical Substation Replacement Phase 2	AM - High	CCRC	C	\$ 2,200,000	\$ 5,250,000	\$ 750,000	\$ -	\$ -	\$ -	\$ 6,000,000
AD-S-21	WWTP Final Clarifier 1-4 Rehabilitation	AM - High	CCRC	D	\$ 900,000	\$ 2,500,000	\$ 3,000,000	\$ -	\$ -	\$ -	\$ 5,500,000
AD-S-22	WWTP Primary Sludge Digester Feed Line Replacement	System Improvement	CCRC	D	\$ 600,000	\$ 2,700,000	\$ -	\$ -	\$ -	\$ -	\$ 2,700,000
AD-S-23	WWTP Wet Weather Improvements Project - Phase 1	Regulatory	CCRC	D	\$ 700,000	\$ 750,000	\$ 10,900,000	\$ 15,750,000	\$ -	\$ -	\$ 27,400,000
AD-S-24	WWTP Plastic Media Trickling Filter Rehabilitation Project	AM - High	CCRC (3)	S	\$ -	\$ 200,000	\$ 5,200,000	\$ -	\$ -	\$ -	\$ 5,400,000
AD-S-25	I/I Reduction Plan	Regulatory	CCRC (2)	V	\$ 3,000,000	\$ 3,000,000	\$ 5,000,000	\$ 5,000,000	\$ 5,250,000	\$ 5,250,000	\$ 23,500,000
AD-S-26	WWTP Solids Process Improvements	Regulatory	CCRC (3)	S	\$ -	\$ 500,000	\$ 2,500,000	\$ 7,000,000	\$ 2,000,000	\$ -	\$ 12,000,000
	Sub-total Allentown Division Wastewater Large & CCRC Projects				\$ 7,400,000	\$ 14,900,000	\$ 27,350,000	\$ 27,750,000	\$ 7,250,000	\$ 5,250,000	\$ 82,500,000
	<u>Act 537 Plan Development Projects</u>										
AD-S-40	Act 537 Alternative Analyses	Regulatory	City	S	\$ 600,000	\$ 250,000	\$ 100,000	\$ -	\$ -	\$ -	\$ 350,000
AD-S-41	Miscellaneous Act 537 Planning, Financial and Legal Reviews	Regulatory	LCA	V	\$ 200,000	\$ 200,000	\$ 100,000				\$ 300,000
	Sub-total Allentown Division Wastewater Capital Funded by the City				\$ 800,000	\$ 450,000	\$ 200,000	\$ -	\$ -	\$ -	\$ 650,000
	GRAND TOTAL				\$ 13,366,000	\$ 19,415,000	\$ 31,565,000	\$ 31,785,000	\$ 10,665,000	\$ 8,625,000	\$ 102,055,000

(1) Reference Glossary of Acronyms and Terms found after the Table of Contents
(2) Per 2020 Lease Amendment related to sewer collection rehabilitation projects
(3) Project to be reviewed by the City for Major Capital Improvement/CCRC approval

RESOLUTION NO. 10-2024-1

(Duly adopted 28 October 2024)

AUTHORIZING THE ISSUANCE OF A SEWER REVENUE NOTE, SUBURBAN SYSTEM, 2024 SERIES, IN AN AMOUNT NOT TO EXCEED \$12,450,000 (THE “NOTE” OR “2024 NOTE”), FOR THE PURPOSE OF THE 2024 SUBURBAN WASTEWATER SYSTEM PROJECT (THE “PROJECT”); REFINANCING OF THE SEWER REVENUE BOND, 2011 SERIES A, AND SETTING FORTH SOURCES OF PAYMENT AND TERMS OF THE NOTE; AND SECURING SAID NOTE BY A PLEDGE OF CERTAIN REVENUES OF THE AUTHORITY AS SECURITY FOR PAYMENT OF THE NOTE; AUTHORIZING EXECUTION AND DELIVERY OF THE NOTE FOR AUTHENTICATION; AUTHORIZING THE APPROPRIATE OFFICIALS OF THE AUTHORITY TO ACCEPT AND ENTER INTO A NOTE PURCHASE AGREEMENT AND RELATED DOCUMENTATION REQUIRED ON BEHALF OF THE AUTHORITY; PROVIDING FOR THE SALE OF THE NOTE PURSUANT TO SAID NOTE PURCHASE AGREEMENT; MAKING CERTAIN COVENANTS WITH RESPECT TO THE NOTE; AND AUTHORIZING OTHER NECESSARY ACTION.

WHEREAS, the Lehigh County Authority (the “Authority”) is a body corporate and politic organized by the Board of the County Commissioners of Lehigh County, Pennsylvania (hereinafter called the “County”) under the Municipality Authorities Act (the Act of June 19, 2001, as amended and supplemented), of the Commonwealth of Pennsylvania (hereinafter called the “Act”), as evidenced by its Certificate of Incorporation dated September 21, 1966; and

WHEREAS, pursuant to such incorporation, as amended, the Authority owns and operates, among other things, a Suburban Wastewater system (the “Wastewater System” or “Sewer System”) in the Lehigh Valley; and

WHEREAS, on November 19, 2009, the Authority issued to PENNVEST a Debt Obligation in the maximum principal amount of \$5,878,847 (the “2009 PENNVEST Debt Obligation”), secured under the terms of Funding Agreement #73141 entered into by the Authority and PENNVEST, dated December 3, 2009 (the “2009 PENNVEST Funding Agreement”); and

WHEREAS, on June 19, 2013, the Authority issued to PENNVEST a Debt

Obligation in the maximum principal amount of \$2,931,170 (the “2013 PENNVEST Debt Obligation”), secured under the terms of Funding Agreement #27849 entered into by the Authority and PENNVEST, dated June 21, 2013 (the “2013 PENNVEST Funding Agreement”); and

WHEREAS, on February 24, 2015, the Authority issued to PENNVEST a Debt Obligation in the maximum principal amount of \$1,000,000 (the “2015 PENNVEST Debt Obligation”), secured under the terms of Funding Agreement #71416 entered into by the Authority and PENNVEST, dated March 5, 2015 (the “2015 PENNVEST Funding Agreement”); and

WHEREAS, the 2009 PENNVEST Debt Obligation, the 2013 PENNVEST Debt Obligation, and the 2015 PENNVEST Debt Obligation are collectively referred to as the PENNVEST Funding Obligations; and

WHEREAS, the 2009 PENNVEST Funding Agreement, the 2013 PENNVEST Funding Agreement, and the 2015 PENNVEST Funding Agreement are collectively referred to as the PENNVEST Funding Agreements; and

WHEREAS, pursuant to the PENNVEST Funding Agreements, as security for its obligations thereunder, the Authority pledged and granted to PENNVEST: 1.) related to the 2009 PENNVEST Debt Obligation, a lien on and security interest in all gross receipts and revenues from the operations of the Authority’s Western Lehigh Interceptor System; 2.) related to the 2013 PENNVEST Debt Obligation, a lien on and security interest in all gross receipts and revenues from the operations of the Authority’s Western Weisenberg Sewer System; 3.) related to the 2015 PENNVEST Debt Obligation, a lien on and security interest in all gross receipts and revenues from the operations of the Authority’s Wastewater Collection System and a secondary Lien on all the gross receipts and revenues of the Common Rate Wastewater Collection System; and

WHEREAS, it is anticipated the three PENNVEST Funding Obligations will be converted to a parity position with all the revenues of the Authority within the Suburban Sewer System with the proposed 2024 Note defined below; and

WHEREAS, the Pledged Revenues related to PENNVEST Funding Agreements and the obligations contemplated under this Resolution do not relate to the Authority’s City of Allentown operations but solely and exclusively to its Suburban Wastewater operations; and

WHEREAS, the Authority is prepared to issue its Sewer Revenue Note, Suburban System, 2024 Series in the maximum principal amount of \$12,450,000 (the "2024 Note" or "Note"), secured under the terms of a certain note purchase agreement the proceeds of which will be used to refinance the Sewer Revenue Bond, 2011 Series A, issued to QNB Bank, provide funds for new project and to pay the costs of issuing Note (collectively the "Project"); and

WHEREAS, after consultation with Concord Public Financial Advisors, Inc. ("Financial Advisor"), the Authority believes that it is in the best interest of the Authority to seek competitive bids regarding the pricing of Note, which was completed by the Financial Advisor on 17 October 2024, and upon receipt of results from this process it is the recommendation of the Financial Advisor to award the Note to a qualified banking institution, S&T Bank ("Lender"); and

WHEREAS, the Authority desires to authorize the issuance of the 2024 Note and the undertaking of the Project, and desires to authorize the appropriate Officials to execute on behalf of the Authority a note purchase agreement consisting of a commitment letter, term sheet or such other appropriate documentation (the "Note Purchase Agreement"), and any related documentation as required (the "Related Documentation"), between the Authority and Lender and to execute and to approve the form and substance of a Note to bear such designation as deemed appropriate by the parties; and such other documents, including but not limited to any required intercreditor agreements, as shall be necessary or appropriate.

NOW, THEREFORE, BE IT RESOLVED by the Board of the Lehigh County Authority as follows:

1. Authorization of the Sewer Revenue Note, Suburban Wastewater System 2024 Series and the Project:

a. The Authority hereby authorizes the issuance of its Sewer Revenue Note, Suburban Wastewater System, 2024 Series, in an amount not to exceed \$12,450,000 for the purpose of financing the Project. The 2024 Note shall be an obligation of the Authority and shall bear interest payable at such times and at such rates and mature as shall be specified in the Note Purchase Agreement or such other designation deemed appropriate by the parties and the 2024 Note. The 2024 Note shall bear interest from its original date on the principal balance outstanding from time to time until the Authority's obligation with respect to the payment of the principal thereof shall have been discharged, payable as specified in the Note Purchase Agreement. The Authority's authorization set forth herein shall be contingent upon receiving the necessary consent from PENNVEST to issue the 2024 Note.

b. The Chairman, Assistant Chairman, Chief Executive Officer and Chief Financial Officer of the Authority are hereby authorized, empowered and directed to take all such further action and execute such additional documents and certificates as they may deem necessary and proper to carry out the purposes of this Resolution as well as to undertake and implement the Project as defined in the Preamble hereof. The Secretary, Assistant Secretary, or Solicitor is authorized to attest to their signature and apply the Authority seal thereto. Persons serving in all of the above-named positions shall be deemed "Officials" for the purpose of this Resolution.

c. The 2024 Note shall be a direct obligation of the Authority and shall be secured by and payable from the Pledged Revenues. The Authority has no power of taxation. The Note is not guaranteed by the Commonwealth of Pennsylvania, the County of Lehigh or any other political subdivision.

d. The 2024 Note shall be subject to prepayment of principal and to such other terms and conditions as are set forth in the 2024 Note and in the Note Purchase Agreement

e. All of the costs of issuance shall be paid by funds made available by the Authority.

2. Authorization of Note Purchase Agreement.

a. The 2024 Note shall be secured by and issued under the Note Purchase Agreement.

b. The Note Purchase Agreement shall be in form and substance as shall be approved by the appropriate Officials of the Authority, with the advice of counsel to the Authority, which approval shall be conclusively evidenced by the execution thereof. The appropriate Officials of the Authority are hereby authorized and directed to execute and acknowledge the Note Purchase Agreement.

3. Execution of 2024 Note

The 2024 Note shall be executed by the manual signature of the appropriate Official of the Authority and by the actual impression of the Authority seal thereon, all attested by the manual signature of the Secretary or Solicitor of the Authority. The 2024 Note shall thereupon be delivered to the Lender at Settlement.

4. Award and Sale of 2024 Note - Authentication and Delivery of 2024 Note - Application of Proceeds.

a. The Authority hereby authorizes the appropriate Officials to enter into the Note Purchase Agreement, and Related Documentation as required and as approved by counsel, on behalf of the Authority providing for the Authority to sell the 2024 Note to the Lender, for a purchase price specified therein and determining the final terms and conditions of the 2024 Note. The Authority hereby accepts the Lender's terms and conditions as specified in the Note Purchase Agreement and the Related Documentation, and the appropriate officers and/or officials of the Authority are hereby authorized and directed, after executing the Note Purchase Agreement and the Related Documentation, to deliver them to the Lender. The maximum interest rates for the 2024 Note established by the Lender and agreed to by the Authority is six (6) percent.

b. The 2024 Note upon the instructions of the appropriate Officials of the Authority shall be delivered to the Lender upon receipt of the purchase price thereof. The purchase price for the 2024 Note shall be deposited in the 2024 Note Settlement Account with the costs and expenses of the financing as finally ascertained and set forth in the Closing Statement being paid out of the 2024 Settlement Account.

5. Federal Tax Code Covenants.

The Authority covenants with the registered owners of the 2024 Note that no part of the proceeds of such 2024 Note shall at any time be applied or spent for any purpose where such application or expenditure would cause, or be used directly or indirectly to acquire securities or obligations the acquisition of which would cause, the 2024 Note to be an "arbitrage bond" or "private activity bond" as defined in Section 103 and Section 148 of the Internal Revenue Code of 1986, as amended and supplemented (the "Code"), or under any similar statutory provision or any rule or regulation promulgated thereunder, with the effect that interest on the 2024 Note would no longer be exempt from federal income taxes.

6. Appointment of Professionals. The Authority appoints Concord Public Financial Advisors, Inc., its Financial Advisor, and King, Spry, Herman, Freund & Faul, LLC ("King Spry") Note Counsel, in regard to the Authority's issuance and sale of the Note.

7. Further Authorization to Officials. The appropriate Officials of the Authority, or any other appropriate officers of the Authority, are hereby authorized and directed to deliver the certificates required under the Note Purchase Agreement in connection with the issuance of the 2024 Note, and to execute and deliver such

further documents and to take such further action as may be necessary or expedient in order to carry out the terms of the and the intent and purpose of this Resolution.

