



**LCA Main Office:**  
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**Agendas & Minutes Posted:**  
[www.lehighcountyauthority.org](http://www.lehighcountyauthority.org)

## LEHIGH COUNTY AUTHORITY

Published: February 3, 2025

### BOARD MEETING AGENDA – February 10, 2025 – 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](mailto: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](http://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 the 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

- *January 27, 2025 Board Meeting minutes*

#### 4. Public Comments

#### 5. Action / Discussion Items:

##### **FINANCE AND ADMINISTRATION**

- *LCA Strategic Plan – Progress Reporting (Discussion) (yellow) (digital Board packet, pages 8-12)*

##### **WATER**

##### **WASTEWATER**

- *Suburban Division – LCA Meter Stations 1 and 2 Upgrades (Approval) (tan) (digital Board packet, pages 13-32)*

#### 6. Monthly Project Updates / Information Items (1<sup>st</sup> Board meeting per month) (digital Board packet, pages 33-41) – **February 2025 report attached**

#### 7. Monthly Financial Review (2<sup>nd</sup> Board meeting per month) (digital Board packet, pages 42-54) – **December 2024 report attached**

#### 8. Monthly System Operations Overview (2<sup>nd</sup> Board meeting per month)

#### 9. Staff Comments

10. Solicitor's Comments
11. Public Comments / Other Comments
12. Board Member Comments
13. Executive Sessions
14. Adjournment

<b>UPCOMING BOARD MEETINGS</b>		
February 24, 2025	March 10, 2025	March 24, 2025

**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**

### **January 27, 2025**

The Regular Meeting of the Lehigh County Authority Board of Directors was called to order at 12:00 p.m. on Monday, January 27, 2025, 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, Linda Rosenfeld, Norma Cusick, Marc Grammes, and Sean Ziller were present for Roll Call, and remained for the duration of the meeting. Kevin Baker entered the meeting at 12:02 p.m. and was present for the duration of the meeting.

Attorney Kevin Reid, the Authority's Solicitor, was present along with Authority Staff, Liesel Gross, Ed Klein, Andrew Moore, Chris Moughan, 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**

Liesel Gross stated that no Executive Session is planned; however, the LCA Strategic Plan – Progress Reporting item under Finance and Administration will need to be postponed until the February 10, 2025 meeting.

#### **APPROVAL OF MINUTES**

##### **January 13, 2025 Meeting Minutes**

Jeff Morgan noted grammatical errors. On a motion by Jeff Morgan, seconded by Linda Rosenfeld, the Board approved the minutes from the January 13, 2025 meeting as corrected (8-0). Brian Nagle abstained.

#### **PUBLIC COMMENTS**

None.

##### **Resolution 1-2025-1: Omnibus Resolution – Delegation of Authority Responsibilities**

Liesel Gross provided an overview of the Resolution. The Resolution is designed to consolidate prior Board actions delegating certain responsibilities to the staff. The Board's prior actions in this area were set forth in multiple resolutions spanning approximately 50 years... The proposed Resolution also seeks to remedy inefficiencies and introduce certain new delegated powers that are consistent with current needs. The Governance Committee has reviewed draft versions of the Resolution and provided input, and recommended that the Resolution be prepared for review and adoption by the full Board. Kevin Reid commented that the Resolution provides efficiencies for the Board and staff and is aligned with the Municipality Authorities Act. He highlighted and reviewed the three new areas of delegated responsibility that were added to this Resolution including the sections related to operations purchasing approval thresholds, the approval of intermunicipal operating agreements, and real property acquisition thresholds.

There was some discussion regarding the financial thresholds included in the Resolution for staff of Board approval and the impact these changes would have on what projects will come before the

Board for approval. Liesel Gross noted that the prior approval thresholds were established at least 30 years ago, and the cost of the Authority's projects and contracts has risen significantly in this time period, so the increase in the approval threshold is more aligned with current costs and would not greatly impact the number or type of projects that would be brought to the Board for approval.

Amir Famili referenced the section of the Resolution that related to hiring decisions for new staff and commented that the Board should participate in the decision-making process for critical positions. He stated his primary concern lies with the hiring of the Chief Financial Officer (CFO), due to the impact on the Authority's finances and the relationship to the Board's fiduciary responsibilities. Liesel Gross commented that it has always been the practice of the Authority to include Board in the hiring process of the CFO and Solicitor, noting that the Solicitor position has certain duties that relate specifically to the Board. There was additional discussion regarding the role of the Board in the hiring process. It was agreed that the Chief Executive Officer is responsible for making the hiring decisions, but the Board's participation in reviewing candidates for the CFO and Solicitor positions should be included in the Resolution. Solicitor Kevin Reid proposed adding language to the Resolution to specify Board representation on the hiring team for select positions such as the CFO and the Solicitor as determined by the Board.

On a motion by Linda Rosenfeld, seconded by Jeff Morgan, the Board approved Resolution 1-2025-1 with the modification set forth by the Solicitor (9-0).

Jeff Morgan asked if there would be a change to the Monthly Project report with the threshold changes. Liesel Gross said the projects list displayed in the report is generated by the projects that are brought to the Board for approval and, therefore, would not change much with the new thresholds in place. She also noted that AJ Capuzzi and the Engineering and Asset Management team are working to develop new project reporting mechanisms with the implementation of project management software.

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

Brian Nagle – yes  
Amir Famili – yes  
Ted Lyons – yes  
Jeff Morgan – yes  
Linda Rosenfeld – yes  
Norma Cusick – yes  
Marc Grammes – yes  
Sean Ziller – yes  
Kevin Baker – yes

#### **Suburban Division – NBMA / North Whitehall Division Water System Interconnection**

Chuck Volk explained that this project is a result of the source water study performed by Gannett Fleming to enhance flow capacity and fire flows within the North Whitehall Division. Amy Kunkel provided further detail explaining that the study concluded that a second interconnection with Northampton Borough Municipal Authority (NBMA) would be the most feasible option to provide redundancy of supply. The current agreement with NBMA can supply up to 1 million gallons per day and has excess capacity if needed in the future. The design includes the construction of a meter pit and related mechanical and electrical work.

The Board suggested providing a map to be able to visualize the location of the project and also providing the consultant proposal.



On a motion by Norma Cusick, seconded by Sean Ziller, the Board approved the Capital Project Authorization for the Design Phase – NBMA / North Whitehall Division Water System Interconnection in the amount of \$340,600.00 which includes the Professional Services Authorization to Gannett Fleming, Inc. for design and bid phases in the amount of \$240,600.00 (9-0).

**Allentown Division I&I Program – Programmatic Support – Trout Creek & Eastside Basins**

AJ Capuzzi introduced the project that is part of the regional Act 537 Plan for the Kline's Island Sewer System (KISS), noting that the Authority is leading the effort to reduce inflow and infiltration (I&I) in the City of Allentown sewer collection system. This new program will evaluate two basins in the system along with providing programmatic support. Stephen Boone provided details of the scope of the project noting that this will include flow monitoring, using meters and rain gauges, during wet weather and high groundwater conditions. The flow monitoring will occur both before and after sewer rehabilitation work is completed so the Authority can quantify the amount of leakage removed. In addition, level sensors will be installed in manholes throughout the Trout Creek and Eastside sewer basins. This is necessary to determine exactly where the I&I is coming from and narrow down the necessary rehabilitation work to each street in the basins. He stated that the Pa. Department of Environmental Protection (DEP) wants mathematical proof as to the effectiveness of I&I work that is being completed, and this project will provide the data proofs DEP requires.

Mr. Boone described the selection process, noting that there was a discrepancy during the final review between AECOM and Arcadis as they assumed different lengths of CCTV inspections. The Authority prepared a standardized cost comparison spreadsheet to eliminate the discrepancy.

There was some discussion about the location of the Trout Creek and Eastside basins and their size relative to the full City sewer collection system. Phil DePoe noted that the City is broken out into eight basins, and this work covers two of them. The Board commented that a map would be helpful to visualize the project, and the consultant's proposal would provide additional detail. Chairman Nagle asked if this approach will work for the remaining six basins and streamline the process. Mr. Boone said that each basin is unique and will have to be looked at individually, but this project will help to streamline the process of identifying the I&I projects in each basin and quantifying the leakage removed. AJ Capuzzi added that the Authority is purchasing the level sensors so they will be used in the remaining basins in the future.

There was further discussion regarding the discrepancy in the proposals between AECOM and Arcadis.

On a motion by Norma Cusick, seconded by Amir Famili, the Board approved the Capital Project Authorization for the Allentown Division I&I Program – Programmatic Support, Trout Creek & Eastside Basins in the amount of \$3,141,000.00 which includes the Professional Services Authorization to Arcadis, Inc. – SSES – Trout Creek & Eastside Basins, Programmatic Support in the amount of \$2,641,000.00 (9-0).

**Sewer Operations Agreement – Upper Macungie Township Sewer Pump Stations**

Liesel Gross provided an overview of the operations contract with Upper Macungie Township for their six sewer pump stations. A map was displayed to show where the pump stations are located in relation to where the Authority is already providing services in the Township. The Township sought a proposal from the Authority, which is attached to the agreement. The Township Board of Supervisors approved the proposal at a meeting earlier in January. The proposal includes the operation and maintenance of the six pump stations, and the Authority will charge the Township for the actual hours worked and other expenses incurred. The work includes routine operational inspections, emergency response capabilities, and scheduled generator maintenance. Additional expenses, such

as generator maintenance fees and materials, will be billed directly to the Township. The term of the agreement is for one year. Andrew Moore provided additional information as to how the stations will be operated.

There was some discussion regarding the resources needed to operate these pump stations. Ms. Gross noted that the 2025 Budget included the addition of one new employee to allow the Authority to manage these additional facilities. Andrew Moore noted that there is a crew at Upper Macungie Township that will also do a weekly inspection at each pump station, and this contract approach was driven in part by the retirement of the Township's lone certified operator.

Kevin Reid commented that the insurance section needs to have the limits added into the agreement.

On a motion by Norma Cusick, seconded by Sean Ziller, the Board approved the operations agreement between the Authority and Upper Macungie Township for the operation of six pump stations, subject to the Solicitor's final review and resolution of the insurance information (9-0).

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

Brian Nagle – yes  
Amir Famili – yes  
Ted Lyons – yes  
Jeff Morgan – yes  
Linda Rosenfeld – yes  
Norma Cusick – yes  
Kevin Baker – yes  
Marc Grammes – yes  
Sean Ziller – yes

### **MONTHLY SYSTEM OPERATIONS OVERVIEW**

Andrew Moore reviewed the December 2024 report and reviewed two safety incidents that occurred. One was a near miss regarding improper strapping down of a load and another was a foreign object in the eye of an employee which occurred while the employee was cleaning a surface. Marc Grammes commented that report shows the root cause for the second incident incorrectly, and the root cause should refer to the employee not wearing safety glasses. He said employees should be wearing safety glasses at all times, and this needs to be reinforced.

Mr. Moore reviewed the remainder of the report and highlighted the improved performance of the Sand Spring Wastewater Treatment Plant. He presented a graph showing the improvements in nitrification during cold weather as compared to prior years. The treatment process improvement that was installed in 2024 appears to be working well, and more information will be available as the winter weather continues.

### **STAFF COMMENTS**

None.

### **SOLICITOR'S COMMENTS**

None.

### **PUBLIC COMMENTS / OTHER COMMENTS**

Erin Kintzer from Bethlehem Sewer & Excavating Service commented that her company uses the Authority's Industrial Pretreatment Plant (PTP) for waste drop-off, primarily grease collected from local restaurants. She stated that it is becoming increasingly difficult to find places to drop off the grease, and municipalities are becoming more stringent with requirements for grease traps and disposal, so the need for this service is increasing. Ms. Kintzer asked if there is a regional plan for grease. She also asked if the Authority is considering prioritizing grease drop-off from the Lehigh Valley for restaurants or other customers such as herself. Liesel Gross said she would like to follow up with Ms. Kintzer after the meeting to provide more detailed responses to her questions. She noted that the waste hauler program is important to the region and the Authority is aware of the need for this service. This was discussed at length during the 2024 stakeholder involvement process associated with developing a long-term plan for the PTP. Ms. Gross provided her direct contact information so Ms. Kintzer may follow up directly after the meeting.

### **BOARD MEMBER COMMENTS**

Norma Cusick asked for an update on the recently acquired property on Brookside Road. Liesel Gross reported that the property has been incorporated into the Building Master Plan project that Stephen Boone is overseeing. Mr. Boone reported that he has been in contact with Lower Macungie Township zoning officer and was informed that a change of use permit is needed because it is changing from a residential use to a commercial use. Ms. Gross added that the property is in the process of having the security updated.

### **EXECUTIVE SESSION**

None.

### **ADJOURNMENT**

There being no further business, the Chairman adjourned the meeting at 1:26 p.m.

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Jeffrey J. Morgan  
Secretary

# **LCA Strategic Plan (2022-2027)**

## **2024 Semi-Annual Progress Report: January 2025**

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### **Overview**

Lehigh County Authority (LCA) adopted an updated Strategic Plan in December 2021, which included a refreshed look at our Mission, Vision, Values and Priorities. An ambitious list of strategies, activities, and tasks were developed to support the achievement of LCA's plan over the next five years. This progress report was developed to help our employees and Board of Directors keep a sharp focus on the plan and, specifically, the work we plan to achieve in the current year. While not all inclusive, milestones outlined in this report describe the breadth of activities LCA focused on in 2024. A dashboard of key performance indicators is included on the last page of this report. Any questions about this report should be directed to LCA's Chief Executive Officer, Liesel Gross.

### **KISS Act 537 Plan**

#### **2024 Target:**

Complete development of Kline's Island Sewer System (KISS) Act 537 Plan in a form that can be issued to KISS municipalities for adoption in 2025.

#### **2024 Progress (1/1/2025):**

- ☒ Final selection of technical solutions is nearing completion.
- ☒ Deep stakeholder engagement on Pretreatment Plant (PTP) future is nearing completion.
- ☒ Intermunicipal cost-sharing agreements under review, with legal support in place.
- ☒ Significant work ongoing to coordinate technical reviews and details with each KISS municipality.
- ☒ Significant work required on intermunicipal agreements, cost-sharing, and new programs such as for sewage billing meters, regional I&I approaches, and high-strength surcharge program.
- ☒ Conduct public open house meetings to share plan details including future rate projections. Incorporate public input into final plan document; prepare to kick-off municipal approval process.