8. Severability. In the event any provision, section, sentence, clause or part of this Resolution shall be held to be invalid, such invalidity shall not affect or impair any remaining provision, section, sentence, clause or part of this Resolution, it being the intent of the Authority that such remainder shall be and shall remain in full force and effect.

9. Repealer. All prior resolutions or parts thereof inconsistent herewith, are hereby repealed, but only so far as they are inconsistent.

10. Effective Date. This Resolution shall become effective immediately.

|

NOW THEREFORE, BE IT RESOLVED that the Lehigh County Authority Board hereby approves Resolution No. 10-2024-1.

On motion of _____, seconded by _____,
this resolution was adopted the 28th day of October, 2024.

Tally of Votes: Yeas _____ Nays _____

§ 3

I, Kevin C. Reid, of the law firm of King, Spry, Herman, Freund & Faul, LLC, Solicitor to the Lehigh County Authority, do hereby certify that the foregoing is a true, correct and complete copy of a resolution which was duly adopted by the Authority Board at a public meeting of the Authority Board held on 28 October, 2024, after notice thereof had been duly given as required by law, at which meeting a quorum was present and voting and which resolution No. 10-2024-1 is now in full force and effect on the date of this certification.

Kevin C. Reid, Esquire Date
King, Spry, Herman, Freund & Faul, LLC
Lehigh County Authority Solicitor

Attest:

Lisa J. Miller Date
Executive Administrative Support Specialist

MEMORANDUM

Date: October 28, 2024

To: Lehigh County Authority Board of Directors
From: Charles Volk, P.E., CCWO
Subject: Suburban Division – LCA Main Office Parking Lot Expansion - Construction Phase

MOTIONS / APPROVALS REQUESTED:

No.	Item	Amount
1	Capital Project Authorization – Construction Phase	\$365,262.50
2	Construction Contract – Gaver Industries, Inc. dba Barker and Barker Paving	\$320,262.50
3	Professional Services Authorization: Construction Phase Engineering Services – Arthur A. Swallow Associates, LLC *	\$20,000

** Included in Capital Project Authorization.*

PROJECT BACKGROUND AND OVERVIEW

LCA's Main Office complex traffic/activities have increased in recent years, due to the need to accommodate a growing staff along with LCA hosting regular regional planning meetings and construction meetings involving multiple parties. Visitors often resort to parking in the grass or parking outside LCA property in the nearby office complex across Spruce Road. It has become evident that the existing parking area is of insufficient capacity. In late 2023 Art Swallow and Associates was retained to perform design phase services of a parking lot expansion project. The design proposes the addition of up to 28 parking spaces, which consists of the construction of a new parking lot to the south of the main parking area with up to 24 spaces to be provided (in the grass area to the west of the main entrance), and the southern extension of the main lot (east side) to add up to 4 spaces. The design also includes storm drainage improvements and lighting.

The land development plans were submitted to Lower Macungie Township in early 2024. A zoning review was performed in March 2024, and all review comments were addressed by the engineer. The final land development plan was submitted to Lower Macungie Township in July 2024, and in September 2024, Lower Macungie Township conditionally approved the final land development plan.

FINANCIAL

This Project will be funded by LCA Suburban Division.

PROJECT STATUS

Board approval is requested for Design and Bid Phase.

THIS APPROVAL – CONSTRUCTION PHASE

BIDDING SUMMARY

This project consists of one contract. The project was advertised for bid in late September, a pre-bid meeting was held October 9, and bids were opened on October 17, 2024 via PennBid. Bid results are as follows:

General Construction	
Bidder	Bid Amount
Gaver Industries Inc. dba Barker and Barker Paving	\$320,262.50
Empire Group	\$321,058.38
Miller Soil Solutions, LLC	\$328,301.80
Gordon H. Bayer, Inc.	\$349,617.50
Barwis Construction, LLC	\$357,995.70
Construction Masters Services, LLC	\$392,046.81
Nyce Construction Services, Inc.	\$399,280.51
G&B Construction	\$484,667.00

Eight bids were received for the General Construction Contract, and the bidding was competitive. Gaver Industries, Inc. dba Barker and Barker Paving (Barker) from Bethlehem PA is the low bidder at \$320,262.50. Barker has been in business for 17 years, specializing in Excavation, Paving, Seal Coating and Striping. Their recent project references include Lehigh Northampton Airport Authority, Sanofi Pasteur Pharmaceuticals, Bethlehem Area School District, and UGI Gas. Their bid documents are in order and the company appears well qualified for the work.

PROFESSIONAL SERVICES

Design phase services are to be provided by Arthur A. Swallow and Associates (AASA). AASA was the design engineer, and they provided satisfactory, cost effective services. The scope of the consultant's services shall include the following:

- 1) Attend pre-construction meeting and progress meetings
- 2) Respond to contractor RFIs
- 3) Review shop drawings
- 4) Provide part time construction inspection and attend field meetings
- 5) Perform substantial completion inspection; issue punchlist
- 6) Perform final completion inspection

PROJECT SCHEDULE

Based on construction phase approval at the October 28, 2024 LCA Board meeting, the project is anticipated to be completed in Spring 2025.

FUTURE AUTHORIZATIONS

None.

CAPITAL PROJECT AUTHORIZATION

PROJECT NO.:	CON-A-8	BUDGET FUND:	Suburban Div\Admin\Capital
PROJECT TITLE:	Suburban Division – Main Office Parking Lot Expansion Project – Construction Phase	PROJECT TYPE:	<input checked="" type="checkbox"/> Construction <input type="checkbox"/> Engineering Study <input type="checkbox"/> Equipment Purchase <input type="checkbox"/> Amendment
THIS AUTHORIZATION:	\$365,262.50		
TO DATE (W/ ABOVE)	\$395,262.50		

DESCRIPTION AND BENEFITS:

Main Office Parking Lot Expansion Project:

LCA's Main Office complex traffic/activities have increased in recent years, due to the need to accommodate a growing staff along with LCA hosting regular regional planning meetings and construction meetings involving multiple parties. Visitors often resort to park in the grass or parking outside LCA property in the nearby office complex across Spruce Road. It has become evident that the existing parking area is of insufficient capacity. In late 2023 Art Swallow and Associates was retained to perform design phase services of a main office parking lot expansion project. Design was completed in early 2024, township land development was secured in September 2024 and bids were opened on October 17, 2024 for the construction contract.

Previous Authorizations	
Design and bid phase	\$30,000

REQUESTED THIS AUTHORIZATION	
Construction Phase	
General Construction Contract - Gaver Industries Inc. dba Barker and Barker Paving	\$320,262.50
Construction Engineering Services – Arthur A. Swallow & Assoc., Inc.	\$20,000
Staff	\$5,000
Contingency	\$20,000
Total This Authorization	\$365,262.50

Future Authorization	
none	

REVIEW AND APPROVALS:

Project Manager	Date	Chief Executive Officer	Date
Chief Capital Works Officer	Date	Chairman	Date



Lehigh County Authority

1053 Spruce Street * P.O. Box 3348 * Allentown, PA 18106-0348
(610)398-2503 * FAX (610)398-8413 * Email: service@lehighcountyauthority.org

PROFESSIONAL SERVICES AUTHORIZATION

Professional:

Arthur A. Swallow Associates, LLC
1003-1005 N. 19th Street
Allentown, PA 18104

Date: 10/28/2024

Requested By: Chuck Volk

Approvals
Department Head:

Chief Executive
Officer:

Description of Services:

LCA Main Office Parking Lot – Construction Engineering Services

Arthur A. Swallow Associates, LLC, will provide the following construction engineering services:

Professional Services
1. Attend pre-construction conference
2. Attend progress meetings
3. Respond to RFIs and review shop drawings
4. Perform part-time field inspection services
5. Contractor payment application review
6. Perform Substantial Completion Inspection and issue punchlist to contractor
7. Perform Final Completion inspection

Construction Engineering Total Cost \$20,000

Timetable and Completion Deadline: Construction phase is anticipated to be completed in Spring 2025.

(For Authority Use Only)

Authorization Completion:

Approval: _____ **Actual Cost:** _____ **Date:** _____

MEMORANDUM

Date: October 28, 2024

To: Lehigh County Authority Board of Directors
From: Amy B. Rohrbach, Project Manager
Subject: Allentown Division – KIWWTP Final Settling Tanks 1-4 Upgrades – Construction Phase

MOTIONS / APPROVALS REQUESTED:

No.	Item	Amount
1	Capital Project Authorization – Construction Phase	\$3,798,130
2 ⁽¹⁾	General Construction Contract Award – Eastern Environmental Contractors, Inc.	\$2,992,230
3 ⁽¹⁾	Electrical Construction Contract Award – Orlando Diefenderfer Electrical Contractors	\$509,500
4 ⁽¹⁾	Professional Services Authorization – Construction Administration – GHD	\$171,400

(1) Included in the Capital Project Authorization

PROJECT OVERVIEW

The four (4) smallest final settling tanks and associated Motor Control Centers were original installed in the late 1960s and are at the end of their useful life and in need of replacement. This project includes upgrades to the existing clarifier rake mechanisms, structural repairs to the tanks, electrical upgrades including replacing the aging Motor Control Centers, and upgrades to the leachate pumping system used in tank #3. These improvements were identified in the 2019 KIWWTP Master Plan as a Near-Term project, and recent Asset Management ratings have identified several components to have a high risk of failure. Upgrades to the existing leachate system will improve operability and efficiency.

FINANCIAL

The project has received conceptual design approval from the City on August 28, 2024; therefore, it is considered a Major Capital Improvement (MCI), and costs will be recovered through Capital Cost Recovery Charges (CCRC).

THIS APPROVAL – CONSTRUCTION PHASE

BIDDING SUMMARY

The project was advertised for bid on September 10, 2024, and a pre-bid meeting was held on September 19, 2024. Bids were received and publicly opened, via PennBid, on October 16, 2024.

The results of which are as follows:

General Construction Contract	
Bidder	Base Bid
Eastern Environmental Contractors, Inc.	\$2,992,230
LB Industries, Inc.	\$3,024,764
DESCCO Design & Construction, Inc.	\$3,157,896
Allan Myers	\$3,235,555
Blooming Glen Contractors, Inc.	\$3,480,151
Electrical Construction Contract	
Bidder	Base Bid
Orlando Diefenderfer Electrical Contractors	\$509,500
Eastern Environmental Contractors, Inc.	\$531,300
Blooming Glen Contractors, Inc.	\$1,189,065
TOTAL GENERAL + ELECTRICAL CONSTRUCTION	\$3,501,730

The engineer's estimate for the base bid was \$4,581,000.

LCA's design consultant on this project, GHD, and LCA staff have reviewed the references and qualifications, and experience statement provided by Eastern Environmental Contractors, Inc. and Orlando Diefenderfer Electrical Contractors and have determined that both contractors are qualified to complete this project. Both contractors also have prior experience with LCA with Eastern Environmental currently working on the WFP Filter Upgrades project and Orlando Diefenderfer currently working on both the WFP Filter Upgrades and KIWWTP Boiler Improvements projects. GHD has also had prior experience with both contractors on past projects at other wastewater treatment plants with positive results. Based on the above, LCA staff recommends the award of General Construction Contract for the Base bid to the lowest bidder, Eastern Environmental Contractors, Inc. and award of an Electrical Construction Contract for the Base bid to Orlando Diefenderfer Electrical Contractors, subject to the receipt of the necessary Performance & Payment Bonds, Insurance and other required documentation.

PROFESSIONAL SERVICES

Construction Administration Services

GHD has been LCA's design consultant on this project and will provide construction administration services for the construction phase of the project. Their work will include:

Professional Services
1. Facilitate completion of agreement and contract elements
2. Prepare for, attend, and facilitate pre-construction conference
3. Prepare for and attend 12 job progress meetings
4. Process and review shop drawings and RFIs

5. Process contractor applications for payment & any necessary work change directives and change orders
6. Construction Observations and Special Inspections
7. Start-up Assistance and Commissioning
8. Perform project closeout activities
9. Prepare record drawings

PROJECT SCHEDULE

The contract time for this work is 515 days from Notice to Proceed to substantial completion and 545 days from Notice to Proceed for final completion. Assuming approval of construction phase at the October 28, 2024 Board meeting, contracts will be executed in December. Major construction is expected to commence in early 2025 and final completion is anticipated in June 2026.

FUTURE AUTHORIZATIONS

None



Our ref: 12624159

October 17, 2024

Ms. Amy Rohrbach
Project Manager
Lehigh County Authority
1053 Spruce Road
Allentown, PA 18106

**Re: Kline's Island WWTP Final Clarifier Rehabilitation
Construction Phase Services Proposal**

Dear Ms. Rohrbach:

As requested GHD is submitting the following proposal for construction phase services associated with the final clarifier rehabilitation project at the Kline's Island WWTP. GHD proposes the following scope of services:

Construction Phase Tasks

Office Administration

GHD will coordinate receipt of bonds, insurances, signed Agreements and other required documents from the apparent low bidders. GHD will provide five conformed, fully executed sets of Contract Documents to LCA for its use. Digital copies of the Contract Documents will be provided to each prime contractor to be used with suppliers and subcontractors and for their own use. GHD will prepare and issue a Notice to Proceed to each prime contractor.

GHD will answer questions regarding the design intent, provide interpretation and clarifications of the Contract Documents, and in connection therewith, prepare work directives for issuance to the contractors. Progress payments will be reviewed on a monthly basis and either recommended to LCA for payment or returned to the contractor for revisions. Change orders will be reviewed, if any, and GHD will recommend actions and contract cost adjustments to LCA as appropriate.

Shop Drawing Review

GHD will review and take appropriate action on mechanical process, structural, and electrical shop drawings in conformance with the contract requirements, technical specifications, and compatibility with the design concept. Shop drawings shall not be approved without accompanying steel origin certificates. GHD will evaluate and provide recommendations to LCA on significant deviations from the Contract Documents requested by contractors. GHD will review resubmittals of shop drawings or other data returned to contractors for correction.

Meetings

Attendance at meetings is included as follows:

1. Pre-construction meeting
2. Twelve (12) job progress meetings

Pre-Construction Meeting: GHD will attend a pre-construction meeting at the beginning of the project to review required work items and the contractors' schedules, as well as outline the procedures and protocols for submittals, progress payments, change orders, requests for information, maintaining records, and project closeout. Meeting minutes will be prepared and distributed by GHD.

Progress Meetings: GHD will coordinate and run up to twelve (12) progress meetings over the course of an estimated 18-month construction period. At these meetings GHD will review work progress and schedule compliance with each contractor, discuss submittals, provide clarifications and interpretations, review particulars of project implementation, and discuss coordination issues, as necessary. A site visit will be performed as part of each progress meeting. Meeting minutes will be prepared and distributed by GHD.

Construction Observation and Special Inspections

GHD will periodically observe and document the Contractor's construction performance in accordance with the Contract Documents and approved shop drawings. Up to eight (8) partial-day general inspections of the contractors' work are included in this proposal, including special structural, electrical, and mechanical inspections. Most importantly, GHD's structural engineer will inspect each tank after it is emptied and cleaned and provide recommendations for concrete repair and crack injections.

Start-Up Assistance and Commissioning

GHD will be onsite during start-up and commissioning of each tank. Up to four (4) days are included in this proposal for this effort.

Substantial Completion Inspection: During this time GHD will conduct a substantial completion meeting to determine if the work is substantially complete. GHD will observe operation of the equipment and other project elements pursuant to the performance requirements of the specifications. A Certificate of Substantial Completion will either be issued along with a punch list of work items to be finalized, or else written documentation of why the work is not considered substantially complete will be provided.

Final Acceptance Inspection: GHD will conduct a final inspection meeting and either issue a Certificate of Final Acceptance or provide a written statement documenting why the work is not considered complete.

Record Drawings

GHD will review the Contractors' redline drawings for completeness while onsite, as well as part of the monthly application for payment process. GHD will use these redline drawings to prepare AutoCAD record drawings. Three paper copies and one digital copy of the record drawings will be provided to LCA at the completion of the project.

Assumed Construction Period

GHD's services during construction are based on an assumed 18-month construction period, with actual on site construction taking place over about six (6) of those months.

Cost Proposal

GHD proposes to complete the construction phase services outlined in this proposal for a not to exceed price of \$171,400 inclusive of all labor and expenses. LCA will only be billed for the actual time and expenses required to complete each task.

Please do not hesitate to contact me with any questions you may have regarding this proposal and the suggested scope. We look forward to a successful and timely completion of this project, which is of significant importance to both Lehigh County Authority and the City of Allentown.

Regards,



Charles J. Winslow, PE
Project Manager

1-215-853-3331
charles.winslow@ghd.com

CJW

CAPITAL PROJECT AUTHORIZATION

PROJECT NO.:	AD-S-22	BUDGET FUND:	Allentown Div\Sewer\Capital
PROJECT TITLE:	Allentown Division – KIWWTP Final Settling Tanks 1-4 Upgrades – Construction Phase	PROJECT TYPE:	<input checked="" type="checkbox"/> Construction <input type="checkbox"/> Engineering Study <input type="checkbox"/> Equipment Purchase <input type="checkbox"/> Amendment No. 1
THIS AUTHORIZATION:	\$3,798,130		
TO DATE (W/ ABOVE)	\$3,983,930		

DESCRIPTION AND BENEFITS:

The four (4) smallest final settling tanks and associated Motor Control Centers were original installed in the late 1960's and are at the end of their useful life and in need of replacement. This project includes upgrades to the existing clarifier rake mechanisms, structural repairs to the tanks, electrical upgrades including replacing the aging Motor Control Centers, and upgrades to the leachate pumping system used in tank #3. These improvements were identified in the 2019 KIWWTP Master Plan as a Near-Term project, and recent Asset Management ratings have identified several components to have a high risk of failure. GHD provided final design and bidding phase services for the project and will provide Construction Administration Services. Work will be coordinated to limit impact on existing plant operations.

Notice to Proceed is anticipated to be issued in December 2024, with final completion expected in June 2026.

AUTHORIZATION STATUS:

Prior Authorizations	
<i>Design Phase – GHD</i>	<i>\$185,800</i>
Requested This Authorization – Construction Phase	
General Construction: Eastern Environmental Contractors, Inc.	\$2,992,230
Electrical Construction: Orlando Diefenderfer Electrical Contractors	\$509,500
Construction Administration Services: GHD	\$171,400
Staff	\$25,000
Contingencies	\$100,000
Total This Authorization	\$3,798,130

REVIEW AND APPROVALS:

<u>Amy Rohrbach</u>	<u>10/28/2024</u>		
Project Manager	Date	Chief Executive Officer	Date
Chief Capital Works Officer	Date	Chairman	Date



Lehigh County Authority

1053 Spruce Street * P.O. Box 3348 * Allentown, PA 18106-0348
(610)398-2503 * FAX (610)398-8413 * Email: service@lehighcountyauthority.org

PROFESSIONAL SERVICES AUTHORIZATION

Professional: GHD
1140 Welsh Road, Suite 120
North Wales, PA 19454

Date: October 28, 2024

Requested By: Amy Rohrbach

Approvals

Department Head: _____

Chief Executive

Officer: _____

Allentown Division – KIWWTP Final Settling Tanks 1-4 Upgrades - Construction Administration Services

GHD will provide construction administration services for the KIWWTP Final Settling Tanks 1-4 Upgrades project. The following professional services are included:

Professional Services
1. Facilitate completion of agreement and contract elements
2. Prepare for, attend, and facilitate pre-construction conference
3. Prepare for and attend 12 job progress meetings
4. Process and review shop drawings and RFIs
5. Process contractor applications for payment & any necessary work change directives and change orders
6. Construction Observations and Special Inspections
7. Start-up Assistance and Commissioning
8. Perform project closeout activities
9. Prepare record drawings

(1) Per attached 10/17/2024 GHD proposal letter

This Authorizations: \$171,400

Prior Design Phase Authorizations: \$185,800

Time Table and Completion Deadline: As required to meet deadlines as set forth in the construction contract.

MUNIS #: 50602











































(For Authority Use Only)

Authorization Completion:

Approval: _____ **Actual Cost:** _____ **Date:** _____

**LEHIGH COUNTY AUTHORITY
FINANCIAL STATEMENTS
SEPTEMBER 2024**

**LEHIGH COUNTY AUTHORITY
YTD SUMMARY SCORESHEET
SEPTEMBER 2024**

	<u>Sub W</u>	<u>Sub WW</u>	<u>City</u>
YTD Net income >0			
YTD Net income >= FC			
YTD Cash Flow >0			
YTD Cash Flow >= FC			
YTD DSCR >= FC			
YTD DSCR >= 1.20			
YTD Operating Ratio >= 1.00			
YTD Operating Ratio >= Budget Target			
YTD Days Cash on Hand >= 180.0			
YTD Operating Revenues >= FC			
YTD Operating Expenses <= FC			
FY FC Net Income >= Budget			
FY FC Cash Flows >=Budget			
FY FC DSCR >= Budget			
TOTAL GREEN	<u><u>11</u></u>	<u><u>11</u></u>	<u><u>12</u></u>

LEHIGH COUNTY AUTHORITY
FINANCIAL STATEMENTS - SUMMARY
For the Period Ended September 30, 2024

	Consolidated Financial Statements														
	Month					Year To Date					FULL YEAR				
	Actual	Q3 FC	Prior Year	FC Var	PY Var	Actual	Q3 FC	Prior Year	FC Var	PY Var	Q3 FC	Budget	Prior Year	Bud Var	PY Var
Income Statement															
Suburban Water	108,214	357,034	387,327	(248,819)	(279,112)	2,090,209	1,867,136	2,701,607	223,073	(611,398)	2,348,377	2,019,922	8,266,955	328,455	(5,918,577)
Suburban Wastewater	(159,026)	(153,914)	(74,135)	(5,112)	(84,891)	(283,088)	(1,403,119)	(192,718)	1,120,031	(90,370)	(1,461,583)	(1,632,719)	(334,302)	171,136	(1,127,281)
City Division	1,159,652	1,244,127	1,962,543	(84,476)	(802,891)	11,198,478	6,819,770	14,292,069	4,378,709	(3,093,591)	12,050,508	14,844,627	7,787,339	(2,794,119)	4,263,170
Total LCA	1,108,840	1,447,247	2,275,735	(338,407)	(1,166,895)	13,005,599	7,283,787	16,800,958	5,721,813	(3,795,359)	12,937,303	15,231,830	15,719,991	(2,294,527)	(2,782,688)
Cash Flow Statement															
Suburban Water	426,278	772,458	560,242	(346,180)	(133,964)	4,862,531	5,582,875	5,517,231	(720,344)	(654,700)	2,998,939	1,446,849	3,429,573	1,552,090	(430,634)
Suburban Wastewater	(1,081,135)	(1,235,839)	(310,860)	154,704	(770,275)	(2,610,030)	(3,963,325)	4,477,237	1,353,295	(7,087,267)	1,278,254	347,045	4,298,204	931,209	(3,019,950)
City Division	905,120	(6,830,036)	1,826,975	7,735,156	(921,855)	65,874,689	50,058,379	19,082,746	15,816,310	46,791,942	51,369,738	2,940,507	13,827,652	48,429,231	37,542,086
Total LCA	250,264	(7,293,417)	2,076,357	7,543,681	(1,826,094)	68,127,190	51,677,929	29,077,215	16,449,261	39,049,975	55,646,931	4,734,400	21,555,429	50,912,531	34,091,502
Debt Service Coverage Ratio															
Suburban Water	1.74	2.37	2.69	(0.63)	(0.95)	2.23	1.99	2.38	0.24	(0.15)	2.10	1.96	3.97	0.14	(1.87)
Suburban Wastewater	4.29	3.95	7.41	0.34	(3.11)	5.58	4.11	8.42	1.47	(2.84)	4.80	4.67	9.02	0.14	(4.21)
City Division	2.30	2.21	3.26	0.08	(0.96)	2.20	1.88	2.93	0.32	(0.73)	2.20	2.13	2.38	0.06	(0.19)

LEHIGH COUNTY AUTHORITY
CONSOLIDATED FINANCIAL STATEMENTS
For the Period Ended September 30, 2024