#### **2024 Work Outstanding:**

- ☐ Finalize all technical inputs to the Act 537 Plan, including PTP final solution and municipal inputs for inflow and infiltration (I&I) plans, maps, etc.
- ☐ Write the plan and complete internal reviews.

### **Tyler EERP Implementation**

#### **2024 Target:**

Full re-implementation of Tyler EERP system with updated financial structure and additional modules to support cross-organizational process improvement. Preparation for a January 1, 2024 "go live" date.

#### **2024 Progress (1/1/2025):**

- ☒ Updated financial structure (General Ledger) is fully redesigned and implemented.
- ☒ Deep review of previously unused Human Capital Management (HCM) module is under way.
- ☒ Initial phases of financial process improvements is in progress.

### 2024 Work Outstanding:

- ☐ Finalized implementation of HCM; integration with Payroll and Employee Self-Service modules.
- ☐ Full implementation of financial process improvements and new modules: Project Accounting, Inventory, Purchasing, etc.
- ☐ Migration of existing utility billing data, and implementation of Customer Access module.
- ☐ Employee training and process documentation.

## Lead Program

### 2024 Target:

Substantial completion of Cycle 1 Lead Service Line (LSL) replacement program with grant funds secured for Cycle 2. Achieve October 2024 regulatory deadlines for LSL inventory submission and public communication.

### 2024 Progress (1/1/2025):

- ☒ Board adoption of LSL Replacement Policy and customer agreement for LSL replacements.
- ☒ Cycle 1 bid documents being finalized for publication; Pennvest grant/loan closing preparations.
- ☒ Cycle 2 scope nearing finalization, preparing for Pennvest grant application by 7/31/2024.
- ☒ Ongoing collaboration with City of Allentown on many project details related to cost-recovery, coordination with water main replacement work, paving requirements, plumbing code requirements, and more.
- ☒ Draft public interface developed for display of LSL location records.
- ☒ Prepare LSL inventory in format acceptable to Pa. Department of Environmental Protection.
- ☒ Implement advanced public outreach strategies to increase engagement in Cycle 2 project and achieve regulatory requirements for public notification.

### 2024 Work Outstanding:

- ☐ Hire Lead Program Manager and Lead Replacement Project Manager.
- ☐ Begin construction phase of Cycle 1 and design phase of Cycle 2 projects.
- ☐ Finalize program details with City of Allentown to support future phases of LSL replacement.

## Asset Management

### 2024 Target:

Complete facility specific Asset Management Plans (AMPs) for at least two critical facilities using new standardized risk scoring system. Develop internal staff capacity for continued implementation of the Strategy Asset Management Plan roadmap.

### 2024 Progress (1/1/2025):

- ☒ Facilities selected for 2024 AMPs: Kline's Island Wastewater Treatment Plant and Lynn Township Wastewater Treatment Plant.
- ☒ External consultant on board to develop the Kline's Island AMP, to ensure compliance with Allentown Lease Agreement requirements.
- ☒ Internal staff working collaboratively on Lynn Township AMP.
- ☒ Internal staff review of updates Computerized Maintenance Management System (CMMS) options to better manage vertical assets.
- ☒ Hire Asset Management Engineer.

- ☑ Complete two facility-specific AMPs already under way; determine if additional AMPs can be completed in 2024.
- ☑ Decide on future CMMS implementation: enhance current CityWorks process, or new system.

### 2024 Work Outstanding:

- ☐ Complete implementation of ProCore for enhancements to project management processes; integrate with Tyler EERP implementation of Project Accounting module.

## Employee Engagement & Safety

### 2024 Target:

Enhance the capture of safety data from daily operations to improve metrics and responses to increase employee safety, safety awareness, and compliance. Develop employee and workforce engagement programs related to enhanced onboarding program and a new internship program.

### 2024 Progress (1/1/2025):

- ☑ New Safety Manager and Human Resource Manager hired; onboarding nearing completion.
- ☑ Employee Health & Safety (EHS) Steering Committee working with new Safety Manager on full review of operational and safety protocols.
- ☑ WaterWORKS internship program developed; five interns on board for summer 2024.
- ☑ Fill vacant Human Resources positions.
- ☑ Evaluate WaterWORKS internship program and develop enhancements for 2025.
- ☑ Evaluate and recommend enhancements to current Excel-based safety incident management system to support increased visibility of safety metrics and more consistent employee reporting.

### 2024 Work Outstanding:

All 2024 targets achieved.

## Staffing & Building Plan

### 2024 Target:

Develop future staffing plan to address rapidly expanding project workload. Complete review of workspace requirements for expanded staffing.

### 2024 Progress (1/1/2025):

- ☑ Utility benchmarking survey completed to identify best practices and areas of opportunity for LCA related to staffing adequacy for core utility functions.
- ☑ Initial 2024 staff additions reviewed and approved by LCA Board.
- ☑ Initiate office building “master plan” review to identify rehabilitation and upgrade needs.
- ☑ Nearing complete digitization of engineering plans; files moved off-site to create work space.
- ☑ Initial concepts developed for Main Office expansion and lead program office consolidation.
- ☑ Preliminary design under way for Capital Works area to create additional work spaces.
- ☑ Review potential purchase of property adjacent to Main Office.
- ☑ Consolidate various planning efforts into single plan for future employee work space.

### 2024 Work Outstanding:

- ☐ Develop staffing plans for 2025 and beyond; include succession planning component.

## Other High-Priority Goals

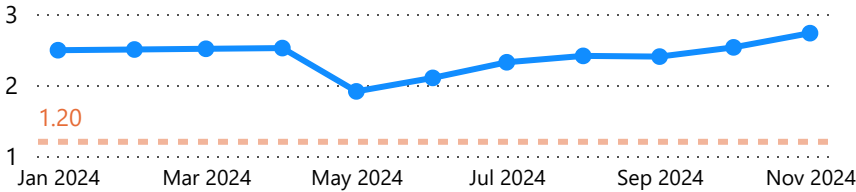
### Discussion:

There are many additional high-priority goals that LCA seeks to achieve in 2024. Some major items are listed below as a reminder to staff and the Board of their importance. Progress on these goals will be ongoing, and may be raised or lowered on the priority list as new information is developed.

- ☒ Complete Sand Spring Wastewater Treatment Plant upgrade to support regulatory compliance.
- ☒ Initiate design phase for PFAS treatment for Allentown and Buss Acres water systems.
- ☐ Adopt Resolution updating and consolidating delegated duties and authorization thresholds.
- ☐ Complete review and update of Emergency Response and Risk & Resiliency plans.
- ☐ Pursue additional grant funding for high-priority projects.

Financial

2024 Debt Service Coverage Ratio - Total LCA



Debt Service Coverage Ratio - Current

City Division	Suburban Wastewater	Suburban Water
2.64	5.39	2.16

Unrestricted Days Cash On Hand

City Division	Suburban Wastewater	Suburban Water
273	467	317

\* Target of 180 days.

Customer Care

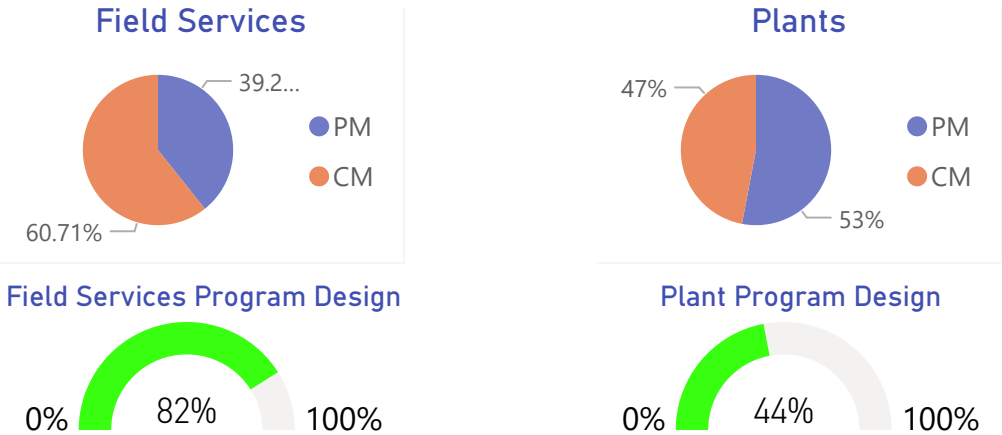
DEVELOPING  
METRIC

Capital Program

DEVELOPING  
METRIC

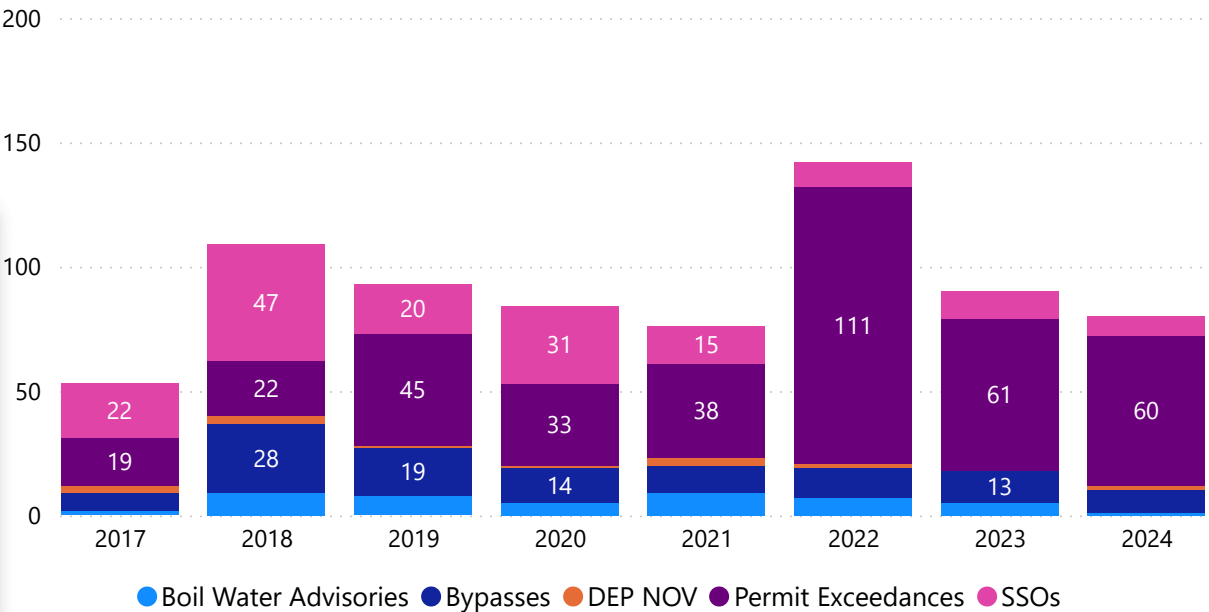
Asset Management

2024 Corrective Maintenance vs. Preventative Maintenance Hours



\*Metric to show 2023 progress on preventative maintenance program redesign and implementation

Environmental Compliance



Safety  
# Days No  
Vehicle Accident

155

# Days No Lost  
Time

436

# Of Recordable  
Injuries YTD

2

Employees

Total Employees

171

Average Age

45.1

Average Yrs of Service

9.8

Total Vacancies

20



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## MEMORANDUM

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**Date:** February 10, 2025

**To:** LCA Board of Directors  
Liesel Gross, CEO

**From:** Charles Volk, P.E., CCWO

**Subject:** Meter Stations #1 and #2 Parshall Flume Replacements: Construction Phase

**MOTIONS / APPROVALS REQUESTED:**

No.	Item	Amount
1	Capital Project Authorization: Construction Phase	\$239,135
2*	Contract Award – Construction: LB Industries, Inc.	\$185,135
3*	Professional Services Authorization – Construction Engineering: Arcadis	\$38,000

*\*Included in the Capital Project Authorization*

**Meter Stations #1 and #2 Parshall Flume Replacements**

**PROJECT OVERVIEW:**

All municipalities in the Kline's Island Sewer System (KISS) are required to work on inflow and infiltration (I&I) source removal as part of the approved Interim Act 537 Plan. As part of the on-going Act 537 regional planning, each municipality will be closely monitoring their flows to quantify I&I reductions. Due to current metering limitations, the boroughs of Macungie and Alburty cannot accurately measure their sewage flows. The primary objective of this project is to expand peak flow metering capacity of two existing meter stations to enable the accurate measurement of flows from the two boroughs.

LCA Meter Stations (MS) #1 and #2 were installed in the late 1970s. MS #1 is located just upstream of the Borough of Alburty's boundary with Lower Macungie Township and therefore captures the entire Borough's flows. MS #2 is located on the western end of Macungie Borough captures the flow entering the Borough of Macungie. MS #3 captures the flow exiting the Borough of Macungie; that station is accurately measuring average and peak sewage flows. MS #1 and #2 are undersized and do not accurately measure current flow conditions.

**PROJECT OBJECTIVE:**

The purpose of this project is to upgrade MS #1 and #2 to improve flow metering capacity and accuracy. Both stations measure flows via a Parshall flume, which is a prefabricated open channel insert in the sewer located directly below both station buildings. The flume has an integral restricted width section and hydraulic step that facilitates flow calculations via flow depth measurement taken with an ultrasonic level detector. The existing flumes are undersized and create hydraulic bottlenecks that overflow the flumes during peak flows, rendering the data inaccurate. The existing flumes are to be removed and replaced with larger units in this project. The secondary project objective is the refurbishment of station HVAC systems to provide adequate fresh air changes for maintenance personnel. No changes to the meter station electrical or communications systems are required as part of this project. The contractor will be required to perform bypass pumping around the meter stations during the flume replacement work in the open channel.

**FINANCIAL**

This project will be funded via the LCA Suburban Division.

**CURRENT STATUS**

Pending Board approval of Construction Phase.