STATEMENTS OF ACTIVITIES	Consolidated Financial Statements															
	Month				Year To Date				Q3 FULL YEAR FORECAST				Full Year Budget			
	Sub W	Sub WW	City	LCA	Sub W	Sub WW	City	LCA	Sub W	Sub WW	City	LCA	Sub W	Sub WW	City	LCA
Operating Revenues:																
User Charges	1,508,436	1,492,725	4,234,069	7,235,230	12,842,953	14,622,761	42,507,623	69,973,337	17,524,394	19,201,227	56,018,070	92,743,692	17,485,300	19,128,454	55,555,506	92,169,260
Connection & System Charges	67,022	96,727	243,846	407,596	664,193	1,309,820	2,166,397	4,140,409	1,034,156	1,652,882	3,529,115	6,216,153	950,850	1,695,900	3,609,600	6,256,350
Other Miscellaneous Revenues	2,130	30	2,985	5,145	105,752	300	199,290	305,342	176,276	2,618	86,448	265,342	177,724	2,900	89,800	270,424
Total Operating Revenues	1,577,588	1,589,482	4,480,900	7,647,970	13,612,897	15,932,880	44,873,310	74,419,088	18,734,826	20,856,727	59,633,634	99,225,187	18,613,874	20,827,254	59,254,906	98,696,034
Operating Expenses:																
Personnel	393,848	160,368	949,527	1,503,743	3,083,660	1,297,842	8,754,584	13,136,087	4,271,437	1,740,118	13,927,623	19,939,178	4,269,081	1,766,601	13,986,737	20,022,419
Shared Services - General & Administrative	80,928	32,879	178,147	291,954	665,881	280,173	1,737,124	2,683,177	1,066,844	428,822	2,446,827	3,942,493	1,136,102	456,840	2,545,190	4,138,132
Utilities	45,204	21,919	163,348	230,472	389,442	216,330	1,491,413	2,097,185	531,376	320,045	2,018,931	2,870,352	537,998	313,870	2,063,922	2,915,790
Materials and Supplies	106,606	21,694	319,019	447,319	622,329	260,003	2,421,932	3,304,264	1,086,624	472,867	3,280,826	4,840,316	1,197,810	518,722	3,251,300	4,967,832
Miscellaneous Services	516,902	621,437	198,590	1,336,928	3,607,219	5,216,987	1,466,757	10,290,963	4,706,969	7,492,424	2,332,686	14,532,079	4,806,151	7,631,090	2,397,011	14,834,252
Treatment and Transportation	-	375,000	-	375,000	-	4,181,502	5,656	4,187,158	-	4,689,486	11,400	4,700,886	-	4,529,540	11,400	4,540,940
Depreciation and Amortization	297,790	575,538	515,561	1,388,889	2,680,083	5,179,839	4,640,049	12,499,971	3,650,624	7,031,500	6,260,297	16,942,421	3,517,000	7,031,500	6,169,850	16,718,350
Major Maintenance Expenses	-	-	3,912	3,912	-	-	26,244	26,244	-	-	4,000,000	4,000,000	-	-	4,000,000	4,000,000
Other Miscellaneous	-	-	-	-	-	-	-	-	93,100	22,100	-	115,200	93,100	22,100	-	115,200
Total Operating Expenses	1,441,278	1,808,835	2,328,104	5,578,218	11,048,614	16,632,675	20,543,759	48,225,049	15,406,973	22,197,362	34,278,590	71,882,925	15,557,242	22,270,263	34,425,410	72,252,915
Net Operating Profit	136,309	(219,353)	2,152,796	2,069,753	2,564,284	(699,795)	24,329,551	26,194,039	3,327,853	(1,340,635)	25,355,045	27,342,262	3,056,632	(1,443,009)	24,829,496	26,443,119
Non-Operating Income (Expense)																
Interest Income	62,599	62,091	558,276	682,966	470,213	474,950	4,241,451	5,186,615	198,236	202,188	1,397,689	1,798,113	130,452	130,271	984,881	1,245,604
Interest (Expense)	(88,974)	(11,504)	(1,549,316)	(1,649,795)	(942,732)	(108,341)	(11,974,273)	(13,025,347)	(1,174,641)	(178,764)	(19,703,642)	(21,057,047)	(1,167,162)	(185,934)	(19,703,642)	(21,056,738)
Other Miscellaneous	(1,721)	9,740	(2,104)	5,916	(1,556)	50,099	(5,398,251)	(5,349,708)	(3,070)	(144,372)	5,001,417	4,853,975	-	(134,047)	8,733,892	8,599,845
Net Non-Operating Income (Expense)	(28,095)	60,327	(993,144)	(960,913)	(474,075)	416,707	(13,131,073)	(13,188,440)	(979,475)	(120,948)	(13,304,536)	(14,404,959)	(1,036,710)	(189,710)	(9,984,869)	(11,211,289)
Net Income (Loss)	108,214	(159,026)	1,159,652	1,108,840	2,090,209	(283,088)	11,198,478	13,005,599	2,348,377	(1,461,583)	12,050,508	12,937,303	2,019,922	(1,632,719)	14,844,627	15,231,830
CASH FLOW STATEMENT																
Cash Flows From Operating Activities																
Operating Revenues	1,577,588	1,589,482	4,480,900	7,647,970	13,612,897	15,932,880	44,873,310	74,419,088	18,734,826	20,856,727	59,633,634	99,225,187	18,613,874	20,827,254	59,254,906	98,696,034
Operating Expenses (ex D&A)	(1,143,488)	(1,233,297)	(1,808,632)	(4,185,417)	(8,368,531)	(11,452,836)	(15,877,467)	(35,698,834)	(11,756,350)	(15,165,862)	(24,018,292)	(50,940,504)	(12,040,242)	(15,238,763)	(24,255,560)	(51,534,565)
Non-Cash Working Capital Changes	133,777	(1,026,338)	(1,003,650)	(1,896,211)	(650,227)	(2,172,713)	(1,914,256)	(4,737,196)	(171,643)	(361,650)	(2,619,905)	(3,153,198)	1	(200,000)	(135,999)	(335,999)
Net Cash Provided by (Used in) Operating Activities	567,877	(670,153)	1,668,619	1,566,343	4,594,140	2,307,330	27,081,588	33,983,058	6,806,833	5,329,215	32,995,437	45,131,486	6,573,633	5,388,491	34,863,347	46,825,470
Cash Flows From Financing Activities																
Capital Contributions	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Proceeds New Borrowing	-	-	-	-	5,241,371	-	55,000,000	60,241,371	5,230,000	7,175,000	56,627,352	69,032,352	5,230,000	7,175,000	8,555,508	20,960,508
Interest Payments	(832)	(11,029)	(1,082)	(12,943)	(383,757)	(104,062)	(4,337,620)	(4,825,439)	(1,167,162)	(185,934)	(13,318,734)	(14,671,830)	(1,167,162)	(185,934)	(13,315,397)	(14,668,493)
Principal Payments	(6,411)	(49,469)	(5,276)	(61,156)	(57,409)	(441,665)	(739,106)	(1,238,179)	(2,254,324)	(1,010,486)	(2,945,000)	(6,209,810)	(2,254,324)	(1,010,486)	(2,945,000)	(6,209,810)
Net Cash Provided by (Used in) Financing Activities	(7,243)	(60,498)	(6,358)	(74,099)	4,800,205	(545,726)	49,923,274	54,177,753	1,808,514	5,978,580	40,363,618	48,150,712	1,808,514	5,978,580	(7,704,889)	82,205
Cash Flows from Capital and Related Activities																
Non-Operating Income (Expenses)	(1,721)	9,740	(2,104)	5,916	(1,556)	50,099	(5,398,251)	(5,349,708)	(3,070)	(144,372)	3,693,193	3,545,751	-	(134,047)	7,425,668	7,291,621
Capital Expenditures, net	(195,234)	(422,314)	(1,313,313)	(1,930,862)	(5,245,472)	(5,385,683)	(9,973,373)	(20,604,527)	(5,811,575)	(10,587,357)	(27,080,200)	(43,479,131)	(7,065,750)	(11,516,250)	(32,628,500)	(51,210,500)
Net Cash Provided By (Used In) Capital and Related Activities	(196,955)	(412,574)	(1,315,417)	(1,924,946)	(5,247,028)	(5,335,584)	(15,371,624)	(25,954,235)	(5,814,644)	(10,731,729)	(23,387,007)	(39,933,380)	(7,065,750)	(11,650,297)	(25,202,832)	(43,918,879)
Cash Flows From Investing Activities																
Investments Converting To Cash	-	-	-	-	735,000	2,163,000	-	2,898,000	735,000	2,173,000	-	2,908,000	-	500,000	-	500,000
Purchased Investments	-	-	-	-	(490,000)	(1,674,000)	-	(2,164,000)	(735,000)	(1,673,000)	-	(2,408,000)	-	-	-	-
Interest Income	62,599	62,091	558,276	682,966	470,213	474,950	4,241,451	5,186,615	198,236	202,188	1,397,689	1,798,113	130,452	130,271	984,881	1,245,604
Net Cash Provided By (Used In) Investing Activities	62,599	62,091	558,276	682,966	715,213	963,950	4,241,451	5,920,615	198,236	702,188	1,397,689	2,298,113	130,452	630,271	984,881	1,745,604
FUND NET CASH FLOWS	426,278	(1,081,135)	905,120	250,264	4,862,531	(2,610,030)	65,874,689	68,127,190	2,998,939	1,278,254	51,369,738	55,646,931	1,446,849	347,045	2,940,507	4,734,400
DEBT SERVICE RATIO																
Debt Service Ratio (Indenture Based)																
Total Operating Revenues	1,508,436	1,492,725	4,234,069	7,235,230	12,842,953	14,622,761	42,507,623	69,973,337	17,524,394	19,201,227	56,018,070	92,743,692	17,485,300	19,128,454	55,555,506	92,169,260
Total Operating Expenses (Cash Based)	(1,143,488)	(1,233,297)	(1,812,543)	(4,189,329)	(8,368,531)	(11,452,836)	(15,903,711)	(35,725,078)	(11,756,350)	(15,165,862)	(24,018,292)	(50,940,504)	(12,040,242)	(15,238,763)	(24,255,560)	(51,534,565)
Interest Income	62,599	62,091	558,276	682,966	470,213	474,950	4,241,451	5,186,615	198,236	202,188	1,397,689	1,798,113	130,452	130,271	984,881	1,245,604
Annual Lease Payment (City)	-	-	(109,019)	(109,019)	-	-	(981,168)	(981,168)	-	-	(1,308,224)	(1,308,224)	-	-	(1,308,224)	(1,308,224)
Total Non-Operating Revenues (Expenses)	67,431	106,498	244,727	418,656	768,389	1,360,218	(3,032,564)	(903,957)	1,207,362	1,511,128	3,615,564	6,334,054	1,128,574	1,564,753	3,699,400	6,392,727
Cash Available For Debt Service	494,978	428,016	3,115,511	4,038,505	5,713,024	5,005,093	26,831,632	37,549,749	7,173,642	5,748,681	35,704,807	48,627,130	6,704,084	5,584,715	34,676,003	46,964,802
Interest Paid	97,264	15,495	1,109,894	1,222,652	875,372	139,451	9,989,050	11,003,872	1,167,162	185,934	13,318,734	14,671,830	1,167,162	185,934	13,315,397	14,668,493
Debt Retirement (Principal Payments)	187,860	84,207	245,417	517,484	1,690,743	757,865	2,208,750	4,657,358	2,254,324	1,010,486	2,945,000	6,209,810	2,254,324	1,010,486	2,945,000	6,209,810
Total Debt Service	285,124	99,702	1,355,311	1,740,137	2,566,115	897,315	12,197,800	15,661,230	3,421,486	1,196,420	16,263,734	20,881,640	3,421,486	1,196,420	16,260,397	20,878,303
Debt Service Ratio	1.74	4.29	2.30	2.32	2.23	5.58	2.20	2.40	2.10	4.80	2.20	2.33	1.96	4.67	2.13	2.25

LEHIGH COUNTY AUTHORITY
FINANCIAL STATEMENTS - SUBURBAN WATER
For the Period Ended September 30, 2024

STATEMENTS OF ACTIVITIES

Operating Revenues:

User Charges	1,508,436	1,551,681	1,461,866	(43,245)	46,569
Connection & System Charges	67,022	142,065	89,101	(75,043)	(22,079)
Other Miscellaneous Revenues	2,130	4,821	1,995	(2,691)	135

Total Operating Revenues	1,577,588	1,698,566	1,552,962	(120,979)	24,625
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Operating Expenses:

Personnel	393,848	369,913	332,146	(23,935)	(61,702)
Shared Services - General & Administrative	80,928	85,606	54,639	4,678	(26,289)
Utilities	45,204	43,763	39,858	(1,442)	(5,346)
Materials and Supplies	106,606	96,760	54,195	(9,846)	(52,411)
Miscellaneous Services	516,902	438,444	363,625	(78,458)	(153,277)
Treatment and Transportation	-	-	-	-	-
Depreciation and Amortization	297,790	233,273	258,365	(64,517)	(39,425)
Major Maintenance Expenses	-	-	-	-	-
Other Miscellaneous	-	-	-	-	-

Total Operating Expenses	1,441,278	1,267,759	1,102,828	(173,520)	(338,450)
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Net Operating Profit

	136,309	430,808	450,134	(294,498)	(313,824)
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Non-Operating Income (Expense)

Interest Income	62,599	11,433	32,335	51,166	30,265
Interest (Expense)	(88,974)	(85,691)	(95,432)	(3,283)	6,458
Other Miscellaneous	(1,721)	484	290	(2,205)	(2,010)

Net Non-Operating Income (Expense)	(28,095)	(73,774)	(62,807)	45,679	34,712
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Net Income (Loss)

	108,214	357,034	387,327	(248,819)	(279,112)
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CASH FLOW STATEMENT

Cash Flows From Operating Activities

Operating Revenues	1,577,588	1,698,566	1,552,962	(120,979)	24,625
Operating Expenses (ex D&A)	(1,143,488)	(1,034,486)	(844,464)	(109,002)	(299,024)
Non-Cash Working Capital Changes	133,777	133,000	272,688	777	(138,911)

Net Cash Provided by (Used in) Operating Activities	567,877	797,081	981,187	(229,204)	(413,310)
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Cash Flows From Financing Activities

Capital Contributions	-	-	-	-	-
Proceeds New Borrowing	-	-	-	-	-
Interest Payments	(832)	(834)	(928)	2	96
Principal Payments	(6,411)	(7,081)	(6,315)	670	(96)

Net Cash Provided by (Used in) Financing Activities	(7,243)	(7,915)	(7,243)	672	-
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Cash Flows from Capital and Related Activities

Non-Operating Income (Expenses)	(1,721)	484	290	(2,205)	(2,010)
Capital Expenditures, net	(195,234)	(28,625)	(446,326)	(166,609)	251,092

Net Cash Provided By (Used In) Capital and Related Activities	(196,955)	(28,141)	(446,036)	(168,814)	249,081
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Cash Flows From Investing Activities

Investments Converting To Cash	-	-	-	-	-
Purchased Investments	-	-	-	-	-
Interest Income	62,599	11,433	32,335	51,166	30,265

Net Cash Provided By (Used In) Investing Activities	62,599	11,433	32,335	51,166	30,265
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FUND NET CASH FLOWS

	426,278	772,458	560,242	(346,180)	(133,964)
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DEBT SERVICE RATIO

Debt Service Ratio (Indenture Based)

User Charges	1,508,436	1,551,681	1,461,866	(43,245)	46,569
Operating Expenses (Cash Based)	(1,143,488)	(1,034,486)	(844,464)	(109,002)	(299,024)
Interest Income	62,599	11,433	32,335	51,166	30,265
Annual Lease Payment (City)	-	-	-	-	-
Non-Operating Revenues (Expenses)	67,431	147,370	91,386	(79,938)	(23,954)

Cash Available For Debt Service	494,978	675,997	741,123	(181,019)	(246,145)
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Interest Paid	97,264	97,264	108,179	-	(10,916)
Debt Retirement (Principal Payments)	187,860	187,860	167,545	-	20,315

Total Debt Service	285,124	285,124	275,724	-	9,400
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Debt Service Ratio	1.74	2.37	2.69	(0.63)	(0.95)
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Suburban - Water

Year To Date

Actual	Q3 FC	Prior Year	FC Var	PY Var
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12,842,953	12,919,619	12,313,186	(76,667)	529,767
664,193	613,950	410,083	50,242	254,110
105,752	100,128	43,173	5,624	62,578
13,612,897	13,633,698	12,766,442	(20,800)	846,455

3,083,660	3,528,406	2,853,982	444,745	(229,678)
665,881	776,541	552,966	110,660	(112,915)
389,442	384,001	361,209	(5,441)	(28,239)
622,329	647,475	444,420	25,145	(177,910)
3,607,219	3,387,806	2,910,583	(219,413)	(696,636)
-	-	-	-	-
2,680,083	2,293,595	2,318,307	(386,488)	(361,776)
-	-	-	-	-
-	-	-	-	-

11,048,614	11,017,822	9,441,467	(30,791)	(1,607,147)
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2,564,284	2,615,875	3,324,975	(51,592)	(760,692)
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470,213	191,119	247,018	279,095	223,196
(942,732)	(946,692)	(883,667)	3,959	(59,065)
(1,556)	6,833	13,282	(8,389)	(14,837)

(474,075)	(748,740)	(623,368)	274,665	149,293
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2,090,209	1,867,136	2,701,607	223,073	(611,398)
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Q3 FC	Budget	Prior Year	Bud Var	PY Var
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17,524,394	17,485,300	16,493,151	39,094	1,031,244
1,034,156	950,850	730,402	83,306	303,754
176,276	177,724	207,520	(1,448)	(31,245)
18,734,826	18,613,874	17,431,073	120,952	1,303,753

4,271,437	4,269,081	3,475,597	(2,356)	(795,840)
1,066,844	1,136,102	725,136	69,258	(341,708)
531,376	537,998	489,997	6,622	(41,379)
1,086,624	1,197,810	688,942	111,186	(397,681)
4,706,969	4,806,151	4,077,315	99,182	(629,654)
-	-	-	-	-
3,650,624	3,517,000	3,898,085	(133,624)	247,462
-	-	-	-	-
93,100	93,100	-	-	(93,100)

15,406,973	15,557,242	13,355,072	150,269	(2,051,901)
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3,327,853	3,056,632	4,076,001	271,221	(748,148)
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198,236	130,452	339,479	67,784	(141,243)
(1,174,641)	(1,167,162)	(954,076)	(7,479)	(220,566)
(3,070)	-	4,805,551	(3,070)	(4,808,620)

(979,475)	(1,036,710)	4,190,954	57,235	(5,170,429)
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2,348,377	2,019,922	8,266,955	328,455	(5,918,577)
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13,612,897	13,633,698	12,766,442	(20,800)	846,455
(8,368,531)	(8,724,228)	(7,123,160)	355,697	(1,245,371)
(650,227)	(651,318)	(2,683,644)	1,091	2,033,417
4,594,140	4,258,152	2,959,639	335,988	1,634,501

5,241,371	5,230,000	6,950,000	11,371	(1,708,629)
(383,757)	(534,240)	(594,183)	150,483	210,426
(57,409)	(61,414)	(56,548)	4,005	(860)

4,800,205	4,634,346	6,299,269	165,859	(1,499,063)
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(1,556)	6,833	13,282	(8,389)	(14,837)
(5,245,472)	(3,752,575)	(4,006,976)	(1,492,897)	(1,238,496)
(5,247,028)	(3,745,741)	(3,993,694)	(1,501,286)	(1,253,333)

735,000	735,000	739,000	-	(4,000)
(490,000)	(490,000)	(734,000)	-	244,000
470,213	191,119	247,018	279,095	223,196
715,213	436,119	252,018	279,095	463,196

4,862,531	5,582,875	5,517,231	(720,344)	(654,700)
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18,734,826	18,613,874	17,431,073	120,952	1,303,753
(11,756,350)	(12,040,242)	(9,456,987)	283,892	(2,299,363)
(171,643)	-	(2,364,689)	(171,644)	2,193,046
6,806,833	6,573,633	5,609,397	233,201	1,197,436

-	-	-	-	-
5,230,000	5,230,000	6,950,000	-	(1,720,000)
(1,167,162)	(1,167,162)	(1,298,151)	-	130,989
(2,254,324)	(2,254,324)	(2,010,541)	-	(243,783)

1,808,514	1,808,514	3,641,309	-	(1,832,795)
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(3,070)	-	(84,098)	(3,070)	81,029
(5,811,575)	(7,065,750)	(6,085,513)	1,254,175	273,938
(5,814,644)	(7,065,750)	(6,169,612)	1,251,106	354,967

735,000	-	988,000	735,000	(253,000)
(735,000)	-	(979,000)	(735,000)	244,000
198,236	130,452	339,479	67,784	(141,243)
198,236	130,452	348,479	67,784	(150,243)

2,998,939	1,446,849	3,429,573	1,552,090	(430,634)
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12,842,953	12,919,619	12,313,186	(76,667)	529,767
(8,368,531)	(8,724,228)	(7,123,160)	355,697	(1,245,371)
470,213	191,119	247,018	279,095	223,196
-	-	-	-	-
768,389	720,911	466,538	47,477	301,851

5,713,024	5,107,422	5,903,582	605,602	(190,558)
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875,372	875,372	973,613	-	(98,241)
1,690,743	1,690,743	1,507,905	-	182,838
2,566,115	2,566,115	2,481,518	-	84,596

2.23	1.99	2.38	0.24	(0.15)
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17,524,394	17,485,300	16,493,151	39,094	1,031,244
(11,756,350)	(12,040,242)	(9,456,987)	283,892	(2,299,363)
198,236	130,452	339,479	67,784	(141,243)
-	-	-	-	-
1,207,362	1,128,574	5,743,472	78,788	(4,536,111)

7,173,642	6,704,084	13,119,116	469,558	(5,945,473)
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1,167,162	1,167,162	1,298,151	-	(130,989)
2,254,324	2,254,324	2,010,541	-	243,783
3,421,486	3,421,486	3,308,691	-	112,795

2.10	1.96	3.97	0.14	(1.87)
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LEHIGH COUNTY AUTHORITY
VARIANCE ANALYSIS - YTD
For the Period Ended September 30, 2024

STATEMENTS OF ACTIVITIES

Operating Revenues:

User Charges
Connection & System Charges
Other Miscellaneous Revenues

Total Operating Revenues

Operating Expenses:

Personnel
Shared Services - General & Administrative
Utilities
Materials and Supplies
Miscellaneous Services
Treatment and Transportation
Depreciation and Amortization
Major Maintenance Expenses
Other Miscellaneous

Total Operating Expenses

Net Operating Profit

Non-Operating Income (Expense)

Interest Income
Interest (Expense)
Other Miscellaneous

Net Non-Operating Income (Expense)

Net Income (Loss)

CASH FLOW STATEMENT

Cash Flows From Operating Activities

Operating Revenues
Operating Expenses (ex D&A)
Non-Cash Working Capital Changes

Net Cash Provided by (Used in) Operating Activities

Cash Flows From Financing Activities

Capital Contributions
Proceeds New Borrowing
Interest Payments
Principal Payments

Net Cash Provided by (Used in) Financing Activities

Cash Flows from Capital and Related Activities

Non-Operating Income (Expenses)
Capital Expenditures, net

Net Cash Provided By (Used In) Capital and Related Activities

Cash Flows From Investing Activities

Investments Converting To Cash
Purchased Investments
Interest Income

Net Cash Provided By (Used In) Investing Activities

FUND NET CASH FLOWS

Suburban - Water			
Actual	Q3 FC	FC Var	Comments
12,842,953	12,919,619	(76,667)	
664,193	613,950	50,242	
105,752	100,128	5,624	
13,612,897	13,633,698	(20,800)	Lower user charges somewhat offset by higher system charges
3,083,660	3,528,406	444,745	
665,881	776,541	110,660	
389,442	384,001	(5,441)	
622,329	647,475	25,145	
3,607,219	3,387,806	(219,413)	
-	-	-	
2,680,083	2,293,595	(386,488)	
-	-	-	
-	-	-	
11,048,614	11,017,822	(30,791)	Lower personnel and G&A costs more than offset by higher Services costs and Higher D&A
2,564,284	2,615,875	(51,592)	Lower operating revenues and higher operating expenses
470,213	191,119	279,095	
(942,732)	(946,692)	3,959	
(1,556)	6,833	(8,389)	
(474,075)	(748,740)	274,665	Higher interest income
2,090,209	1,867,136	223,073	Lower net operating income more than offset by higher interest income

13,612,897	13,633,698	(20,800)	
(8,368,531)	(8,724,228)	355,697	
(650,227)	(651,318)	1,091	
4,594,140	4,258,152	335,988	Lower cash based operating expenses
-	-	-	
5,241,371	5,230,000	11,371	
(383,757)	(534,240)	150,483	
(57,409)	(61,414)	4,005	
4,800,205	4,634,346	165,859	Favorable debt service
(1,556)	6,833	(8,389)	
(5,245,472)	(3,752,575)	(1,492,897)	
(5,247,028)	(3,745,741)	(1,501,286)	Higher capex
735,000	735,000	-	
(490,000)	(490,000)	-	
470,213	191,119	279,095	
715,213	436,119	279,095	Higher interest income
4,862,531	5,582,875	(720,344)	Higher cash from operations and favorable financial activity more than offset by higher capex

LEHIGH COUNTY AUTHORITY
FINANCIAL STATEMENTS - SUBURBAN WASTEWATER
For the Period Ended September 30, 2024

STATEMENTS OF ACTIVITIES

Operating Revenues:

User Charges	1,492,725	1,648,762	1,557,294	(156,037)	(64,569)
Connection & System Charges	96,727	45,123	37,441	51,605	59,287
Other Miscellaneous Revenues	30	372	75	(342)	(45)

Total Operating Revenues

Operating Expenses:

Personnel	160,368	132,279	133,759	(28,090)	(26,609)
Shared Services - General & Administrative	32,879	29,150	21,528	(3,729)	(11,351)
Utilities	21,919	23,434	17,790	1,515	(4,130)
Materials and Supplies	21,694	50,120	37,354	28,426	15,660
Miscellaneous Services	621,437	682,703	648,981	61,266	27,544
Treatment and Transportation	375,000	389,024	335,270	14,024	(39,730)
Depreciation and Amortization	575,538	533,053	508,303	(42,485)	(67,235)
Major Maintenance Expenses	-	-	19	-	19
Other Miscellaneous	-	-	-	-	-

Total Operating Expenses

Net Operating Profit

Non-Operating Income (Expense)

Interest Income	62,091	11,969	41,744	50,122	20,347
Interest (Expense)	(11,504)	(15,002)	(12,574)	3,497	1,070
Other Miscellaneous	9,740	(5,375)	4,890	15,115	4,850

Net Non-Operating Income (Expense)

Net Income (Loss)

CASH FLOW STATEMENT

Cash Flows From Operating Activities

Operating Revenues	1,589,482	1,694,256	1,594,809	(104,774)	(5,327)
Operating Expenses (ex D&A)	(1,233,297)	(1,306,709)	(1,194,682)	73,412	(38,616)
Non-Cash Working Capital Changes	(1,026,338)	(1,026,346)	(57,737)	8	(968,601)

Net Cash Provided by (Used in) Operating Activities

Cash Flows From Financing Activities

Capital Contributions	-	-	-	-	-
Proceeds New Borrowing	-	-	-	-	-
Interest Payments	(11,029)	(14,999)	(11,903)	3,970	874
Principal Payments	(49,469)	(84,635)	(48,273)	35,166	(1,197)

Net Cash Provided by (Used in) Financing Activities

Cash Flows from Capital and Related Activities

Non-Operating Income (Expenses)	9,740	(5,375)	4,890	15,115	4,850
Capital Expenditures, net	(422,314)	(504,000)	(394,709)	81,686	(27,606)

Net Cash Provided By (Used In) Capital and Related Activities

Cash Flows From Investing Activities

Investments Converting To Cash	-	-	249,000	-	(249,000)
Purchased Investments	-	-	(494,000)	-	494,000
Interest Income	62,091	11,969	41,744	50,122	20,347

Net Cash Provided By (Used In) Investing Activities

FUND NET CASH FLOWS

DEBT SERVICE RATIO

Debt Service Ratio (Indenture Based)

User Charges	1,492,725	1,648,762	1,557,294	(156,037)	(64,569)
Operating Expenses (Cash Based)	(1,233,297)	(1,306,709)	(1,194,701)	73,412	(38,596)
Interest Income	62,091	11,969	41,744	50,122	20,347
Annual Lease Payment (City)	-	-	-	-	-
Non-Operating Revenues (Expenses)	106,498	40,120	42,406	66,378	64,092

Cash Available For Debt Service

Interest Paid	15,495	15,495	12,296	-	3,198
Debt Retirement (Principal Payments)	84,207	84,207	48,028	-	36,179

Total Debt Service

Debt Service Ratio

Month				
Actual	Q3 FC	Prior Year	FC Var	PY Var
1,492,725	1,648,762	1,557,294	(156,037)	(64,569)
96,727	45,123	37,441	51,605	59,287
30	372	75	(342)	(45)
1,589,482	1,694,256	1,594,809	(104,774)	(5,327)
160,368	132,279	133,759	(28,090)	(26,609)
32,879	29,150	21,528	(3,729)	(11,351)
21,919	23,434	17,790	1,515	(4,130)
21,694	50,120	37,354	28,426	15,660
621,437	682,703	648,981	61,266	27,544
375,000	389,024	335,270	14,024	(39,730)
575,538	533,053	508,303	(42,485)	(67,235)
-	-	19	-	19
-	-	-	-	-
1,808,835	1,839,762	1,703,004	30,927	(105,831)
(219,353)	(145,506)	(108,195)	(73,847)	(111,158)
62,091	11,969	41,744	50,122	20,347
(11,504)	(15,002)	(12,574)	3,497	1,070
9,740	(5,375)	4,890	15,115	4,850
60,327	(8,408)	34,060	68,735	26,267
(159,026)	(153,914)	(74,135)	(5,112)	(84,891)

1,589,482	1,694,256	1,594,809	(104,774)	(5,327)
(1,233,297)	(1,306,709)	(1,194,682)	73,412	(38,616)
(1,026,338)	(1,026,346)	(57,737)	8	(968,601)
(670,153)	(638,798)	342,390	(31,355)	(1,012,543)
-	-	-	-	-
(11,029)	(14,999)	(11,903)	3,970	874
(49,469)	(84,635)	(48,273)	35,166	(1,197)
(60,498)	(99,634)	(60,176)	39,136	(323)
9,740	(5,375)	4,890	15,115	4,850
(422,314)	(504,000)	(394,709)	81,686	(27,606)
(412,574)	(509,375)	(389,819)	96,801	(22,756)
-	-	249,000	-	(249,000)
-	-	(494,000)	-	494,000
62,091	11,969	41,744	50,122	20,347
62,091	11,969	(203,256)	50,122	265,347
(1,081,135)	(1,235,839)	(310,860)	154,704	(770,275)