**THIS APPROVAL:** Construction Phase

**BIDS**

Three contractors submitted bids for this project; results are summarized in the following table:

<b>Bid Results – Construction Phase</b>	
<b>Contractor</b>	<b>Total Bid Amount</b>
<b>LB Industries, Inc.</b>	<b>\$185,135</b>
Blooming Glen Wastewater Contractors, Inc.	\$194,821
PSI Pumping Solutions, Inc.	335,100

The low bidder for the project is LB Industries, Inc. (LBI), located in Hellertown PA. LBI has been in business for over 20 years, specializing in structural and mechanical construction, primarily at water and wastewater plants. LBI is currently the general contractor (GC) for the KIWWTP Boiler Replacement Project, and the firm also completed the KIWWTP dechlorination system project as the general contractor. The firm is consistently responsive and the quality of their work is very good. Reference checks for LBI did not identify any past project performance issues. Therefore, Capital Works recommends awarding the project to LBI, subject to the receipt of the necessary Performance Bonds, Insurance and other required documentation.

**MATERIAL PROCUREMENT:** N/A

**PROFESSIONAL SERVICES :**

Arcadis served as design engineer and will perform construction engineering and part-time construction inspection services. Arcadis will provide the following construction phase services (see attached PSA):

- Conduct pre-construction meeting and provide meeting minutes
- Review shop drawings and address RFIs
- Provide part-time inspection services and prepare inspection reports
- Payment application review certification
- Document performance of the work
- Perform Substantial Completion inspection and provide certification of completion
- Prepare and verify punchlist completion
- Final inspection and contract closeout administration

**SCHEDULE**

Assuming approval at the February 10, 2025 LCA Board meeting, the construction work is anticipated to begin in April and will be substantially completed by the end of this summer.

**FUTURE AUTHORIZATIONS**

None at this time.

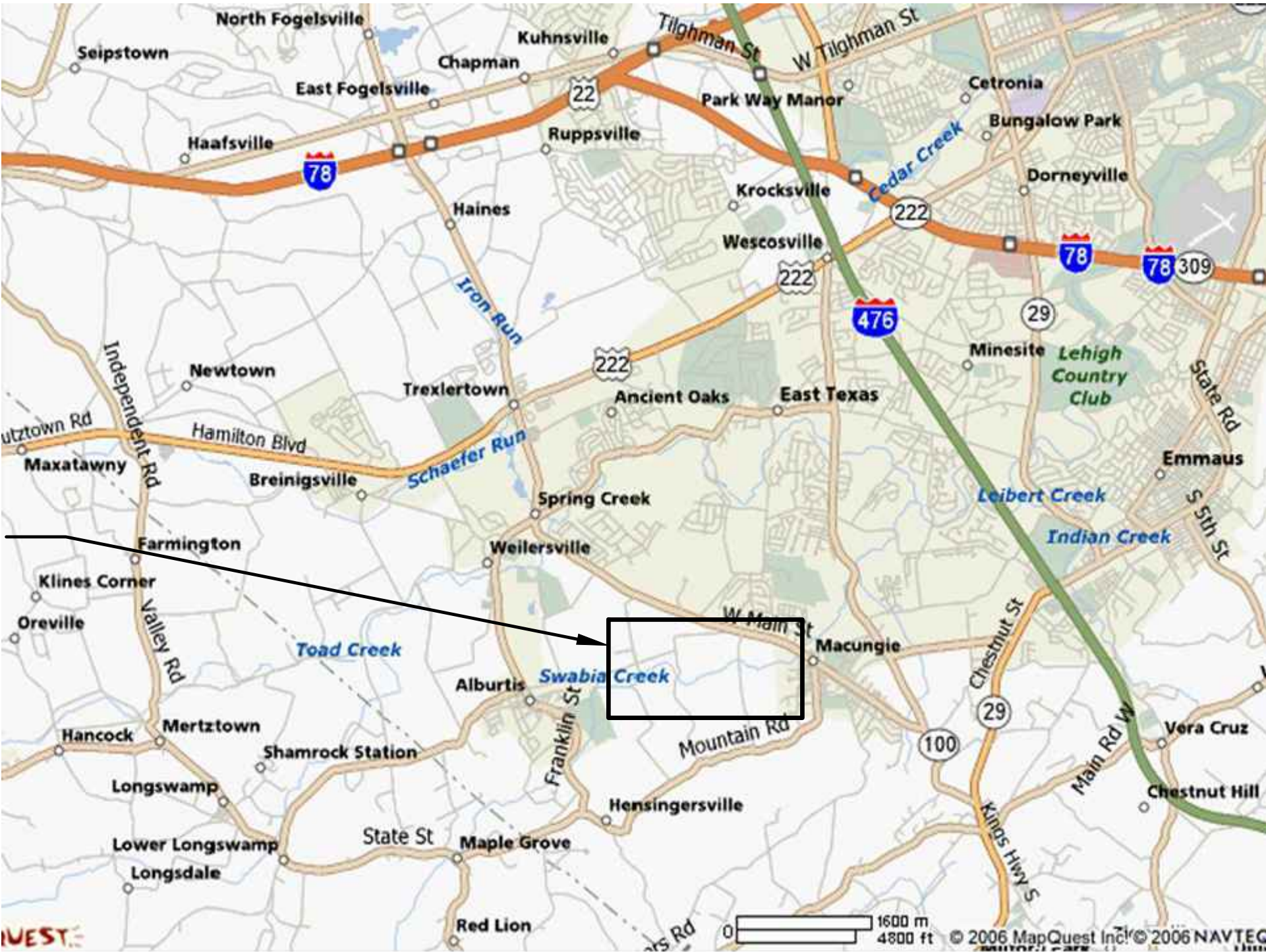
# LEHIGH COUNTY AUTHORITY ALLENTOWN, PENNSYLVANIA

## METER STATION 1 AND 2 REHABILITATION

PROJECT NO. 30213338  
AUGUST 2024

CONSULTING ENGINEERS:  
ARCADIS U.S., INC.  
PHILADELPHIA, PA

PROJECT  
LOCATIONS



LOCATION MAP

### LIST OF DRAWINGS

SHEET NO.	DESCRIPTION
	GENERAL
G-1	COVER SHEET AND DRAWING INDEX
G-2	LEGEND, ABBREVIATIONS AND GENERAL NOTES
G-3	KEY SHEET
G-4	METER STATION 1 BYPASS PUMPING
G-5	METER STATION 2 BYPASS PUMPING
	PLANS
C-1	METER STATION 1
C-2	METER STATION 1 EXTERIOR PHOTOS
C-3	METER STATION 1 LOWER LEVEL PHOTOS
C-4	METER STATION 1 UPPER LEVEL PHOTOS
C-5	METER STATION 2
C-6	METER STATION 2 EXTERIOR PHOTOS
C-7	METER STATION 2 LOWER LEVEL PHOTOS
C-8	METER STATION 2 UPPER LEVEL PHOTOS



REVISIONS				
NO.	BY	DATE	REMARKS	

LEHIGH COUNTY AUTHORITY  
ALLENTOWN, PA

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WESTERN LEHIGH INTERCEPTOR SYSTEM  
MACUNGIE TOWNSHIP

METER STATION 1 AND 2  
REHABILITATION

30213338

COVER SHEET  
AND DRAWING INDEX

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G SHEET 1 OF 5

CAD REF. NO. 0247EE001



GENERAL NOTES:

SURVEY

- S1. SANITARY SEWER SIZE AND MANHOLES ARE EXAGGERATED ON PLANS.
- S2. ALL SEWER MAIN DIAMETERS ARE NOMINAL, AND ALL SEWER MAIN DIAMETERS, DROP CONNECTIONS, LENGTHS AND LATERAL LOCATIONS ARE TAKEN FROM RECORD PLANS AND/OR CCTV RECORDS AND MUST BE FIELD VERIFIED.

PRECONSTRUCTION ACTIVITIES

- P1. ALL EXISTING FIELD CONDITIONS, ELEVATIONS, LOCATIONS, DIMENSIONS MUST BE FIELD CHECKED AND VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION OPERATIONS.
- P2. LOCATIONS OF EXISTING UTILITIES ARE APPROXIMATE AND UTILITIES OTHER THAN SANITARY SEWER ARE GENERALLY NOT SHOWN. THERE ARE UNDERGROUND AND OVERHEAD UTILITIES (E.G., GAS, ELECTRIC, TELEPHONE, WATER, STORM, ETC.) OTHER THAN THOSE SHOWN. MAKE ARRANGEMENTS FOR MARK OUT OF EXISTING UTILITIES PRIOR TO THE COMMENCEMENT OF ANY EXCAVATION WORK. CALL THE PA 811 CONSTRUCTION HOT LINE FOR MARK OUT. PROVIDE PROOF OF COMPLIANCE WITH THE PA 811 HOTLINE SYSTEM PRIOR TO ANY EXCAVATION. CONTACT ALL NON-RESPONDING UTILITY OWNERS INDIVIDUALLY AND CONFIRM MARK OUTS.
- P3. NOT ALL CONDUITS ARE SHOWN ON DRAWINGS. CONTRACTOR TO CONFIRM LOCATIONS OF ALL CONDUITS PRIOR TO START OF WORK.

CONSTRUCTION

- C1. PERFORM ALL CONSTRUCTION WORK IN ACCORDANCE WITH ALL APPLICABLE SAFETY CODES.
- C2. THE CONTRACTOR IS RESPONSIBLE TO MAINTAIN EXISTING SEWAGE FLOWS WITHIN THE SANITARY SEWER MAINS AT ALL TIMES DURING CONSTRUCTION OPERATIONS, INCLUDING BYPASS PUMPING OPERATIONS AS NECESSARY. CONTRACTOR SHALL CONTINUALLY MONITOR THE BYPASS PUMPING OPERATION TO INSURE BACKUPS DO NOT OCCUR OR FAILURE OF EQUIPMENT. ANY DAMAGE TO PUBLIC OR PRIVATE PROPERTY OR FINES RESULTING FROM HIS OPERATIONS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AT HIS EXPENSE.

RESTORATION

- R1. CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR RESTORATION OF ANY DAMAGE RESULTING FROM THE EXECUTION OF THE WORK, INCLUDING BUT NOT LIMITED TO DAMAGE FROM EXCAVATION, TRAFFIC WEAR AND TEAR TO LAWNS, LANDSCAPING, DRIVEWAYS, ETC., OR ANY OTHER PRIVATE PROPERTY ITEMS.
- R2. FOR DISTURBED GRASS AREAS, EITHER REMOVE EXISTING SOIL AND INSTALL NEW TOPSOIL BEFORE SEEDING AND MULCHING OR REMOVE THE REQUISITE AMOUNT OF SOIL AND INSTALL NEW SOD, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

TELEPHONE DIRECTORY

1. LEHIGH COUNTY AUTHORITY, DISPATCH (610) 398-2503
2. ARCADIS, JIM SHELTON, PROJECT MANAGER (302) 723-1450
3. LEHIGH COUNTY AUTHORITY, PHIL DEPOE, PROJECT MANAGER (717) 887-8953
4. UNDERGROUND UTILITY LOCATION SERVICE PA-811: 811 OR 1-800-242-1776
5. UGI UTILITIES (610) 807-3162
6. PPL ELECTRIC UTILITIES CORP, DOUG HAUPT (570) 490-5684
7. VERIZON COMMUNICATIONS, VICTOR WOOD (914) 414-2782
8. AT&T, PAT SUTTON (814) 321-6470

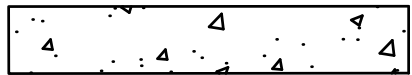
ABBREVIATIONS

TYP – TYPICAL

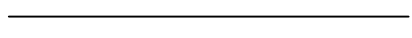
LEGEND



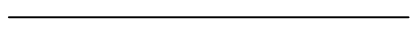
METAL FLOOR PLATE



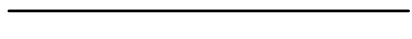
CONCRETE



ELECTRICAL



DOOR/WINDOWS



WALLS/FLOOR



BYPASS PUMPING ROUTE



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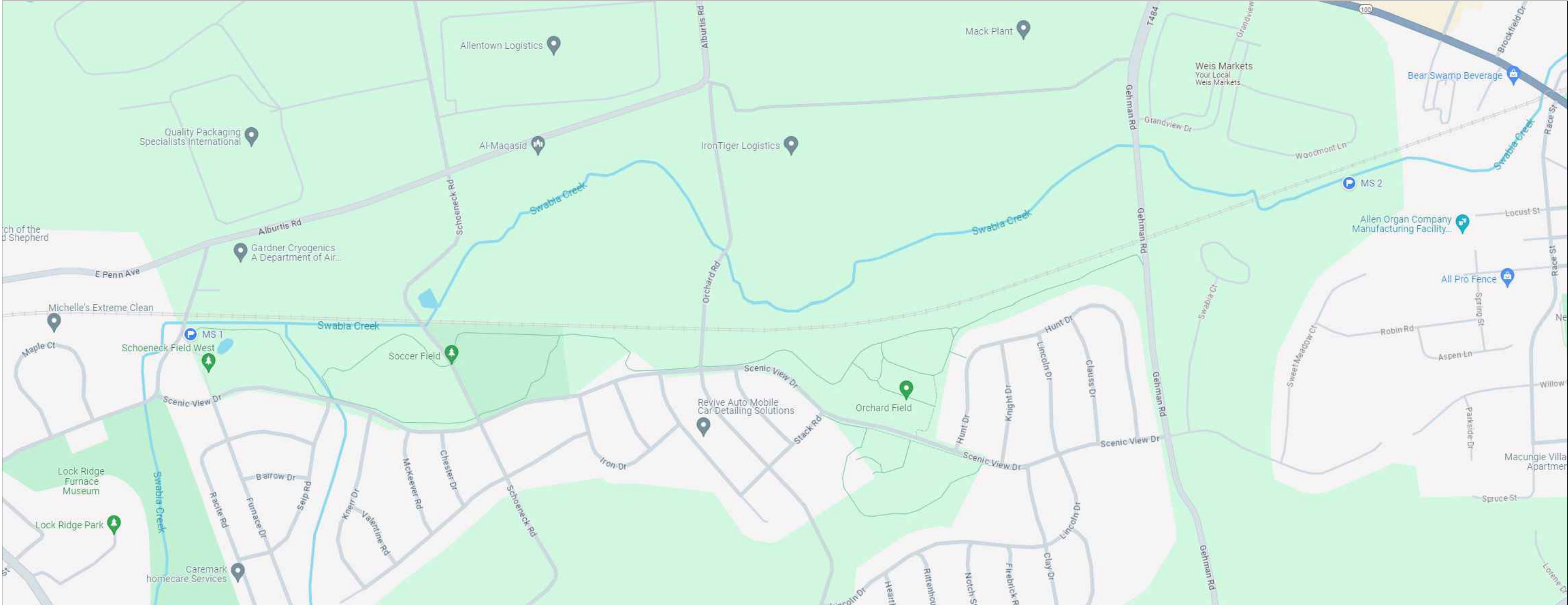
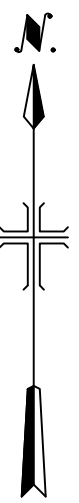
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WESTERN LEHIGH INTERCEPTOR SYSTEM  
MACUNGIE TOWNSHIP  
METER STATION 1 AND 2  
REHABILITATION  
30213338

LEGENDS, ABBREVIATIONS  
AND GENERAL NOTES  
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LEHIGH COUNTY AUTHORITY  
ALLENTOWN, PA

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WESTERN LEHIGH INTERCEPTOR SYSTEM  
MACUNGIE TOWNSHIP  
METER STATION 1 AND 2  
REHABILITATION  
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**BYPASS PUMPING DESIGN RATES:**  
MINIMUM NIGHTTIME FLOW: 0.09 MGD  
AVERAGE DRY DAY DAILY FLOW: 0.19 MGD

**NOTE:**  
1. BYPASS PUMPING OPERATION SHALL ONLY OCCUR DURING DRY WEATHER.



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WESTERN LEHIGH INTERCEPTOR SYSTEM  
MACUNGIE TOWNSHIP  
METER STATION 1 AND 2  
REHABILITATION  
30213338

METER STATION 1  
BYPASS PUMPING  
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BYPASS PUMPING DESIGN RATES:  
MINIMUM NIGHTTIME FLOW: 0.12 MGD  
AVERAGE DRY DAY DAILY FLOW: 0.34 MGD

NOTE:  
1. BYPASS PUMPING OPERATION SHALL ONLY OCCUR DURING DRY WEATHER.