1,492,725	1,648,762	1,557,294	(156,037)	(64,569)
(1,233,297)	(1,306,709)	(1,194,701)	73,412	(38,596)
62,091	11,969	41,744	50,122	20,347
-	-	-	-	-
106,498	40,120	42,406	66,378	64,092
428,016	394,141	446,742	33,875	(18,726)
15,495	15,495	12,296	-	3,198
84,207	84,207	48,028	-	36,179
99,702	99,702	60,325	-	39,377
4.29	3.95	7.41	0.34	(3.11)

Suburban - Wastewater Year To Date				
Actual	Q3 FC	Prior Year	FC Var	PY Var
14,622,761	14,673,586	13,616,328	(50,825)	1,006,433
1,309,820	949,309	1,204,488	360,510	105,332
300	1,320	450	(1,020)	(150)
15,932,880	15,624,214	14,821,265	308,666	1,111,615
1,297,842	1,397,886	1,272,524	100,044	(25,318)
280,173	307,308	246,487	27,135	(33,687)
216,330	243,125	183,422	26,795	(32,908)
260,003	358,581	308,781	98,578	48,778
5,216,987	5,635,181	5,380,168	418,194	163,182
4,181,502	4,164,913	3,226,329	(16,589)	(955,173)
5,179,839	4,962,609	4,645,163	(217,231)	(534,676)
-	-	2,683	-	2,683
-	-	-	-	-
16,632,675	17,069,603	15,265,557	436,927	(1,367,118)
(699,795)	(1,445,388)	(444,292)	745,593	(255,503)
474,950	202,180	319,841	272,770	155,109
(108,341)	(129,742)	(117,970)	21,401	9,628
50,099	(30,168)	49,702	80,267	396
416,707	42,270	251,574	374,438	165,134
(283,088)	(1,403,119)	(192,718)	1,120,031	(90,370)

15,932,880	15,624,214	14,821,265	308,666	1,111,615
(11,452,836)	(12,106,994)	(10,617,711)	654,158	(835,126)
(2,172,713)	(2,172,476)	348,862	(237)	(2,521,575)
2,307,330	1,344,744	4,552,417	962,586	(2,245,086)
-	-	-	-	-
(104,062)	(128,335)	(111,509)	24,273	7,447
(441,665)	(651,534)	(430,931)	209,870	(10,733)
(545,726)	(779,869)	(542,440)	234,143	(3,287)
50,099	(30,168)	49,702	80,267	396
(5,385,683)	(4,699,212)	(1,684,457)	(686,471)	(3,701,226)
(5,335,584)	(4,729,380)	(1,634,755)	(606,204)	(3,700,829)
2,163,000	738,000	5,381,174	1,425,000	(3,218,174)
(1,674,000)	(739,000)	(3,599,000)	(935,000)	1,925,000
474,950	202,180	319,841	272,770	155,109
963,950	201,180	2,102,015	762,770	(1,138,065)
(2,610,030)	(3,963,325)	4,477,237	1,353,295	(7,087,267)

14,622,761	14,673,586	13,616,328	(50,825)	1,006,433
(11,452,836)	(12,106,994)	(10,620,394)	654,158	(832,443)
474,950	202,180	319,841	272,770	155,109
-	-	-	-	-
1,360,218	920,460	1,254,640	439,758	105,578
5,005,093	3,689,232	4,570,415	1,315,860	434,677
139,451	139,451	110,666	-	28,784
757,865	757,865	432,256	-	325,609
897,315	897,315	542,922	-	354,393
5.58	4.11	8.42	1.47	(2.84)

Full Year				
Q3 FC	Budget	Prior Year	Bud Var	PY Var
19,201,227	19,128,454	18,488,050	72,773	713,177
1,652,882	1,695,900	1,371,193	(43,018)	281,689
2,618	2,900	585	(282)	2,033
20,856,727	20,827,254	19,859,828	29,473	996,899
1,740,118	1,766,601	1,811,893	26,483	71,775
428,822	456,840	337,395	28,018	(91,427)
320,045	313,870	238,267	(6,175)	(81,779)
472,867	518,722	391,409	45,855	(81,457)
7,492,424	7,631,090	7,678,739	138,666	186,315
4,689,486	4,529,540	3,903,664	(159,946)	(785,822)
7,031,500	7,031,500	6,705,023	-	(326,477)
-	-	-	-	-
22,100	22,100	133,968	-	111,868
22,197,362	22,270,263	21,200,358	72,901	(997,004)
(1,340,635)	(1,443,009)	(1,340,530)	102,374	(105)
202,188	130,271	454,362	71,917	(252,174)
(178,764)	(185,934)	(155,847)	7,170	(22,917)
(144,372)	(134,047)	707,714	(10,325)	(852,086)
(120,948)	(189,710)	1,006,228	68,762	(1,127,176)
(1,461,583)	(1,632,719)	(334,302)	171,136	(1,127,281)

20,856,727	20,827,254	19,859,828	29,473	996,899
(15,165,862)	(15,238,763)	(14,495,335)	72,901	(670,527)
(361,650)	(200,000)	1,530,213	(161,650)	(1,891,863)
5,329,215	5,388,491	6,894,706	(59,276)	(1,565,491)
-	-	-	-	-
7,175,000	7,175,000	-	-	7,175,000
(185,934)	(185,934)	(147,555)	-	(38,379)
(1,010,486)	(1,010,486)	(576,341)	-	(434,145)
5,978,580	5,978,580	(723,896)	-	6,702,476
(144,372)	(134,047)	121,966	(10,325)	(266,338)
(10,587,357)	(11,516,250)	(4,486,108)	928,893	(6,101,249)
(10,731,729)	(11,650,297)	(4,364,142)	918,568	(6,367,587)
2,173,000	500,000	6,129,174	1,673,000	(3,956,174)
(1,673,000)	-	(4,092,000)	(1,673,000)	2,419,000
202,188	130,271	454,362	71,917	(252,174)
702,188	630,271	2,491,536	71,917	(1,789,348)
1,278,254	347,045	4,298,204	931,209	(3,019,950)

19,201,227	19,128,454	18,488,050	72,773	713,177
(15,165,862)	(15,238,763)	(14,495,335)	72,901	(670,527)
202,188	130,271	454,362	71,917	(252,174)
-	-	-	-	-
1,511,128	1,564,753	2,079,492	(53,625)	(568,364)
5,748,681	5,584,715	6,526,569	163,966	(777,887)
185,934	185,934	147,555	-	38,379
1,010,486	1,010,486	576,341	-	434,145
1,196,420	1,196,420	723,896	-	472,524
4.80	4.67	9.02	0.14	(4.21)

LEHIGH COUNTY AUTHORITY
VARIANCE ANALYSIS - YTD
For the Period Ended September 30, 2024

STATEMENTS OF ACTIVITIES

Operating Revenues:

User Charges
Connection & System Charges
Other Miscellaneous Revenues

Total Operating Revenues

Operating Expenses:

Personnel
Shared Services - General & Administrative
Utilities
Materials and Supplies
Miscellaneous Services
Treatment and Transportation
Depreciation and Amortization
Major Maintenance Expenses
Other Miscellaneous

Total Operating Expenses

Net Operating Profit

Non-Operating Income (Expense)

Interest Income
Interest (Expense)
Other Miscellaneous

Net Non-Operating Income (Expense)

Net Income (Loss)

CASH FLOW STATEMENT

Cash Flows From Operating Activities

Operating Revenues
Operating Expenses (ex D&A)
Non-Cash Working Capital Changes

Net Cash Provided by (Used in) Operating Activities

Cash Flows From Financing Activities

Capital Contributions
Proceeds New Borrowing
Interest Payments
Principal Payments

Net Cash Provided by (Used in) Financing Activities

Cash Flows from Capital and Related Activities

Non-Operating Income (Expenses)
Capital Expenditures, net

Net Cash Provided By (Used In) Capital and Related Activities

Cash Flows From Investing Activities

Investments Converting To Cash
Purchased Investments
Interest Income

Net Cash Provided By (Used In) Investing Activities

FUND NET CASH FLOWS

Suburban - Wastewater			
Actual	Q3 FC	FC Var	Comments
14,622,761	14,673,586	(50,825)	
1,309,820	949,309	360,510	
300	1,320	(1,020)	
15,932,880	15,624,214	308,666	Higher tapping fees
1,297,842	1,397,886	100,044	
280,173	307,308	27,135	
216,330	243,125	26,795	
260,003	358,581	98,578	
5,216,987	5,635,181	418,194	
4,181,502	4,164,913	(16,589)	
5,179,839	4,962,609	(217,231)	
-	-	-	
-	-	-	
16,632,675	17,069,603	436,927	Favorable discretionay spending across the board
(699,795)	(1,445,388)	745,593	Higher operating revenues along with lower operating expenses
474,950	202,180	272,770	
(108,341)	(129,742)	21,401	
50,099	(30,168)	80,267	
416,707	42,270	374,438	Higher interest income
(283,088)	(1,403,119)	1,120,031	Higher net operating profit adided by higher interest income
15,932,880	15,624,214	308,666	
(11,452,836)	(12,106,994)	654,158	
(2,172,713)	(2,172,476)	(237)	
2,307,330	1,344,744	962,586	Higher operating revenues and lower operating expenses
-	-	-	
-	-	-	
(104,062)	(128,335)	24,273	
(441,665)	(651,534)	209,870	
(545,726)	(779,869)	234,143	Lower debt service
50,099	(30,168)	80,267	
(5,385,683)	(4,699,212)	(686,471)	
(5,335,584)	(4,729,380)	(606,204)	Higher capex
2,163,000	738,000	1,425,000	
(1,674,000)	(739,000)	(935,000)	
474,950	202,180	272,770	
963,950	201,180	762,770	Favorable investing activity and higher interest income
(2,610,030)	(3,963,325)	1,353,295	Higher cash from operations, favorable debt service and favorable financial related activity offset in part by higher capex

STATEMENTS OF ACTIVITIES

	Month				
	Actual	Q3 FC	Prior Year	FC Var	PY Var
Operating Revenues:					
User Charges	4,234,069	4,600,956	4,308,513	(366,887)	(74,443)
Connection & System Charges	243,846	444,913	1,029,367	(201,067)	(785,521)
Other Miscellaneous Revenues	2,985	1,692	3,440	1,293	(455)
Total Operating Revenues	4,480,900	5,047,561	5,341,320	(566,660)	(860,419)
Operating Expenses:					
Personnel	949,527	1,126,723	933,699	177,196	(15,828)
Shared Services - General & Administrative	178,147	216,723	173,746	38,575	(4,401)
Utilities	163,348	203,757	187,425	40,409	24,076
Materials and Supplies	319,019	312,562	316,188	(6,458)	(2,831)
Miscellaneous Services	198,590	169,899	149,900	(28,691)	(48,690)
Treatment and Transportation	-	-	-	-	-
Depreciation and Amortization	515,561	474,683	519,750	(40,878)	4,189
Major Maintenance Expenses	3,912	-	7,763	(3,912)	3,851
Other Miscellaneous	-	-	-	-	-
Total Operating Expenses	2,328,104	2,504,346	2,288,471	176,242	(39,634)
Net Operating Profit	2,152,796	2,543,214	3,052,849	(390,418)	(900,053)
Non-Operating Income (Expense)					
Interest Income	558,276	92,695	326,258	465,582	232,018
Interest (Expense)	(1,549,316)	(1,391,781)	(1,411,364)	(157,535)	(137,952)
Other Miscellaneous	(2,104)	-	(5,200)	(2,104)	3,096
Net Non-Operating Income (Expense)	(993,144)	(1,299,087)	(1,090,306)	305,942	97,161
Net Income (Loss)	1,159,652	1,244,127	1,962,543	(84,476)	(802,891)

CASH FLOW STATEMENT

Cash Flows From Operating Activities					
Operating Revenues	4,480,900	5,047,561	5,341,320	(566,660)	(860,419)
Operating Expenses (ex D&A)	(1,808,632)	(2,029,663)	(1,760,957)	221,032	(47,674)
Non-Cash Working Capital Changes	(1,003,650)	(6,748,715)	(363,557)	5,745,065	(640,092)
Net Cash Provided by (Used in) Operating Activities	1,668,619	(3,730,817)	3,216,806	5,399,436	(1,548,186)
Cash Flows From Financing Activities					
Capital Contributions	-	-	-	-	-
Proceeds New Borrowing	-	-	-	-	-
Interest Payments	(1,082)	(1,291)	(1,134)	209	52
Principal Payments	(5,276)	(697,395)	(5,172)	692,118	(104)
Net Cash Provided by (Used in) Financing Activities	(6,358)	(698,686)	(6,306)	692,327	(52)
Cash Flows from Capital and Related Activities					
Non-Operating Income (Expenses)	(2,104)	(654,112)	(685,790)	652,008	683,686
Capital Expenditures, net	(1,313,313)	(1,839,116)	(1,023,993)	525,803	(289,320)
Net Cash Provided By (Used In) Capital and Related Activities	(1,315,417)	(2,493,228)	(1,709,783)	1,177,811	394,366
Cash Flows From Investing Activities					
Investments Converting To Cash	-	-	-	-	-
Purchased Investments	-	-	-	-	-
Interest Income	558,276	92,695	326,258	465,582	232,018
Net Cash Provided By (Used In) Investing Activities	558,276	92,695	326,258	465,582	232,018
FUND NET CASH FLOWS	905,120	(6,830,036)	1,826,975	7,735,156	(921,855)

DEBT SERVICE RATIO

Debt Service Ratio (Indenture Based)					
User Charges	4,234,069	4,600,956	4,308,513	(366,887)	(74,443)
Operating Expenses (Cash Based)	(1,812,543)	(2,029,663)	(1,768,720)	217,120	(43,823)
Interest Income	558,276	92,695	326,258	465,582	232,018
Annual Lease Payment (City)	(109,019)	(109,019)	(113,432)	-	4,413
Non-Operating Revenues (Expenses)	244,727	446,605	1,027,607	(201,877)	(782,880)
Cash Available For Debt Service	3,115,511	3,001,573	3,780,226	113,937	(664,715)
Interest Paid	1,109,894	1,109,894	974,644	-	135,250
Debt Retirement (Principal Payments)	245,417	245,417	185,201	-	60,216
Total Debt Service	1,355,311	1,355,311	1,159,845	-	195,466
Debt Service Ratio	2.30	2.21	3.26	0.08	(0.96)

City Division				
Year To Date				
Actual	Q3 FC	Prior Year	FC Var	PY Var
42,507,623	42,556,582	40,512,428	(48,958)	1,995,195
2,166,397	2,344,567	3,769,368	(178,170)	(1,602,971)
199,290	54,998	84,497	144,292	114,793
44,873,310	44,956,146	44,366,293	(82,836)	507,017
8,754,584	10,119,926	8,378,988	1,365,341	(375,597)
1,737,124	1,777,751	1,531,475	40,627	(205,648)
1,491,413	1,359,280	1,490,783	(132,133)	(630)
2,421,932	2,279,752	2,230,106	(142,179)	(191,825)
1,466,757	1,474,411	1,315,212	7,654	(151,545)
5,656	5,263	5,220	(393)	(436)
4,640,049	4,392,971	4,662,710	(247,078)	22,661
26,244	12,369	186,684	(13,875)	160,440
-	-	-	-	-
20,543,759	21,421,723	19,801,178	877,964	(742,581)
24,329,551	23,534,423	24,565,114	795,128	(235,564)
4,241,451	1,330,799	2,423,916	2,910,652	1,817,535
(11,974,273)	(12,648,369)	(12,691,762)	674,097	717,489
(5,398,251)	(5,397,083)	(5,200)	(1,168)	(5,393,051)
(13,131,073)	(16,714,654)	(10,273,046)	3,583,581	(2,858,027)
11,198,478	6,819,770	14,292,069	4,378,709	(3,093,591)

44,873,310	44,956,146	44,366,293	(82,836)	507,017
(15,877,467)	(17,016,383)	(14,951,784)	1,138,917	(925,682)
(1,914,256)	(7,654,243)	(1,232,282)	5,739,987	(681,974)
27,081,588	20,285,520	28,182,226	6,796,068	(1,100,639)
55,000,000	55,000,000	1,371,118	-	53,628,882
(4,337,620)	(6,540,622)	(5,742,099)	2,203,001	1,404,479
(739,106)	(4,892,144)	(10,283)	4,153,038	(728,823)
49,923,274	43,567,234	(4,381,264)	6,356,040	54,304,538
(5,398,251)	(6,705,307)	(1,366,380)	1,307,056	(4,031,871)
(9,973,373)	(8,419,867)	(5,775,752)	(1,553,506)	(4,197,621)
(15,371,624)	(15,125,174)	(7,142,132)	(246,450)	(8,229,492)
-	-	-	-	-
4,241,451	1,330,799	2,423,916	2,910,652	1,817,535
4,241,451	1,330,799	2,423,916	2,910,652	1,817,535
65,874,689	50,058,379	19,082,746	15,816,310	46,791,942

42,507,623	42,556,582	40,512,428	(48,958)	1,995,195
(15,903,711)	(17,028,752)	(15,138,468)	1,125,042	(765,242)
4,241,451	1,330,799	2,423,916	2,910,652	1,817,535
(981,168)	(981,168)	(1,020,885)	-	39,717
(3,032,564)	(2,997,518)	3,848,665	(35,046)	(6,881,229)
26,831,632	22,879,942	30,625,656	3,951,690	(3,794,024)
9,989,050	9,989,050	8,771,799	-	1,217,252
2,208,750	2,208,750	1,666,805	-	541,945
12,197,800	12,197,800	10,438,604	-	1,759,196
2.20	1.88	2.93	0.32	(0.73)

Full Year				
Q3 FC	Budget	Prior Year	Bud Var	PY Var
56,018,070	55,555,506	52,162,410	462,564	3,855,660
3,529,115	3,609,600	5,487,746	(80,485)	(1,958,630)
86,448	89,800	182,595	(3,352)	(96,146)
59,633,634	59,254,906	57,832,751	378,728	1,800,884
13,927,623	13,986,737	11,576,407	59,114	(2,351,216)
2,446,827	2,545,190	2,040,469	98,363	(406,358)
2,018,931	2,063,922	1,898,483	44,991	(120,447)
3,280,826	3,251,300	3,218,805	(29,526)	(62,021)
2,332,686	2,397,011	2,247,835	64,325	(84,852)
11,400	11,400	11,307	-	(93)
6,260,297	6,169,850	6,755,624	(90,447)	495,326
4,000,000	4,000,000	-	-	(4,000,000)
-	-	5,782,103	-	5,782,103
34,278,590	34,425,410	33,531,033	146,820	(747,557)
25,355,045	24,829,496	24,301,718	525,549	1,053,327
1,397,689	984,881	3,466,498	412,808	(2,068,810)
(19,703,642)	(19,703,642)	(19,980,878)	-	277,236
5,001,417	8,733,892	-	(3,732,475)	5,001,417
(13,304,536)	(9,984,869)	(16,514,379)	(3,319,667)	3,209,843
12,050,508	14,844,627	7,787,339	(2,794,119)	4,263,170

59,633,634	59,254,906	57,832,751	378,728	1,800,884
(24,018,292)	(24,255,560)	(26,775,409)	237,268	2,757,117
(2,619,905)	(135,999)	3,580,831	(2,483,905)	(6,200,736)
32,995,437	34,863,347	34,638,173	(1,867,909)	(1,642,735)
-	-	-	-	-
56,627,352	8,555,508	1,371,118	48,071,844	55,256,234
(13,318,734)	(13,315,397)	(11,695,732)	(3,337)	(1,623,002)
(2,945,000)	(2,945,000)	(2,222,407)	-	(722,593)
40,363,618	(7,704,889)	(12,547,021)	48,068,507	52,910,639
3,693,193	7,425,668	(1,361,180)	(3,732,475)	5,054,373
(27,080,200)	(32,628,500)	(10,368,819)	5,548,300	(16,711,381)
(23,387,007)	(25,202,832)	(11,729,999)	1,815,825	(11,657,008)
-	-	-	-	-
1,397,689	984,881	3,466,498	412,808	(2,068,810)
1,397,689	984,881	3,466,498	412,808	(2,068,810)
51,369,738	2,940,507	13,827,652	48,429,231	37,542,086

56,018,070	55,555,506	52,162,410	462,564	3,855,660
(24,018,292)	(24,255,560)	(26,775,409)	237,268	2,757,117
1,397,689	984,881	3,466,498	412,808	(2,068,810)
(1,308,224)	(1,308,224)	(1,361,180)	-	52,956
3,615,564	3,699,400	5,670,340	(83,836)	(2,054,777)
35,704,807	34,676,003	36,622,660	1,028,804	2,542,147
13,318,734	13,315,397	11,695,732	3,337	1,623,002
2,945,000	2,945,000	2,222,407	-	722,593
16,263,734	16,260,397	13,918,139	3,337	2,345,595
2.20	2.13	2.38	0.06	(0.19)

LEHIGH COUNTY AUTHORITY
VARIANCE ANALYSIS - YTD
For the Period Ended September 30, 2024

STATEMENTS OF ACTIVITIES

Operating Revenues:

User Charges
Connection & System Charges
Other Miscellaneous Revenues

Total Operating Revenues

Operating Expenses:

Personnel
Shared Services - General & Administrative
Utilities
Materials and Supplies
Miscellaneous Services
Treatment and Transportation
Depreciation and Amortization
Major Maintenance Expenses
Other Miscellaneous

Total Operating Expenses

Net Operating Profit

Non-Operating Income (Expense)

Interest Income
Interest (Expense)
Other Miscellaneous

Net Non-Operating Income (Expense)

Net Income (Loss)

CASH FLOW STATEMENT

Cash Flows From Operating Activities

Operating Revenues
Operating Expenses (ex D&A)
Non-Cash Working Capital Changes

Net Cash Provided by (Used in) Operating Activities

Cash Flows From Financing Activities

Capital Contributions
Proceeds New Borrowing
Interest Payments
Principal Payments

Net Cash Provided by (Used in) Financing Activities

Cash Flows from Capital and Related Activities

Non-Operating Income (Expenses)
Capital Expenditures, net

Net Cash Provided By (Used In) Capital and Related Activities

Cash Flows From Investing Activities

Investments Converting To Cash
Purchased Investments
Interest Income

Net Cash Provided By (Used In) Investing Activities

FUND NET CASH FLOWS

City Division				
Actual	Q3 FC	FC Var	Comments	
42,507,623	42,556,582	(48,958)		
2,166,397	2,344,567	(178,170)		
199,290	54,998	144,292		
44,873,310	44,956,146	(82,836)	Higher system charges offset partly by lower user charges	
8,754,584	10,119,926	1,365,341		
1,737,124	1,777,751	40,627		
1,491,413	1,359,280	(132,133)		
2,421,932	2,279,752	(142,179)		
1,466,757	1,474,411	7,654		
5,656	5,263	(393)		
4,640,049	4,392,971	(247,078)		
26,244	12,369	(13,875)		
20,543,759	21,421,723	877,964	Lower personnel costs a little offset by higher utilities and higher supplies and services	
24,329,551	23,534,423	795,128		
4,241,451	1,330,799	2,910,652		
(11,974,273)	(12,648,369)	674,097		
(5,398,251)	(5,397,083)	(1,168)		
(13,131,073)	(16,714,654)	3,583,581	Higher interest income	
11,198,478	6,819,770	4,378,709	Higher operating income and higher interest income	
44,873,310	44,956,146	(82,836)		
(15,877,467)	(17,016,383)	1,138,917		
(1,914,256)	(7,654,243)	5,739,987		
27,081,588	20,285,520	6,796,068	Higher operating income	
-	-	-		
55,000,000	55,000,000	-		
(4,337,620)	(6,540,622)	2,203,001		
(739,106)	(4,892,144)	4,153,038		
49,923,274	43,567,234	6,356,040	Lower debt service	
(5,398,251)	(6,705,307)	1,307,056		
(9,973,373)	(8,419,867)	(1,553,506)		
(15,371,624)	(15,125,174)	(246,450)	Higher capex	
-	-	-		
-	-	-		
4,241,451	1,330,799	2,910,652		
4,241,451	1,330,799	2,910,652	Higher interest income	
65,874,689	50,058,379	15,816,310	Higher cash from operations. Lower debt service, and higher interest income offset a little bit by higher capex	