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WESTERN LEHIGH INTERCEPTOR SYSTEM  
MACUNGIE TOWNSHIP  
METER STATION 1 AND 2  
REHABILITATION  
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METER STATION 2  
BYPASS PUMPING  
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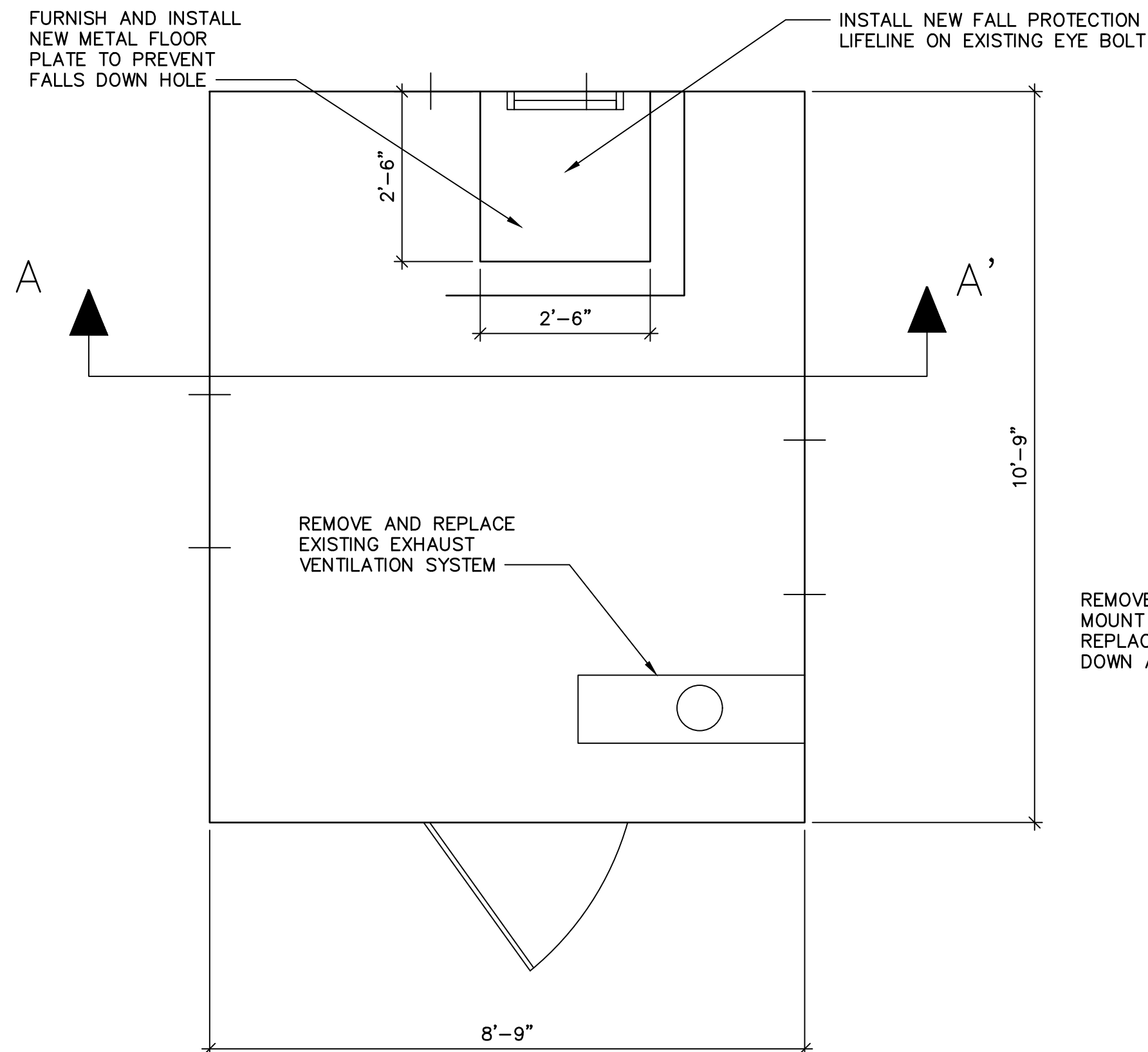
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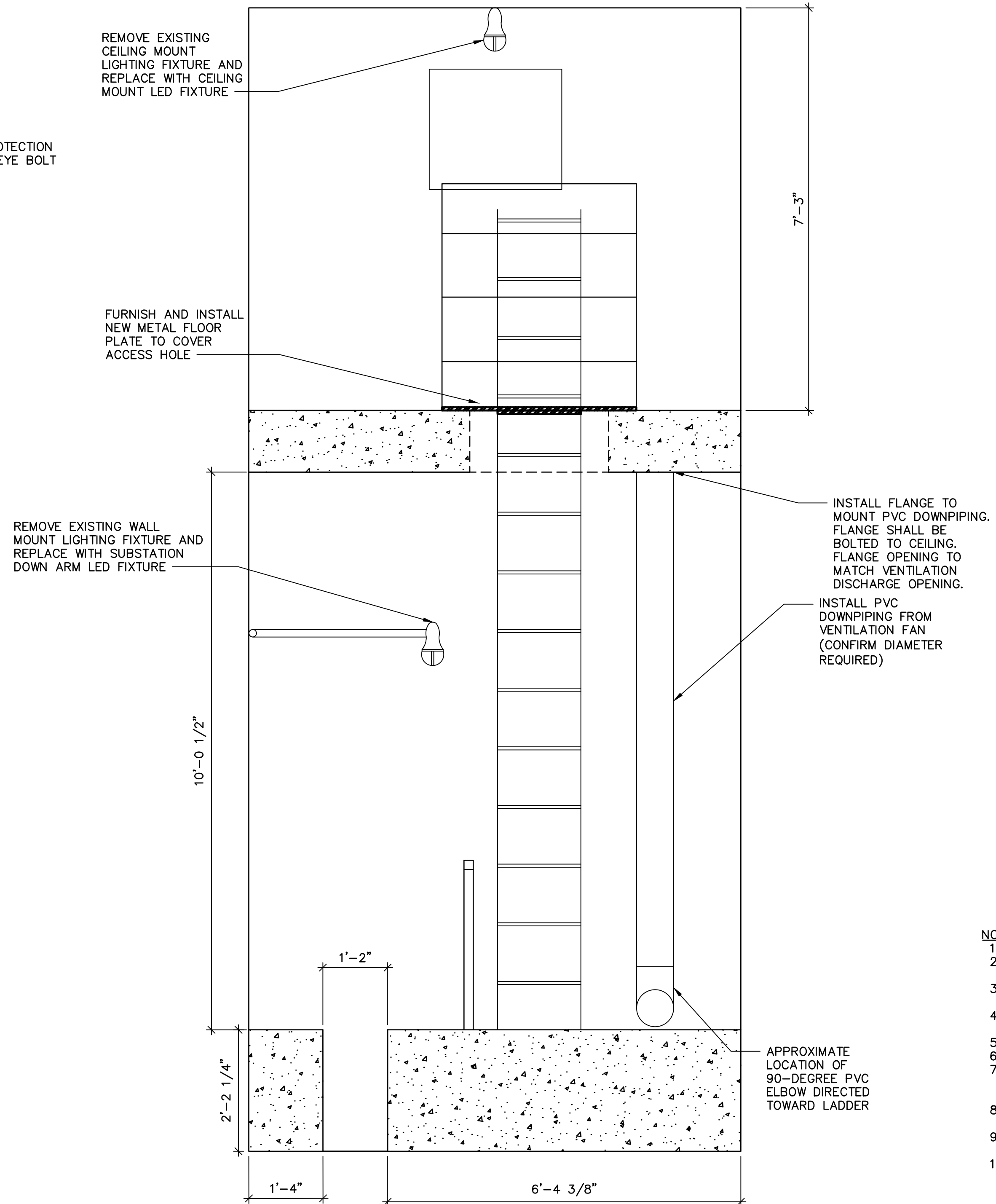
## METER STATION 1 UPPER FLOOR PLAN VIEW



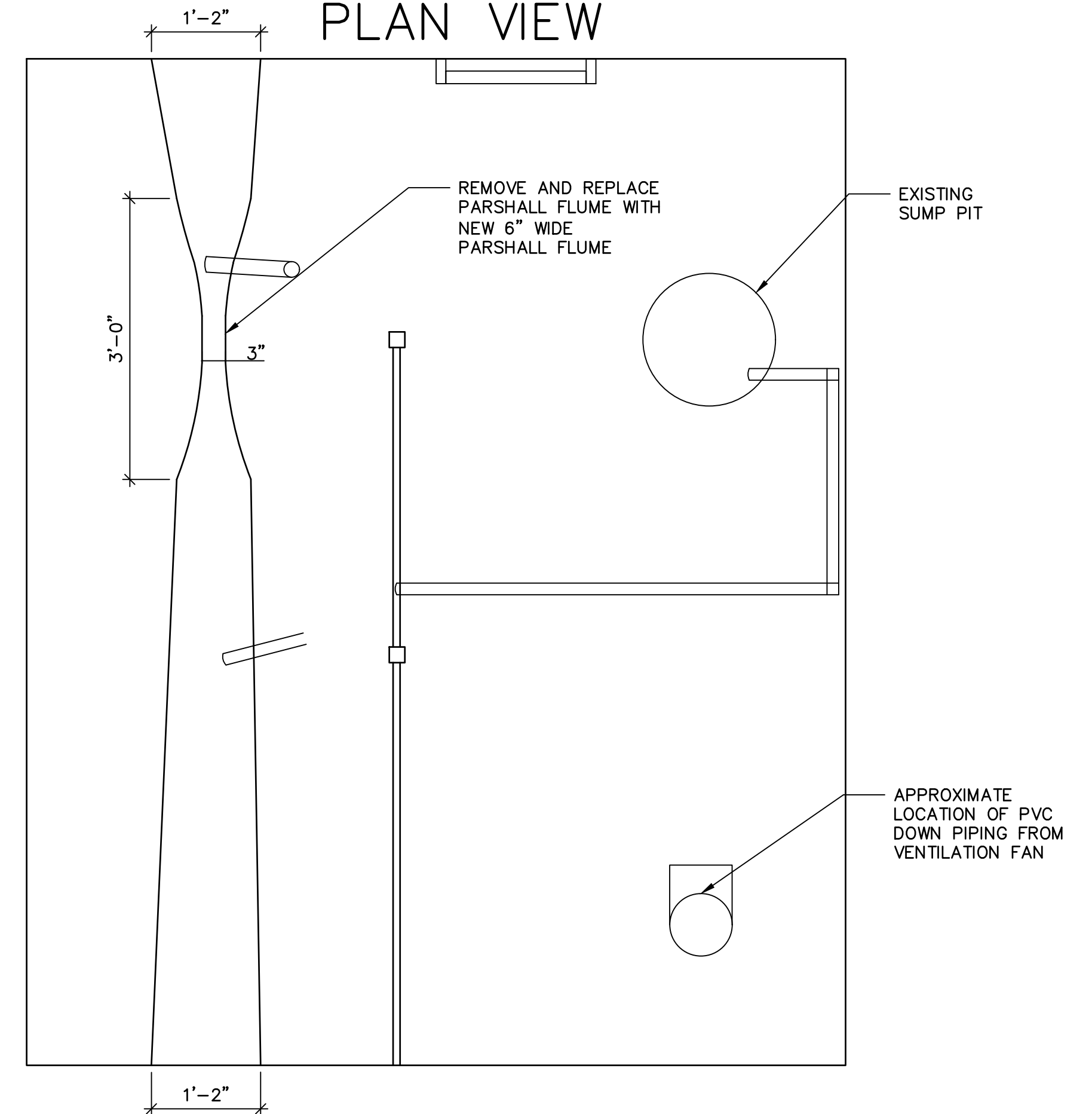
### EQUIPMENT INFORMATION:

1. VENTILATION FAN
  - 1.1. HARTZELL AIR MOVEMENT
    - SERIES 42
    - FIBERGLASS PRESSURE BLOWER, BELT DRIVE
2. LED LIGHTING
  - 2.1. PETROLUX LED LOW BAY LIGHT
    - 5,000 LUMENS
    - FORWARD THROW GLASS LENS
    - 120 VOLTS
    - 3,000 KELVIN COLOR TEMPERATURE
    - 90 COLOR RENDERING INDEX
  - 2.2. MOUNTING
    - CEILING MOUNT OPTION
    - SUBSTATION ARM - DOWN ORIENTATION
3. FALL PROTECTION
  - 3.1. FRENCH CREEK FALL SAFETY
    - XR-30G SELF RETRACTING LIFELINE

## METER STATION 1 SECTION A-A'



## METER STATION 1 BASEMENT PLAN VIEW



### NOTES:

1. DISCONNECT EXISTING FLOW SENSORS FROM PARSHALL FLUME.
2. ONCE BYPASS PUMPING HAS BEEN STARTED, SAW CUT AROUND EXISTING PARSHALL FLUME AS NECESSARY TO REMOVE FLUME.
3. INVERT OF NEW PARSHALL FLUME SHALL MATCH INVERTS OF EXISTING FLOW CHANNEL. RESTORE CONCRETE TO MATCH EXISTING CONDITIONS AND LINES.
4. INSTALL PARSHALL FLUME SO THAT EXISTING PLACEMENT OF ULTRASONIC SENSOR MATCHES RECOMMENDED PLACEMENT OF NEW FLUME.
5. REPLACE LIGHT FIXTURES WITH NEW LED FIXTURES AND LAMPS.
6. REMOVE AND REPLACE EXISTING VENTILATION FAN, INTAKE DUCT, AND SCREEN.
7. INSTALL FLANGE ON CEILING OPENING FROM VENTILATION FAN AND SCHEDULE 80 PVC PIPING TO THE BASEMENT FLOOR. INSTALL SCHEDULE 80 90-DEGREE BEND WHERE PVC PIPE MEETS THE BASEMENT FLOOR, DIRECTED TOWARD LADDER.
8. PRESSURE WASH BASEMENT CEILING, WALLS, LADDER, AND BASEMENT FLOOR WHEN WORK HAS BEEN COMPLETED.
9. FURNISH AND PLACE NEW METAL FLOOR PLATE OVER ACCESS HOLE TO BASEMENT. METAL FLOOR PLATE SHALL BE SIZED TO FIT AROUND ACCESS LADDER AND OVERLAP CONCRETE FLOOR BY SIX INCHES.
10. PURCHASE, FURNISH, AND INSTALL FALL PROTECTION WINCH AND INSTALL TO CEILING EYE BOLT.



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WESTERN LEHIGH INTERCEPTOR SYSTEM  
MACUNGIE TOWNSHIP  
METER STATION 1 AND 2  
REHABILITATION  
30213338

METER STATION 1

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WESTERN LEHIGH INTERCEPTOR SYSTEM  
MACUNGIE TOWNSHIP  
METER STATION 1 AND 2  
REHABILITATION  
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METER STATION 1  
EXTERIOR PHOTOS

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CAD REF. NO.   0247EE026a





LOWER LEVEL FLOOR VIEW



CLOSE-UP OF PARSHALL  
FLUME



CLOSE-UP OF HOLE FOR  
VENTILATION FAN



LOWER LEVEL LIGHT



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WESTERN LEHIGH INTERCEPTOR SYSTEM  
MACUNGIE TOWNSHIP  
METER STATION 1 AND 2  
REHABILITATION  
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METER STATION 1  
LOWER LEVEL PHOTOS  
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UPPER LEVEL WIDE VIEW



VENTILATION FAN

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WESTERN LEHIGH INTERCEPTOR SYSTEM  
MACUNGIE TOWNSHIP  
METER STATION 1 AND 2  
REHABILITATION  
30213338

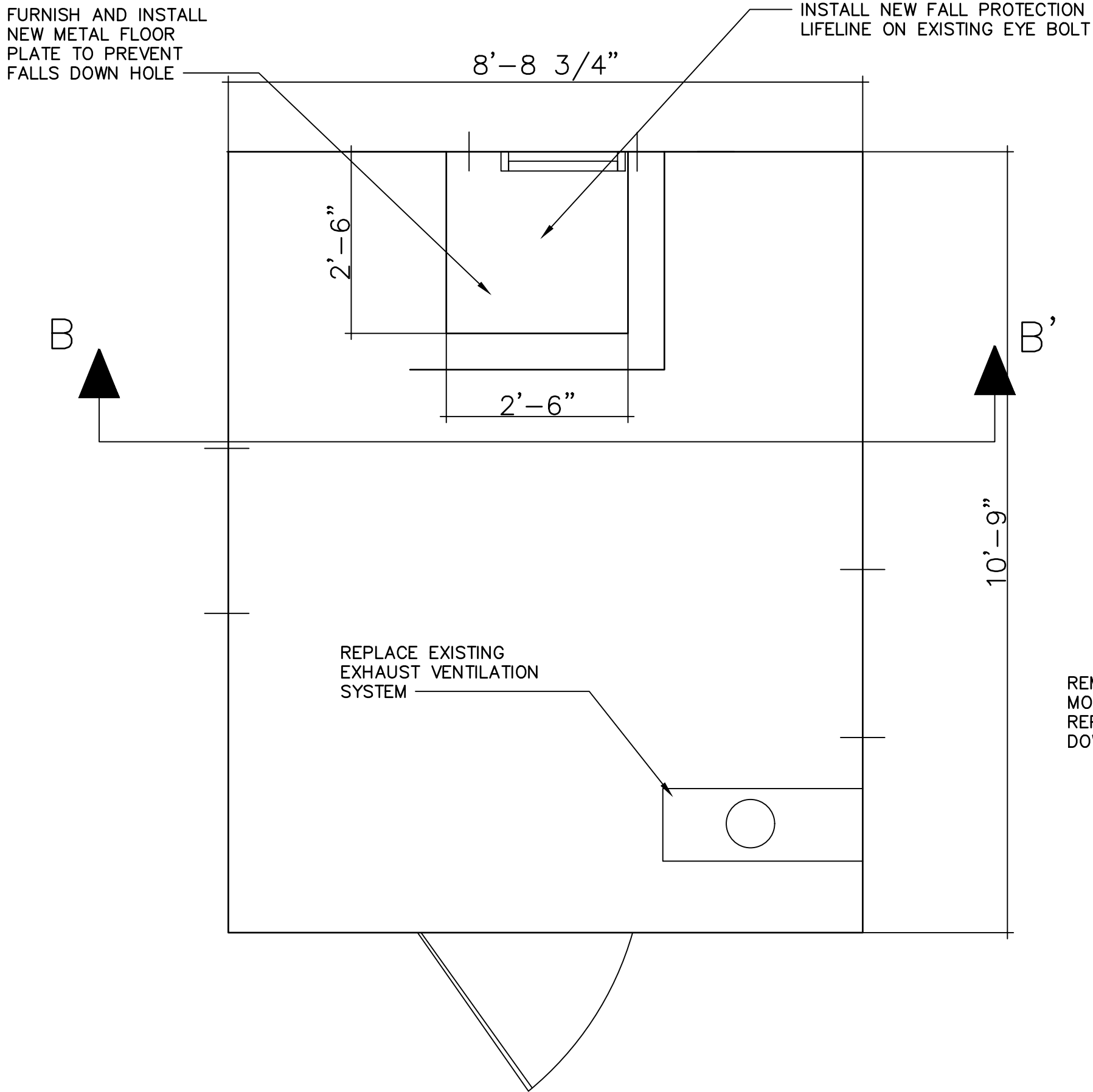
METER STATION 1  
UPPER LEVEL PHOTOS  
NOT TO SCALE



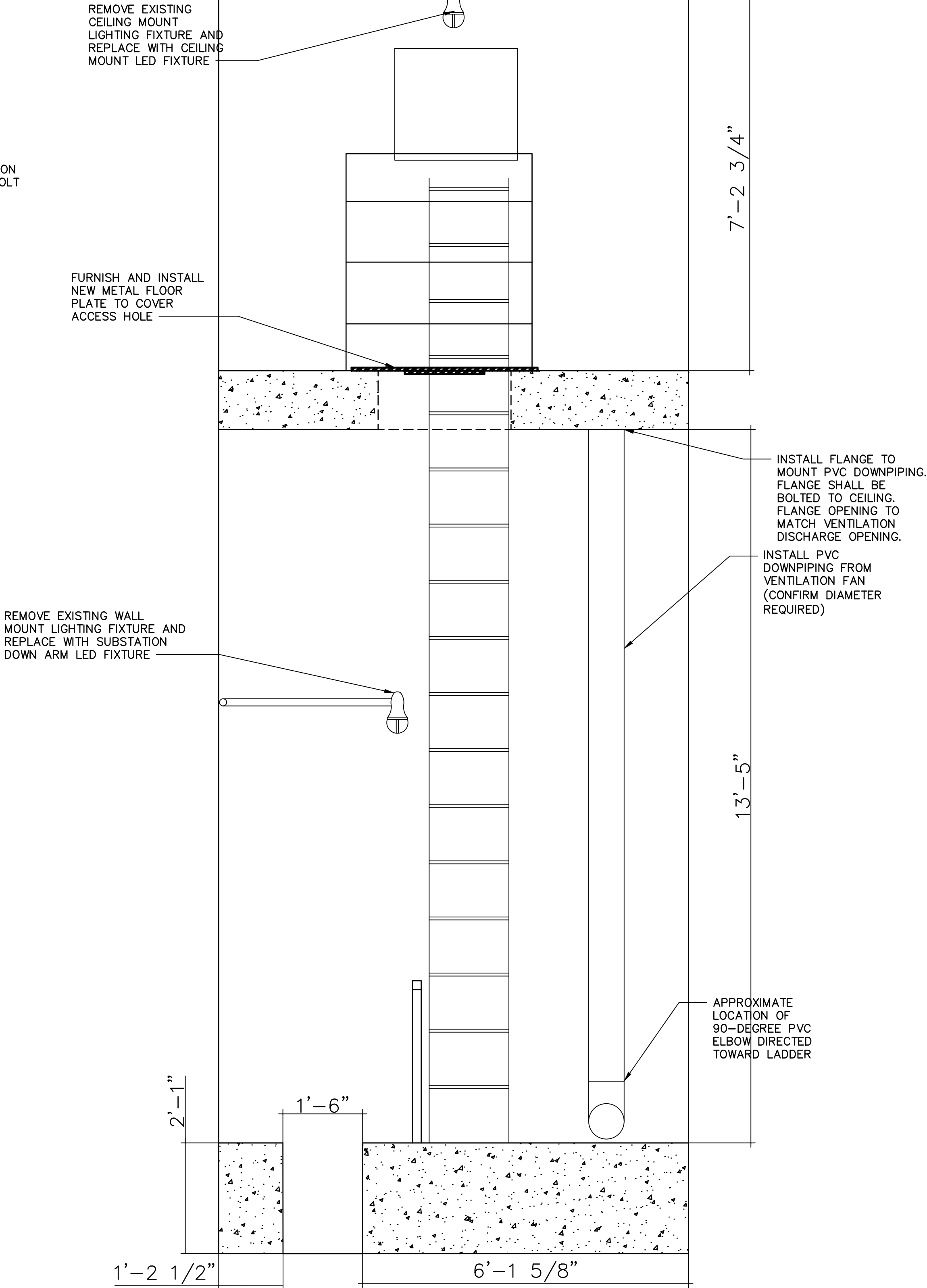
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METER STATION 2  
SECTION B-B'

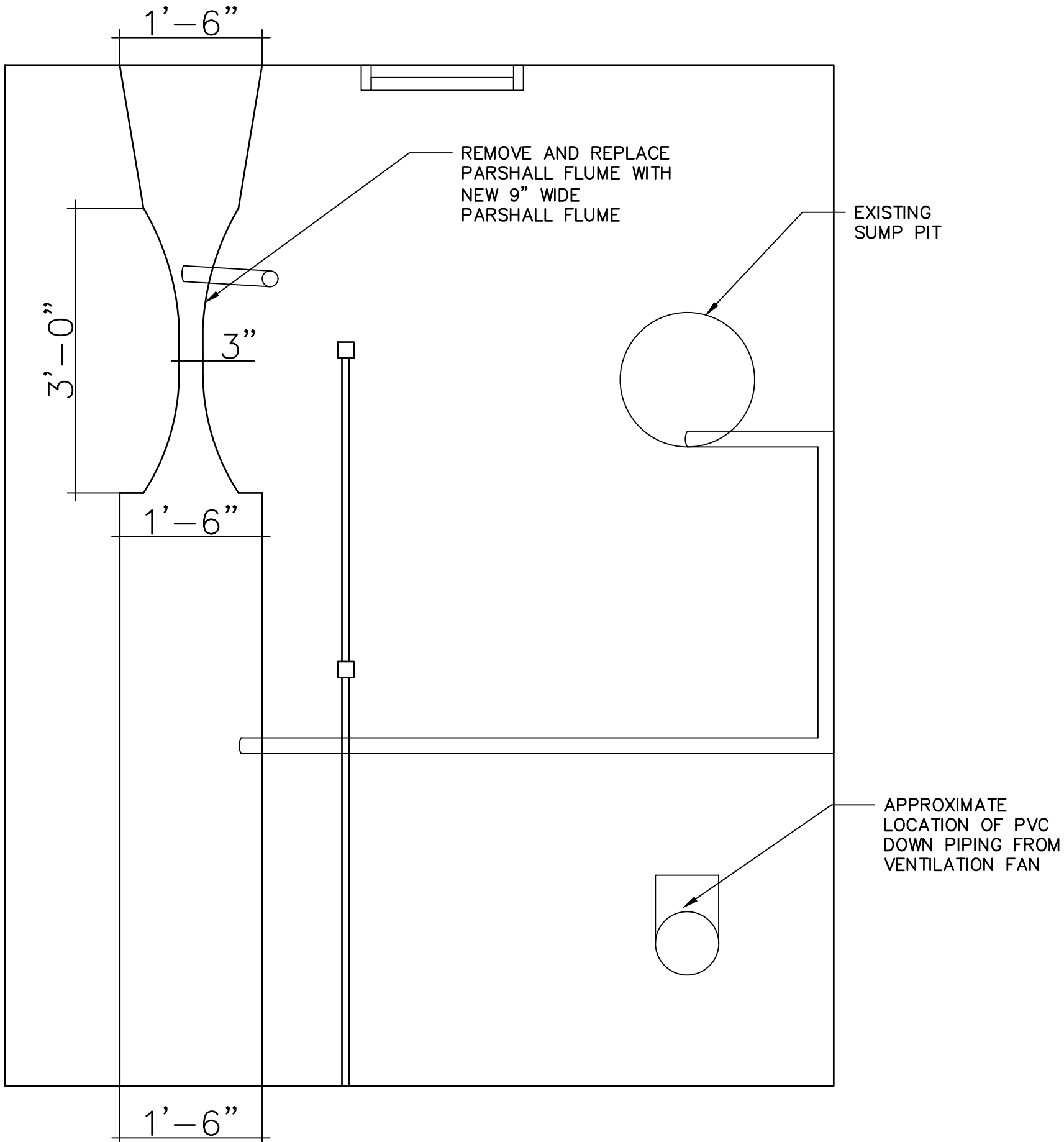
METER STATION 2  
PLAN VIEW



- EQUIPMENT INFORMATION:**
- VENTILATION FAN
    - HARTZELL AIR MOVEMENT
      - SERIES 42
      - FIBERGLASS PRESSURE BLOWER, BELT DRIVE
  - LED LIGHTING
    - PETROLUX LED LOW BAY LIGHT
      - 5,000 LUMENS
      - FORWARD THROW GLASS LENS
      - 120 VOLTS
      - 3,000 KELVIN COLOR TEMPERATURE
      - 90 COLOR RENDERING INDEX
    - MOUNTING
      - CEILING MOUNT OPTION
      - SUBSTATION ARM - DOWN ORIENTATION
  - FALL PROTECTION
    - FRENCH CREEK FALL SAFETY
      - XR-30G SELF RETRACTING LIFELINE