	Suburban Water				Suburban Wastewater				City Division				Total			
	9/30/2024 Actual	2024 Forecast	2024 Budget	2023 Actual	9/30/2024 Actual	2024 Forecast	2024 Budget	2023 Actual	9/30/2024 Actual	2024 Forecast	2024 Budget	2023 Actual	9/30/2024 Actual	2024 Forecast	2024 Budget	2023 Actual
Cash																
Operating																
Unrestricted	1,025,552	10,860,080	13,136,985	8,385,525	(1,272,850)	11,919,540	3,976,076	3,779,293	9,072,261	20,423,899	15,263,906	13,483,582	8,439,995	42,917,609	32,376,967	25,648,400
Restricted	-	-	-	-	-	3,437	317	2,708	84,258,846	25,737,927	25,438,613	33,121,646	84,258,846	25,741,364	25,438,930	33,124,354
Total Operating	1,025,552	10,860,080	13,136,985	8,385,525	(1,272,850)	11,922,977	3,976,393	3,782,000	93,331,107	46,161,826	40,702,519	46,605,229	92,698,841	68,658,973	57,815,897	58,772,754
Capital																
Unrestricted	12,726,700	321,054	319,718	321,054	9,349,509	-	5,955,385	6,862,722	14,558,146	54,804,198	3,022,601	3,022,601	36,634,355	55,125,252	9,297,704	10,206,378
Restricted	-	-	-	-	345,625	338,677	338,360	338,677	7,531,432	7,531,579	7,500,035	7,500,035	7,877,057	7,870,256	7,838,396	7,838,712
Total Capital	12,726,700	321,054	319,718	321,054	9,695,134	338,677	6,293,745	7,201,399	22,089,579	62,335,777	10,522,636	10,522,636	44,511,412	62,995,508	17,136,099	18,045,090
Other Restricted																
Debt Reserves	1,680,120	2,184,599	1,656,568	1,660,215	-	-	-	-	37,591,838	30,004,516	28,335,482	30,004,516	39,271,958	32,189,115	29,992,050	31,664,731
Escrow - Developer Deposits	263,339	466,386	218,888	466,386	7,764	56,678	252,969	56,678	26,652	32,106	32,090	32,106	297,754	555,169	503,947	555,169
Total Other Restricted	1,943,459	2,650,984	1,875,456	2,126,600	7,764	56,678	252,969	56,678	37,618,490	30,036,622	28,367,571	30,036,622	39,569,712	32,744,284	30,495,996	32,219,900
Total Cash	15,695,710	13,832,119	15,332,159	10,833,179	8,430,048	12,318,332	10,523,107	11,040,077	153,039,176	138,534,225	79,592,726	87,164,487	176,779,965	164,398,765	105,447,992	109,037,744
Investments																
Operating																
Unrestricted	1,729,367	2,022,946	1,945,069	2,022,946	7,300,590	8,638,467	6,584,624	6,965,467	-	-	-	-	9,029,957	10,661,412	8,529,693	8,988,412
Restricted	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Operating	1,729,367	2,022,946	1,945,069	2,022,946	7,300,590	8,638,467	6,584,624	6,965,467	-	-	-	-	9,029,957	10,661,412	8,529,693	8,988,412
Capital																
Unrestricted	1,109,330	1,000,184	1,000,000	1,000,184	-	-	-	-	-	-	-	-	1,109,330	1,000,184	1,000,000	1,000,184
Restricted	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Capital	1,109,330	1,000,184	1,000,000	1,000,184	-	-	-	-	-	-	-	-	1,109,330	1,000,184	1,000,000	1,000,184
Other Restricted																
Debt Reserves	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Escrow	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Other Restricted	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Investments	2,838,698	3,023,129	2,945,069	3,023,129	7,300,590	8,638,467	6,584,624	6,965,467	-	-	-	-	10,139,287	11,661,596	9,529,693	9,988,596
Total Cash and Investments	18,534,408	16,855,248	18,277,228	13,856,308	15,730,637	20,956,798	17,107,731	18,005,544	153,039,176	138,534,225	79,592,726	87,164,487	186,919,252	176,060,360	114,977,685	119,026,340
Summary																
Cash																
Unrestricted	13,752,252	11,181,134	13,456,703	8,706,579	8,076,659	11,919,540	9,931,461	10,642,015	23,630,407	75,228,097	18,286,506	16,506,183	45,074,349	98,042,861	41,674,670	35,568,867
Restricted	1,943,459	2,650,984	1,875,456	2,126,600	353,388	398,792	591,646	398,062	129,408,768	63,306,128	61,306,220	70,658,304	131,705,615	66,355,904	63,773,322	73,182,966
Total Cash	15,695,710	13,832,119	15,332,159	10,833,179	8,430,048	12,318,332	10,523,107	11,040,077	153,039,176	138,534,225	79,592,726	87,164,487	176,779,965	164,398,765	105,447,992	108,751,833
Investments																
Unrestricted	2,838,698	3,023,129	2,945,069	3,023,129	7,300,590	8,638,467	6,584,624	6,965,467	-	-	-	-	10,139,287	11,661,596	9,529,693	9,988,596
Restricted	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Investments	2,838,698	3,023,129	2,945,069	3,023,129	7,300,590	8,638,467	6,584,624	6,965,467	-	-	-	-	10,139,287	11,661,596	9,529,693	9,988,596
Total Cash and Investments	18,534,408	16,855,248	18,277,228	13,856,308	15,730,637	20,956,798	17,107,731	18,005,544	153,039,176	138,534,225	79,592,726	87,164,487	186,919,252	176,060,360	114,977,685	118,740,429

CERTIFICATES OF DEPOSIT

SEPTEMBER 2024

Fund		Bank	Location	Gross Amount	Date of Purchase	Date Due	Net Rate %
LLRI CR	Lending Club Bank		Lehi, UT	245,000.00	9/9/24	9/9/26	4.000
WW Capac	Trustone Financial CU		Plymouth, MN	245,000.00	9/20/24	9/18/26	4.050

DEVELOPMENT ACTIVITY

Water system construction is occurring in the following developments:

7649 Penn Drive, Warehouse expansion, water, UMT
 6681 Snowdrift Road, Warehouse expansion, water, UMT
 8323/8449 Congdon Hill Drive, 2 industrial lots with warehouses, LMT
 Advanced Health Care of Allentown, 1 commercial lot, LMT
 Estates at Maple Ridge, Water main extension-UMiIT
 Glenlivet Drive West Main extension and subdivision UMT
 Hidden Meadows - Phase 3, 20 townhouse units, UMT
 Fallbrooke Residential Subdivision, 90 sf residential units, UMT
 Fields at Indian Creek, Phases 4 & 5, 86 residential units (sfd), water and sewer, UMiIT & Emmaus
 Kohler Tract, 123 residential lots (sfa), water and sewer, UMiIT
 Laurel Fields Phase 5 25 townhouses (sfd) UMT
 Lehigh Hills, Lot 5 Phase 2, 240 residential units (sfd.), UMT
 Lehigh Hills Townhouses, 24 townhouse units (sfa), UMT
 Madison Village at Penn's View, 66 manufactured homes, 1 lot, water and sewer, LynnT
 Mertztown Residential Subdivision, 264 sf units & 136 townhouse units, LMT
 Mosser Road 10 Townhouses,UMT
 Mountain View Estates, 27 residential units (sfd), LMT
 Parkland Crossings Main Extension 144 Town homes UMT
 Sauerkraut Lane Extension, Roadway & water line extension, LMT
 Spring Creek Properties, Lot 12, 1 lot, warehouse, LMT
 Towneplace Suites by Marriott, 91-room hotel, UMT
 Trexler Point (Towns at Schaefer Run) 128 Townhouses UMT
 Woodmont Valley 2, 129 apartment units (former Allen Organ Co.) LMT
 Wrenfield Townhouses 98 Townhomes UMT
 7150 Ambassador Drive 1 lot, Warehouse expansion, UMT
 7991 Quarry Road 1 lot, Warehouse,LMT

Water system plans are being reviewed for the following developments:

405 Nestle Way Blue Triton Trailer Entrance, Warehouse, UMT
 110 PA Route 100, Lehigh Valley West 57, Warehouse, UMT
 1321 Rising Sun Road, 110 Single family homes, Sewer NWT
 1470 Brookside Road, 9 Single Family Homes, LMT
 2024 Elbow lane single home,LMT
 2619 Grove Street Sewer Main Extension,Washington Township
 2766 Route 100, Warehouse, Watermain extention, Lowhill Township
 3400 Brookside Road, Indian Creek- 26 Single family homes-Main extension, LMT
 3952 Independence Drive,NW
 4054 Chestnut Street Single connection,Umilford
 6045 Reppert Lane 24 Town Homes, UMT
 Valley at Indian Creek 3510 Macungie Road 22 Single family homes-LMT
 5329-5347-5357 Hamilton Blvd., 1 commercial lot, LMT
 Advanced Health Care of Allentown, 1 commercial lot, LMT
 Air Products & Chemicals-Cetronia Road, 1 commercial lot, UMT
 ATAS International, 1 industrial lot, UMT
 Bandit Truck Stop Sewer Main Extension, WT
 Carriage East Residential Development, 11 residential units, (sfd), UMT
 Fields at Emmaus 78 Town Homes, UMT
 Grant Street Townes, 18 Townhouse, WT
 Grant Way Building Expansion,UMT
 Iron Run Estates 58 Single Home, LMT
 Heidelberg Heights 10 Townhouses water ext on lot septic, HH
 Hidden Meadows - Phase 3, 20 townhouse units, UMT
 Krocks Road Mixed use development
 Lehigh Valley Town Center, Mixed use development, UMT
 Ridings at Parkland Phase 2, 44 Single Homes. NWT
 Schoeneck Road, Lot 1, 1 lot, warehouse, LMT
 Spring Creek Estates 2022 LMT 2 lots, 2 6 unit Apt, 8 single family homes, water
 Spring Creek Lot 12 1 Commercial Lot,LMT
 The Annex at Fields at Indian Creek, 22 sf residential units, Emmaus Borough
 Towns At Schaefer Run, 128 townhouse unit (sfa), UMT
 Transedge Truck Center, Warehouse, UMT
 Twin Ponds 8739 Hamilton Blvd 22 Apts and 1 Daycare UMT
 Upper Macungie Community Center UMT commercial lot, water and Main Extension
 PA Turnpike Lehigh Valley Interchange, UMT, Removal of domestic line.
 V Parkland 9230 Long Lane, 16 Single family homes, UMT.

Sewage Facilities Planning Modules Reviewed in Prior Month:

1401 W Green Street Land Development	1401 W Green St	Allentown	GPD 238
638 N 8th St Adaptive Reuse	638 N 8th St	Allentown	2,380

Lehigh County Authority
System Operations Review - September 2024
Presented: October 28, 2024

		<u>Sep-24</u>	<u>2024</u> <u>Totals***</u>	<u>2023 Totals</u>	<u>2022 Totals</u>
Recordable Safety Incidents*	Total LCA	0	2	33	7
Non-Recordable Safety Incidents	Total LCA	1	20		
Incident Types **	Injuries	1	10		
	Property Damage	0	12		
	Near Miss	0	0		

***Numbers adjusted to match current tracking methodology

* Recordable Safety Incidents are those that result in death, days away from work, restricted duty, medical treatment beyond first aid.

** Safety incidents may be categorized in more than one incident type.

<u>Year To Date Safety Incidents</u>		<u>Root Cause Analysis Completed</u>	<u>Corrective Actions Identified</u>	<u>Corrective Actions Completed</u>
		7	5	2
<u>Current Month Incidents</u>				
<u>Description</u>	<u>Date</u>	<u>Type</u>	<u>Root Cause(s)</u>	<u>Corrective Action(s)</u>
Incident # 86 - Shocked by service line	9/9/2024	Injury	Home grounded to copper line	

Page 2

Page 1						
Critical Activities	System	Description	Sep-24	2024 Totals	2023 Totals	Permit
			Daily Avg (MGD)	Daily Avg (MGD)	Daily Avg (MGD)	Daily Max (MGD)
Water Production	Allentown	Total	22.75	22.67	22.52	39.0
		Schantz Spring	6.21	7.04	6.93	9.0
		Crystal Spring	3.84	3.87	3.89	4.0
		Little Lehigh Creek	12.70	11.46	11.66	30.0
		Lehigh River	0.00	0.29	0.04	28.0
	Central Lehigh	Total	12.31	11.70	11.27	19.04 MGD Avg
		Feed from Allentown	7.50	6.92	7.28	7.0 MGD Avg 10.5 MGD Max
		Well Production (CLD)	4.81	4.76	3.98	8.54 MGD Avg
		Sum of all (12) other Suburban Water Systems	0.14	0.15	0.13	1.71 Sum of all wells
Wastewater Treatment		Kline's Island	30.35	35.24	32.24	40.0
		Pretreatment Plant	4.75	5.20	4.78	5.75 (design capacity)
		Sum of all (5) other Suburban WW Systems	0.16	0.20	0.19	0.36
			Sep-24	2024 Totals	2023 Totals	2022 Totals
Precipitation Totals (inches)			1.30	35.92	46.38	46.47
Compliance Reports Submitted to Allentown			18	217	280	277
Notices of Violation (NOVs)		(Allentown + Suburban)	0	3	3	4
Sanitary Sewer Overflows (SSOs)/Bypasses		(Allentown + Suburban)	0	17	24	18
Main Breaks Repaired		Allentown	0	20	8	34
		Suburban	2	8	12	15
Customer Service Phone Inquiries		(Allentown + Suburban)	1422	12889	11,221	10,539
Water Shutoffs for Non-Payment		(Allentown + Suburban)	197	1546	1,995	1,975
Injury Accidents		(Allentown + Suburban)	1	10	19	7
Emergency Declarations		Allentown	2	2 @ 228,181.55	2	(3) @ \$386,225.43
		Suburban	0	1 @ 56,662.50	0	(4) @ \$933,077.1
Significant Repairs/Upgrades:						
The treatment process modifications have been completed at Sand Spring WWTP. 10m3 of media has been added to Sequencing Batch Reactor #1. Analytical results and process control parameters are being closely monitored before the addition of media into SBR #2.						
Description of Non-Compliance Events:						
Other:						
Two emergency repairs occurred in the Allentown Division, both of which occurred on September 23, 2024. One was for the emergency sewer repairs on South Clinton Street and was retroactively approved by the board on October 14, 2024. The second repair was on the Schantz 30" raw water line in the Cedar Beach Parkway. Due to the depth of the leak and size of the line, JOAO Bradley was contracted to make the repair. The cost of the was \$39,542.06.						

	<p style="text-align: center;">Lehigh County Authority</p> <p style="text-align: center;">System Operations Review - September 2024</p> <p style="text-align: center;">Presented: October 28, 2024</p> <p style="text-align: right;">Page 3</p>				
Critical Activities	System	Description	Sep-24	2024 Totals	2023 Totals
Wastewater Compliance	Allentown	Bypass	0	3	4
		Bypass Volume	0	1,713,644	1,589,466
		Permit Exceedances	0	0	0
		Sanitary Sewer Overflows	0	5	6
		COA Issued NOVs	0	0	1
		Regulatory Agency issued NOVs	0	0	0
	Arcadia	Bypass	0	0	0
		Bypass Volume	0	0	0
		Permit Exceedances	0	0	3
		Sanitary Sewer Overflows	0	0	0
		NOVs	0	1	0
	Heidelberg Heights	Bypass	0	4	8
		Bypass Volume	0	2,125,696	1,872,796
		Permit Exceedances	0	9	14
		Sanitary Sewer Overflows	0	0	0
		NOVs	0	0	0
	Lynn	Bypass	0	2	1
		Bypass Volume	0	1,010,000	350,000
		Permit Exceedances	0	2	1
		Sanitary Sewer Overflows	0	0	0
		NOVs	0	0	0
	Sand Spring	Bypass	0	0	0
		Bypass Volume	0	0	0
		Permit Exceedances	6	32	39
		Sanitary Sewer Overflows	0	0	1
		NOVs	0	1	0
	Wynnewood	Bypass	0	0	0
		Bypass Volume	0	0	0
		Permit Exceedances	2	9	5
		Sanitary Sewer Overflows	0	3	3
		NOVs	0	0	0
Water Compliance	Allentown	Boil Water Advisories	0	0	2
	Central Lehigh	Boil Water Advisories	0	0	1
	Suburban Water Systems	Boil Water Advisories	0	1	3