METER STATION 2  
BASEMENT  
PLAN VIEW



- NOTES:**
- DISCONNECT EXISTING FLOW SENSORS FROM PARSHALL FLUME.
  - ONCE BYPASS PUMPING HAS BEEN STARTED, SAW CUT AROUND EXISTING PARSHALL FLUME AS NECESSARY TO REMOVE FLUME.
  - INVERT OF NEW PARSHALL FLUME SHALL MATCH INVERTS OF EXISTING FLOW CHANNEL. RESTORE CONCRETE TO MATCH EXISTING CONDITIONS AND LINES.
  - INSTALL PARSHALL FLUME SO THAT EXISTING PLACEMENT OF ULTRASONIC SENSOR MATCHES RECOMMENDED PLACEMENT OF NEW FLUME.
  - REPLACE LIGHT FIXTURES WITH NEW LED FIXTURES AND LAMPS.
  - REMOVE AND REPLACE EXISTING VENTILATION FAN, INTAKE DUCT, AND SCREEN.
  - INSTALL FLANGE ON CEILING OPENING FROM VENTILATION FAN AND SCHEDULE 80 PVC PIPING TO THE BASEMENT FLOOR. INSTALL SCHEDULE 80 90-DEGREE BEND WHERE PVC PIPE MEETS THE BASEMENT FLOOR, DIRECTED TOWARD LADDER.
  - PRESSURE WASH BASEMENT CEILING, WALLS, LADDER, AND BASEMENT FLOOR WHEN WORK HAS BEEN COMPLETED.
  - FURNISH AND PLACE NEW METAL FLOOR PLATE OVER ACCESS HOLE TO BASEMENT. METAL FLOOR PLATE SHALL BE SIZED TO FIT AROUND ACCESS LADDER AND OVERLAP CONCRETE FLOOR BY SIX INCHES.
  - PURCHASE, FURNISH, AND INSTALL FALL PROTECTION WINCH AND INSTALL TO CEILING EYE BOLT.



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WESTERN LEHIGH INTERCEPTOR SYSTEM  
MACUNGIE TOWNSHIP  
METER STATION 1 AND 2  
REHABILITATION  
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METER STATION 2

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WESTERN LEHIGH INTERCEPTOR SYSTEM  
MACUNGIE TOWNSHIP  
METER STATION 1 AND 2  
REHABILITATION  
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METER STATION 2  
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BASEMENT LEVEL



CLOSE-UP OF  
PARSHALL FLUME



CLOSE-UP OF FLOW  
METER HOLE AND  
VENTILATION FAN HOLE



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WESTERN LEHIGH INTERCEPTOR SYSTEM  
MACUNGIE TOWNSHIP  
METER STATION 1 AND 2  
REHABILITATION  
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METER STATION 2  
LOWER LEVEL PHOTOS  
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UPPER LEVEL



VENTILATION FAN



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WESTERN LEHIGH INTERCEPTOR SYSTEM  
MACUNGIE TOWNSHIP  
METER STATION 1 AND 2  
REHABILITATION  
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METER STATION 2  
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Mr. Charles Volk  
Capital Works Project Manager  
Lehigh County Authority  
1053 Spruce Road  
Allentown, PA 18106-0348

Arcadis U.S., Inc.  
1600 Market Street  
Suite 1810  
Philadelphia  
Pennsylvania 19103  
Tel 215 625 0850  
[www.arcadis.com](http://www.arcadis.com)

Subject:

Meter Station 1 and 2 Parshall Flume Replacement and Station Refurbishment  
Construction Engineering Scope and Budget Proposal

WATER

Dear Mr. Volk:

Arcadis U.S., Inc. (Arcadis) is pleased to submit this proposal to provide construction engineering services to LCA for the Parshall flume replacement and station refurbishment of Meter Station 1 (Alburtis) and Meter Station 2 (Lower Macungie) construction project. This scope and budget cover construction engineering, administration, and inspection services for this project.

This scope and budget covers work from project pre-construction meeting through final completion. It does not cover work performed to SCADA systems.

Date:

January 8, 2025

Contact:

Dan Cooper

Phone:

215.931.4343

Email:

daniel.cooper@  
arcadis.com

## OBJECTIVES

The objective of this work is to work with the successful contractor and LCA to ensure the construction plans and specifications for meter station rehabilitation are implemented to provide expanded peak flow capacity of these meter stations so that peak wet weather flows no longer overtop the existing undersized flumes and refurbished ventilation, lighting, and safety inside each station.

## ASSUMPTIONS

*This proposal and its contents shall not be duplicated, used, or disclosed — in whole or in part — for any purpose other than to evaluate the proposal. This proposal is not intended to be binding or form the terms of a contract. The scope and price of this proposal will be superseded by the contract. If this proposal is accepted and a contract is awarded to Arcadis as a result of — or in connection with — the submission of this proposal, Arcadis and/or the client shall have the right to make appropriate revisions of its terms, including scope and price, for purposes of the contract. Further, client shall have the right to duplicate, use or disclose the data contained in this proposal only to the extent provided in the resulting contract.*



This project will utilize bypass pumping of each station to replace each parshall flume. Contract time is 60 calendar days. This scope assumes construction oversight inspection for key events such as bypass pump setup/startup, demolition, flume insertion/plumb and level, and punch-list activities. Outside of these activities, oversight inspection will be 1 hour per day to check in with crews. This project will utilize up to 1 progress meeting given the short duration of the contract.

## SCOPE OF WORK

Arcadis will provide construction engineering and contract administration services for the duration of the contract.

Arcadis will:

- Review schedules and shop submittals for compliance with the contract documents.
- Review and respond to requests for information.
- Provide part-time Construction Engineer during rehabilitation. For the purposes of this proposal, we have assumed oversight of key events throughout construction, such as bypass setup/startup, demolition, flume insertion/plumb and level, and punch-list activities. Other activities throughout construction will be 1 hour per day check-ins with the contractor.
- Provide senior oversight remotely daily to construction engineer and Contractor's crews to successfully guide the work.
- Prepare inspectors daily reports (IDRs), update Construction Progress Tracker, and update Issues Tracker daily.
- Review pay estimates submitted by the contractor and prepare recommendations to LCA.
- Review work conducted by the Contractor, recommend remedial action or deductions for out-of-specification defects, and prepare punch list.
- Participate in the preparation of the certificate of completion (issued for Substantial Completion).
- Coordinate contract close-out.

LCA will:

- Attend preconstruction meeting.
- Respond to request for information in a timely fashion.

## Budget

We estimate the cost and level of effort of this work as shown in the below table.

Task No.	Task Name	Total Hours	Expenses and Subs	Estimated Budget
1	Construction Administration	60	\$ 200	\$ 11,000
2	Construction Engineering	100	\$ 2,500	\$ 21,000
PM	Project Management and Non-Progress Meetings	30	\$ -	\$ 6,000
Total		190		\$ 38,000

We propose to complete these services on a time and materials basis in accordance with the Agreement between LCA and Malcolm Pirnie, Inc., and the current Summary of Standard Charges for Lehigh County Authority. Arcadis will track the costs associated with this work and report them to LCA monthly throughout the project; we will not exceed the authorized budget without written professional services authorization from LCA. Payment for services will be based upon the actual labor and expenses incurred. Invoicing will be completed monthly. The invoice will include the defined contract tasks listing the day-by-day personnel performing the task with hourly rate and hours worked. The invoice will provide total billed for month. Support documents will be provided if there are any expenses incurred.

Please contact me with your authorization to proceed if this scope and budget are acceptable to you. If you have any questions, please do not hesitate to call me.

Sincerely,

Arcadis U.S., Inc.



Daniel P. Cooper  
Certified Project Manager

Copies:

Cc: Tony Dill, Jim Shelton

## CAPITAL PROJECT AUTHORIZATION

<b>PROJECT NO.:</b>	<u>SD-S-3</u>	<b>BUDGET FUND:</b>	<u>Suburban Div\Wastewater\Capital</u>
<b>PROJECT TITLE:</b>	<u>Meter Stations #1 and #2 Parshall Flume Replacements: Construction Phase</u>	<b>PROJECT TYPE:</b>	<input checked="" type="checkbox"/> Construction <input type="checkbox"/> Engineering Study <input type="checkbox"/> Equipment Purchase <input type="checkbox"/> Amendment
<b>THIS AUTHORIZATION:</b>	<u>\$239,135</u>		
<b>TO DATE (W/ ABOVE)</b>	<u>\$298,135</u>		

### DESCRIPTION AND BENEFITS:

As part of the on-going Act 537 regional planning, each municipality in the Kline's Island Sanitary Sewer System will be closely monitoring their flows to quantify I&I reductions. Due to current metering limitations, the boroughs of Macungie and Alburtis cannot accurately measure their sewage flows. LCA Meter Stations (MS) #1 and #2 were installed in the late 1970s to enable metering flows from both boroughs and are undersized for current flow conditions. MS #1 is located just upstream of the Borough of Alburtis' boundary with Lower Macungie Township and therefore captures the entire Borough's flows. MS #2 captures the flow entering the Borough of Macungie. The primary objective of this project is to improve peak flow metering capacity and accuracy of the two existing meter stations. Parshall flumes are to be replaced with larger units in addition to HVAC upgrades at both stations.

**Prior Authorization:** \$59,000

**This Authorization:** Construction phase

See attached Board Memo for further project details.

### Authorization Status:

Requested This Authorization (LCA MS #1 and 2)	
<b>Construction Phase</b>	
<b>Staff</b>	<b>6,000</b>
<b>Contractor – LB Industries, Inc.</b>	<b>\$185,135</b>
<b>Engineering Consultant - Arcadis</b>	<b>\$38,000</b>
<b>Contingency</b>	<b>\$10,000</b>
<b>Total This Authorization</b>	<b>\$239,135</b>

Other authorizations:	
Prior authorizations	\$59,000
Future authorizations	None

### REVIEW AND APPROVALS:

<u>Project Manager</u>	<u>Date</u>	<u>Chief Executive Officer</u>	<u>Date</u>
<u>Chief Capital Works Officer</u>	<u>Date</u>	<u>Chairman</u>	<u>Date</u>



**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:** ARCADIS U.S., INC.  
1600 Market Street, Suite 1810  
Philadelphia, PA 19103

**Date:** February 10, 2025

**Requested By:** Chuck Volk

**Approvals**

**Department Head:** \_\_\_\_\_

**Chief Executive**

**Officer:** \_\_\_\_\_

**Suburban Division – Meter Stations #1 and #2 Parshall Flume Replacements: Construction Phase Engineering Services**

As part of the on-going Act 537 planning, each municipality in the KISS will be closely monitoring their flows to quantify I&I reductions. Due to current flow metering limitations in MS #1 and #2, the boroughs of Macungie and Alburty cannot accurately measure their respective sewage flows. The primary objective of this project is to upgrade the meter stations to improve peak flow measuring capacity. Work in this proposal includes, but is not limited to, the following:

Professional Services <sup>(1)</sup>
1. Pre-construction meeting admin and minutes
2. Review shop drawings and address contractor RFIs
3. Provide part time construction inspection
4. Payment application review
5. Performance of work documentation
6. Substantial completion inspection and punchlist preparation
7. Final inspection and contract closeout

(1) Please reference the cover Memo for additional information.

**Prior Approval Amount:** \$49,000

**This Approval Amount:** \$38,000

**New Amended Amount (not to be exceeded without further authorization):** \$87,000

**Time Table and Completion Deadline:** As required to meet various critical deadlines as set forth in the proposal.

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(For Authority Use Only)

**Authorization Completion:**

**Approval:** \_\_\_\_\_ **Actual Cost:** \_\_\_\_\_ **Date:** \_\_\_\_\_

# Lehigh County Authority – Monthly Report to Board of Directors

## Upcoming Board Agenda Items & Project Updates – February 2025

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Published: February 3, 2025

### ***PART 1 – Upcoming Agenda Items – Action & Discussion Items***

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#### **FINANCE & ADMINISTRATION**

**Project Title: LCA Strategic Plan - Progress Reporting**

Division / Funding: All Divisions

Status or Action Desired: Discussion

Board Action Date: 2/10/2025

Project Phase: n/a

Project Notes: A report of staff progress on key initiatives outlined in LCA's Strategic Plan will be presented for Board review and discussion. Staff Responsibility: Liesel Gross

**Project Title: Board of Directors - Election of Officers**

Division / Funding: n/a

Status or Action Desired: Election Vote

Board Action Date: 2/10/2025 & 2/24/2025

Project Phase: n/a

Project Notes: The Board of Directors will nominate and elect officers for 2025 at the February 24, 2025 Board meeting. Staff Responsibility: Liesel Gross

**Project Title: Monthly Financial Review**

Division / Funding: n/a

Status or Action Desired: Information

Board Action Date: 2/10/2025

Project Phase: n/a

Project Notes: The December 2024 monthly financial report will be presented on 2/10/2025 and the January 2025 report will be distributed when it is available. Staff Responsibility: Ed Klein

#### **SYSTEM OPERATIONS**

**Project Title: Monthly Operations Report**

Division / Funding: n/a

Status or Action Desired: Information

Board Action Date: 2/24/2025

Project Phase: n/a

Project Notes: The January 2025 monthly operations report will be presented. Staff Responsibility: Andrew Moore & Chris Moughan

**Project Title: Suburban Water Facilities - SCADA System Upgrade**Division / Funding: Suburban DivisionStatus or Action Desired: ApprovalBoard Action Date: 2/24/2025Project Phase: Construction Phase

Project Notes: This project is focused on upgrading the Supervisory Control and Data Acquisition (SCADA) system for 42 facilities within the Suburban Division water and sewer systems. The project will be completed over a four-year period, and will result in a standardized system for all facilities for system management, operational data collection, and alarm protocols for operational events. This will increase operational efficiencies and decrease response times. Approval for the capital project authorization, contract award, and professional services necessary to complete the project was granted at the May 9, 2022 Board meeting. The project is ahead of schedule and on budget, and 2025 will be the final phase of the multi-year project. At the February 24, 2025 Board meeting, approval of the final phase of consultant services will be requested. Staff Responsibility: Chris Moughan

**WATER PROJECTS – ALLENTOWN DIVISION****Project Title: Lehigh River Pump Station Upgrades**Division / Funding: Allentown DivisionStatus or Action Desired: ApprovalBoard Action Date: 2/24/2025Project Phase: Design Phase

Project Notes: The Lehigh River Pump Station is infrequently utilized due to taste and odor concerns as well as operational issues with the existing pumps and intake screens. A preliminary engineering evaluation was performed in 2024 that identified treatment options for taste and odor control as well as pump upgrades and intake screening modifications. The goal is to be able to utilize the Lehigh River source fully in the event the Little Lehigh Creek intake has to be taken out of service for any reason. A Basis of Design Report was completed late 2024 and presented to the City of Allentown for Major Capital Improvement consideration. Initial review comments were addressed and final review comments are expected from the City of Allentown by the end of January. LCA solicited final design and bid phase proposals from 3 firms in late 2024 and Capital Project Authorization for final design and bidding phase services is to be requested at the 2/24/2025 Board meeting. Staff Responsibility: Amy Rohrbach

**WASTEWATER PROJECTS – KISS ACT 537****Project Title: Sanitary Sewer Collection System: City of Allentown Interceptor Inspections**Division / Funding: Allentown DivisionStatus or Action Desired: ApprovalBoard Action Date: 2/24/2025Project Phase: Planning Phase

Project Notes: As part of both the Act 537 planning process and LCA Asset Management program, the condition and rehabilitation needs for each major interceptor in the system needs to be known. In the City of Allentown, the condition of each interceptor is not currently known. Since all sewage generated by the Kline's Island Sewer System flows through one or more of the City's main interceptors, the condition of each interceptor must be determined and a rehabilitation plan developed if needed. This interceptor inspection work will identify any needed rehabilitation, repairs, or modifications needed to suit the regional sewer needs. Board authorization for limited interceptor inspection work was granted at the December 12, 2022 meeting. The majority of those inspections occurred in the second quarter of 2023. Follow-up work was recommended on key sections of the inspected interceptors. These recommendations have been evaluated and authorization to proceed with this follow-up work was subsequently granted at the June 10, 2024 Board Meeting. Four interceptors on the east side of the Lehigh River (plus the siphon piping under the Lehigh River) have been fully inspected and a final report is forthcoming. Inspections in 2025 will include the Lehigh Interceptor (~1 mile). Staff Responsibility: Stephen Boone

## **WASTEWATER PROJECTS – SUBURBAN DIVISION**

**Project Title: LCA Meter Stations 1 and 2 Upgrades**

Division / Funding: Suburban Division

Board Action Date: 2/10/2025

Status or Action Desired: Approval

Project Phase: Construction Phase

Project Notes: The LCA Western Lehigh sewer system contains five meter stations located strategically throughout the area. Meter Station #1 is located on the downstream side of the Borough of Alburtis at the beginning of the Alburtis-Macungie Trunkline, and Meter Station #2 is located on the upstream side of the Borough of Macungie. Currently, neither meter station can accurately measure peak flows and require replacements of instrumentation and Parshall flumes. The replacement of these flumes will expand the peak flow metering capacity. This proposed work is part of the larger KISS Sewer Billing Meter issue that requires a long term solution in order to implement accurate billing and flow monitoring programs. Board authorization for the design and bid phase was granted at the 1/8/2024 Meeting. Authorization for construction will be requested at the 2/10/2025 LCA Board meeting. Staff Responsibility: Chuck Volk

## ***PART 2 – Project Updates – Information Items***

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No updates for February 2025



### ***PART 3 – Open Project List – No Updates***

<b>Project Category</b>	<b>Project Title</b>	<b>Division / Funding</b>	<b>Project Phase</b>	<b>Staff Responsibility</b>
Finance & Administration	LCA Main Office Parking Lot Expansion	All Divisions	Construction Phase	Chuck Volk
Finance & Administration	Project Management / Construction Management Software Installation & Setup	All Divisions	Planning Phase	Jason Peters
Finance & Administration	LCA Munis ERP System Planning & Re-Implementation	All Divisions	Planning Phase	Chris Moughan & Brooke Neve
Water - Allentown	Lead Service Line Replacement Project Cycle 1	Allentown Division	Construction Phase	Liesel Gross & Staff
Finance & Administration	LCA Building Optimization Study & Master Plan	Suburban Division	Planning Phase	Stephen Boone
Finance & Administration	Capital Program Management Services	All Divisions	Planning Phase	Chuck Volk
System Operations	Watershed Monitoring Program	Suburban Division	Planning Phase	Andrew Moore
Water - Suburban	North Whitehall Second Interconnection	Suburban Division	Design Phase	Amy Kunkel
Water - Suburban	Suburban Division Lead Service Line Inventory Program & Compliance Planning	Suburban Division	Planning Phase	Albert Capuzzi
Water - Suburban	2024 Meter Replacements	Suburban Division	Construction Phase	Amy Kunkel
Water - Suburban	Central Lehigh and North Whitehall Systems – Water Supply Study	Suburban Division	Planning Phase	Phil DePoe
Water - Suburban	Upper System Pump Station and Main Extension	Suburban Division	Design Phase	Amy Kunkel
Water - Suburban	Water Main Replacement Program Cycle 8	Suburban Division	Design Phase	Jason Peters
Water - Allentown	Water Filtration Plant: PFAS Treatment	Allentown Division	Design Phase	Amy Rohrbach
Water - Allentown	Allentown Division Lead Service Line Inventory Program & Compliance Planning	Allentown Division	Planning Phase	Albert Capuzzi

<b>Project Category</b>	<b>Project Title</b>	<b>Division / Funding</b>	<b>Project Phase</b>	<b>Staff Responsibility</b>
Water - Allentown	Badger Meter Replacements	Allentown Division	Construction Phase	Amy Kunkel
Water - Allentown	Lead Service Line Replacement Project Cycle 2	Allentown Division	Design Phase	Albert Capuzzi
Water - Allentown	Water Filtration Plant: Fluoride System Upgrades	Allentown Division	Design Phase	Amy Rohrbach
Water - Allentown	Water Filtration Plant: HVAC Upgrades - Phase 1	Allentown Division	Construction Phase	Amy Rohrbach
Water - Allentown	Water Filtration Plant: Emergency Power Design	Allentown Division	Design Phase	Amy Rohrbach
Water - Allentown	Water Main Replacement Program Cycles 7 & 8	Allentown Division	Construction	Jason Peters
Water - Allentown	Water Main Replacement Program Cycles 9 - 11	Allentown Division	Design Phase	Jason Peters
Water - Allentown	Water Filtration Plant: Filter Upgrade Project	Allentown Division	Construction Phase	Amy Rohrbach
Water - Allentown	30" & 36" East Side Transmission Main Repair Project	Allentown Division	Design Phase	Jason Peters
Water - Allentown	Water Filtration Plant: 2022-2023 Indenture Upgrades	Allentown Division	Construction Phase	Chuck Volk
Water - Allentown	Large Diameter Valve Rehabilitation & Replacement Program	Allentown Division	Construction Phase	Chuck Volk
Sewer - Act 537	Sanitary Sewer Collection System: City of Allentown Manhole Inspections	Allentown Division	Planning Phase	Phil DePoe
Sewer - Act 537	Sanitary Sewer Collection System: City of Allentown Manhole Rehabilitation	Allentown Division	Construction Phase	Jason Peters
Sewer - Act 537	Regional Sewer Capacity & Wet-Weather Planning - Regional Act 537 Plan Preparation	City of Allentown (AO)	Planning Phase	Phil DePoe
Sewer - Act 537	KISS Act 537 Planning - Financial & Institutional Evaluation, Phase 3	City of Allentown (AO)	Planning Phase	Liesel Gross
Sewer - Act 537	Legal Services: Development of New Intermunicipal Agreement(s)	City of Allentown (AO)	Planning Phase	Liesel Gross











































<b>Project Category</b>	<b>Project Title</b>	<b>Division / Funding</b>	<b>Project Phase</b>	<b>Staff Responsibility</b>
Sewer - Act 537	KISS System Modeling - Sewage Billing Meter QA/QC Data Analytics and 2021 Flow Metering Preparation	City of Allentown (AO)	Planning Phase	Phil DePoe
Sewer - Act 537	KISS Act 537 Planning - Selection of Solution (SOS) Phase	City of Allentown (AO)	Planning Phase	Phil DePoe
Sewer - Act 537	Industrial Pretreatment Plant Master Plan	Suburban Division	Planning Phase	Liesel Gross & Albert Capuzzi
Sewer - Act 537	Spring Creek Force Main Condition Assessment	Suburban Division	Planning Phase	Amy Kunkel
Sewer - Act 537	Regional Sewer Capacity & Wet-Weather Planning: Engineering & Program Support	Suburban Division	Planning Phase	Phil DePoe
Sewer - Act 537	KISS Relief Interceptor Pre-Design Study	Suburban Division	Planning Phase	Phil DePoe
Sewer - Act 537	Western Lehigh Interceptor Municipalities Test & Seal Lateral Grouting Project	Suburban Division	Construction Phase	Jason Peters
Sewer - Act 537	Western Lehigh Service Area - Engineering & Program Support	Suburban Division	Planning Phase	Phil DePoe
Sewer - Act 537	Upper Western Lehigh Pump Station & Force Main	Suburban Division	Construction Phase	Amy Kunkel
Sewer - Suburban	Wynnewood Terrace WWTP Expansion - Developer Cost-Sharing Agreement	Suburban Division	Planning Phase	Chuck Volk
Sewer - Suburban	Heidelberg Heights Sanitary Sewer Consent Order & Agreement	Suburban Division	Planning Phase	Chuck Volk
Sewer-Suburban	Pretreatment Plant - Critical Upgrades	Suburban Division	Construction Phase	Chuck Volk
Sewer - Suburban	Lynn Township WWTP Final Clarifier Project	Suburban Division	Construction Phase	Chuck Volk
Sewer - Suburban	Spring Creek Force Main Relocation - PA Turnpike Commission	Suburban Division	Construction Phase	Amy Kunkel
Sewer - Suburban	Spring Creek Pump Station Upgrades	Suburban Division	Construction Phase	Amy Kunkel
Sewer - Suburban	Park Pump Station Phase 2 Upgrade	Suburban Division	Construction Phase	Amy Kunkel

<b>Project Category</b>	<b>Project Title</b>	<b>Division / Funding</b>	<b>Project Phase</b>	<b>Staff Responsibility</b>
Sewer - Suburban	Arcadia WWTP Screening System Project	Suburban Division	Design Phase	Chuck Volk
Sewer - Suburban	North Whitehall Township Act 537 Plan	Suburban Division	Planning Phase	Phil DePoe
Sewer - Suburban	Pretreatment Plant (PTP) Electrical Study	Suburban Division	Planning Phase	Chuck Volk
Sewer - Suburban	Lynn Township Corrective Action Plan	Suburban Division	Planning Phase	Jason Peters
Sewer - Suburban	Sand Spring WWTP: Treatment Process Modification	Suburban Division	Design Phase	Chuck Volk
Sewer - Allentown	Kline's Island WWTP: Chemically Enhanced Primary Treatment Study	Allentown Division	Planning Phase	Stephen Boone
Sewer - Allentown	Sanitary Sewer Collection System: I&I Source Reduction Program (LCA Year 2)	Allentown Division	Planning Phase	Jason Peters
Sewer- Allentown	Kline's Island WWTP - Wet Weather Improvements - Phase 1	Allentown Division	Design Phase	Amy Rohrbach
Sewer - Allentown	Kline's Island WWTP: Master Plan	Allentown Division	Planning Phase	Amy Rohrbach
Sewer - Allentown	Kline's Island WWTP - Septage Receiving and Vacuum Truck Unloading Modifications	Allentown Division	Construction Phase	Amy Rohrbach
Sewer - Allentown	Kline's Island WWTP: Substation No. 1 and Switchgear Replacement	Allentown Division	Construction Phase	Amy Rohrbach
Sewer - Allentown	Kline's Island WWTP: 2023-2024 Architectural and Structural Upgrades	Allentown Division	Construction Phase	Amy Rohrbach
Sewer - Allentown	Kline's Island WWTP: Solids Process Boiler and HVAC System Upgrade Project	Allentown Division	Construction Phase	Chuck Volk
Sewer- Allentown	Kline's Island WWTP - Primary Sludge System Upgrades	Allentown Division	Construction Phase	Amy Rohrbach
Sewer - Allentown	Kline's Island WWTP - Final Settling Tanks 1-4 Upgrades	Allentown Division	Construction Phase	Amy Rohrbach
Sewer - Allentown	Sanitary Sewer Collection System: I&I Source Reduction Program (LCA Year 1)	Allentown Division	Construction Phase	Jason Peters

<b>Project Category</b>	<b>Project Title</b>	<b>Division / Funding</b>	<b>Project Phase</b>	<b>Staff Responsibility</b>
Sewer - Allentown	Kline's Island WWTP - Plastic Media Trickling Filter Rehabilitation	Allentown Division	Design Phase	Amy Rohrbach

**LEHIGH COUNTY AUTHORITY  
FINANCIAL STATEMENTS  
DECEMBER 2024**

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

	<b>Sub W</b>	<b>Sub WW</b>	<b>City</b>
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>10</u></u>	<u><u>7</u></u>	<u><u>13</u></u>

LEHIGH COUNTY AUTHORITY  
FINANCIAL STATEMENTS - SUMMARY  
For the Period Ended December 31, 2024

	Consolidated Financial Statements														
	Month					Year To Date					FULL YEAR				
	Actual	Q4 FC	Prior Year	FC Var	PY Var	Actual	Q4 FC	Prior Year	FC Var	PY Var	Actual	Budget	Prior Year	Bud Var	PY Var
Income Statement															
Suburban Water	344,348	863,892	4,984,487	(519,544)	(4,640,138)	2,481,476	2,663,377	8,266,955	(181,901)	(5,785,478)	2,481,476	2,019,922	8,266,955	461,554	(5,785,478)
Suburban Wastewater	(2,599,118)	(70,883)	(435,943)	(2,528,235)	(2,163,175)	(3,153,843)	(1,861,583)	(334,302)	(1,292,260)	(2,819,541)	(3,153,843)	(1,632,719)	(334,302)	(1,521,124)	(2,819,541)
City Division	1,581,615	4,793,513	(6,485,074)	(3,211,898)	8,066,689	17,750,388	16,511,908	7,787,339	1,238,480	9,963,049	17,750,388	14,844,627	7,787,339	2,905,761	9,963,049
Total LCA	(673,155)	5,586,523	(1,936,531)	(6,259,678)	1,263,376	17,078,022	17,313,703	15,719,991	(235,681)	1,358,030	17,078,022	15,231,830	15,719,991	1,846,192	1,358,030
Cash Flow Statement															
Suburban Water	(485,427)	2,500,056	(105,868)	(2,985,484)	(379,559)	806,020	2,633,939	3,429,573	(1,827,918)	(2,623,553)	806,020	1,446,849	3,429,573	(640,828)	(2,623,553)
Suburban Wastewater	(1,891,800)	(4,618,937)	144,896	2,727,137	(2,036,696)	7,556,058	4,703,254	4,298,204	2,852,804	3,257,854	7,556,058	347,045	4,298,204	7,209,013	3,257,854
City Division	(9,255,314)	772,209	(8,499,768)	(10,027,523)	(755,546)	59,299,522	55,832,338	13,827,651	3,467,184	45,471,870	59,299,522	2,940,507	13,827,652	56,359,015	45,471,870
Total LCA	(11,632,542)	(1,346,672)	(8,460,740)	(10,285,870)	(3,171,802)	67,661,600	63,169,531	21,555,429	4,492,069	46,106,171	67,661,600	4,734,400	21,555,429	62,927,200	46,106,171
Debt Service Coverage Ratio															
Suburban Water	2.55	6.28	21.00	(3.73)	(18.46)	2.19	2.24	3.97	(0.05)	(1.78)	2.19	1.96	3.97	0.23	(1.78)
Suburban Wastewater	(19.77)	9.54	10.28	(29.31)	(30.05)	3.29	4.47	9.02	(1.18)	(5.72)	3.29	4.67	9.02	(1.38)	(5.72)
City Division	2.91	7.29	(0.93)	(4.37)	3.84	2.44	1.86	2.38	0.58	0.06	2.44	2.13	2.38	0.31	0.06



LEHIGH COUNTY AUTHORITY  
CONSOLIDATED FINANCIAL STATEMENTS  
For the Period Ended December 31, 2024

STATEMENTS OF ACTIVITIES	Consolidated Financial Statements															
	Month				Year To Date				Q4 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
<b>Operating Revenues:</b>																
User Charges	1,343,245	(770,585)	4,946,519	5,519,179	17,419,721	17,161,729	58,218,846	92,800,296	17,524,394	19,201,227	56,080,070	92,805,692	17,485,300	19,128,454	55,555,506	92,169,260
Connection & System Charges	31,769	-	235,017	266,786	781,191	1,350,898	3,020,974	5,153,063	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	38,447	30	40,406	78,882	149,898	405	254,620	404,924	176,276	2,618	86,448	265,342	177,724	2,900	89,800	270,424
<b>Total Operating Revenues</b>	<b>1,413,461</b>	<b>(770,555)</b>	<b>5,221,942</b>	<b>5,864,848</b>	<b>18,350,811</b>	<b>18,513,031</b>	<b>61,494,440</b>	<b>98,358,282</b>	<b>18,734,826</b>	<b>20,856,727</b>	<b>59,695,634</b>	<b>99,287,187</b>	<b>18,613,874</b>	<b>20,827,254</b>	<b>59,254,906</b>	<b>98,696,034</b>
<b>Operating Expenses:</b>																
Personnel	411,907	163,474	1,113,202	1,688,584	4,267,610	1,740,883	11,840,977	17,849,470	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	59,215	19,475	141,385	220,075	818,660	329,877	2,127,009	3,275,546	1,066,844	428,822	2,446,827	3,942,493	1,136,102	456,840	2,545,190	4,138,132
Utilities	21,944	9,917	69,780	101,641	492,836	263,757	1,833,941	2,590,533	531,376	320,045	2,018,931	2,870,352	537,998	313,870	2,063,922	2,915,790
Materials and Supplies	89,684	45,156	164,477	299,317	889,667	378,342	3,081,830	4,349,839	1,086,624	472,867	3,280,826	4,840,316	1,197,810	518,722	3,251,300	4,967,832
Miscellaneous Services	180,058	631,258	156,808	968,125	5,086,183	7,030,638	1,936,805	14,053,625	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	-	-	-	388,812	-	5,507,107	11,933	5,519,040	-	5,519,486	12,000	5,531,486	-	4,529,540	11,400	4,540,940
Depreciation and Amortization	297,790	625,549	765,849	1,689,188	3,573,453	6,956,464	6,437,020	16,966,937	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	-	-	1,126	1,126	-	-	38,038	38,038	-	-	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
<b>Total Operating Expenses</b>	<b>1,060,599</b>	<b>1,883,642</b>	<b>2,412,627</b>	<b>5,356,868</b>	<b>15,128,409</b>	<b>22,207,067</b>	<b>27,307,553</b>	<b>64,643,028</b>	<b>15,406,973</b>	<b>23,027,362</b>	<b>34,279,190</b>	<b>72,713,525</b>	<b>15,557,242</b>	<b>22,270,263</b>	<b>34,425,410</b>	<b>72,252,915</b>
<b>Net Operating Profit</b>	<b>352,862</b>	<b>(2,654,197)</b>	<b>2,809,315</b>	<b>507,980</b>	<b>3,222,402</b>	<b>(3,694,035)</b>	<b>34,186,888</b>	<b>33,715,254</b>	<b>3,327,853</b>	<b>(2,170,635)</b>	<b>25,416,445</b>	<b>26,573,662</b>	<b>3,056,632</b>	<b>(1,443,009)</b>	<b>24,829,496</b>	<b>26,443,119</b>
<b>Non-Operating Income (Expense)</b>																
Interest Income	75,919	53,480	483,059	612,458	697,464	636,313	5,755,319	7,089,096	692,236	632,188	5,797,689	7,122,113	130,452	130,271	984,881	1,245,604
Interest (Expense)	(84,433)	(2,718)	(1,710,759)	(1,797,910)	(1,436,834)	(136,537)	(16,783,652)	(18,357,023)	(1,353,641)	(178,764)	(19,703,642)	(21,236,047)	(1,167,162)	(185,934)	(19,703,642)	(21,056,738)
Other Miscellaneous	-	4,318	-	4,318	(1,556)	40,416	(5,408,167)	(5,369,306)	(3,070)	(144,372)	5,001,417	4,853,975	-	(134,047)	8,733,892	8,599,845
<b>Net Non-Operating Income (Expense)</b>	<b>(8,513)</b>	<b>55,079</b>	<b>(1,227,700)</b>	<b>(1,181,134)</b>	<b>(740,926)</b>	<b>540,193</b>	<b>(16,436,500)</b>	<b>(16,637,233)</b>	<b>(664,475)</b>	<b>309,052</b>	<b>(8,904,536)</b>	<b>(9,259,959)</b>	<b>(1,036,710)</b>	<b>(189,710)</b>	<b>(9,984,869)</b>	<b>(11,211,289)</b>
<b>Net Income (Loss)</b>	<b>344,348</b>	<b>(2,599,118)</b>	<b>1,581,615</b>	<b>(673,155)</b>	<b>2,481,476</b>	<b>(3,153,843)</b>	<b>17,750,388</b>	<b>17,078,022</b>	<b>2,663,377</b>	<b>(1,861,583)</b>	<b>16,511,908</b>	<b>17,313,703</b>	<b>2,019,922</b>	<b>(1,632,719)</b>	<b>14,844,627</b>	<b>15,231,830</b>
<b>CASH FLOW STATEMENT</b>																
<b>Cash Flows From Operating Activities</b>																
Operating Revenues	1,413,461	(770,555)	5,221,942	5,864,848	18,350,811	18,513,031	61,494,440	98,358,282	18,734,826	20,856,727	59,695,634	99,287,187	18,613,874	20,827,254	59,254,906	98,696,034
Operating Expenses (ex D&A)	(762,809)	(1,258,093)	(1,645,653)	(3,666,554)	(11,554,955)	(15,250,603)	(20,832,495)	(47,638,053)	(11,756,350)	(15,995,862)	(24,018,892)	(51,771,104)	(12,040,242)	(15,238,763)	(24,255,560)	(51,534,565)
Non-Cash Working Capital Changes	(121,870)	2,867,788	(8,695,219)	(5,949,301)	(1,514,019)	4,821,472	(13,193,607)	(9,886,154)	(362,014)	(350,650)	(991,353)	(1,704,017)	1	(200,000)	(135,999)	(335,999)
<b>Net Cash Provided by (Used in) Operating Activities</b>	<b>528,782</b>	<b>839,140</b>	<b>(5,118,930)</b>	<b>(3,751,007)</b>	<b>5,281,836</b>	<b>8,083,901</b>	<b>27,468,338</b>	<b>40,834,075</b>	<b>6,616,462</b>	<b>4,510,215</b>	<b>34,685,389</b>	<b>45,812,067</b>	<b>6,573,633</b>	<b>5,388,491</b>	<b>34,863,347</b>	<b>46,825,470</b>
<b>Cash Flows From Financing Activities</b>																
Capital Contributions	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Proceeds New Borrowing	-	-	-	-	5,241,371	11,000,000	55,000,000	71,241,371	5,241,371	11,000,000	55,000,000	71,241,371	5,230,000	7,175,000	8,555,508	20,960,508
Interest Payments	-	-	-	-	(1,146,731)	(121,742)	(4,339,771)	(5,608,244)	(1,167,162)	(185,934)	(13,318,734)	(14,671,830)	(1,167,162)	(185,934)	(13,315,397)	(14,668,493)
Principal Payments	-	-	-	-	(2,081,771)	(2,878,132)	(749,566)	(5,709,470)	(2,254,324)	(1,010,486)	(2,945,000)	(6,209,810)	(2,254,324)	(1,010,486)	(2,945,000)	(6,209,810)
<b>Net Cash Provided by (Used in) Financing Activities</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>2,012,869</b>	<b>8,000,126</b>	<b>49,910,662</b>	<b>59,923,657</b>	<b>1,819,885</b>	<b>9,803,580</b>	<b>38,736,266</b>	<b>50,359,731</b>	<b>1,808,514</b>	<b>5,978,580</b>	<b>(7,704,889)</b>	<b>82,205</b>
<b>Cash Flows from Capital and Related Activities</b>																
Non-Operating Income (Expenses)	-	4,318	-	4,318	(1,556)	40,416	(5,408,167)	(5,369,306)	(3,070)	(144,372)	3,693,193	3,545,751	-	(134,047)	7,425,668	7,291,621
Capital Expenditures, net	(1,090,129)	(2,788,738)	(4,619,444)	(8,498,311)	(7,429,593)	(9,693,698)	(18,426,632)	(35,549,922)	(6,491,575)	(10,587,357)	(27,080,200)	(44,159,131)	(7,065,750)	(11,516,250)	(32,628,500)	(51,210,500)
<b>Net Cash Provided By (Used In) Capital and Related Activities</b>	<b>(1,090,129)</b>	<b>(2,784,420)</b>	<b>(4,619,444)</b>	<b>(8,493,993)</b>	<b>(7,431,149)</b>	<b>(9,653,282)</b>	<b>(23,834,798)</b>	<b>(40,919,229)</b>	<b>(6,494,644)</b>	<b>(10,731,729)</b>	<b>(23,387,007)</b>	<b>(40,613,380)</b>	<b>(7,065,750)</b>	<b>(11,650,297)</b>	<b>(25,202,832)</b>	<b>(43,918,879)</b>
<b>Cash Flows From Investing Activities</b>																
Investments Converting To Cash	-	-	-	-	735,000	2,408,000	-	3,143,000	735,000	2,408,000	-	3,143,000	-	500,000	-	500,000
Purchased Investments	-	-	-	-	(490,000)	(1,919,000)	-	(2,409,000)	(735,000)	(1,919,000)	-	(2,654,000)	-	-	-	-
Interest Income	75,919	53,480	483,059	612,458	697,464	636,313	5,755,319	7,089,096	692,236	632,188	5,797,689	7,122,113	130,452	130,271	984,881	1,245,604
<b>Net Cash Provided By (Used In) Investing Activities</b>	<b>75,919</b>	<b>53,480</b>	<b>483,059</b>	<b>612,458</b>	<b>942,464</b>	<b>1,125,313</b>	<b>5,755,319</b>	<b>7,823,096</b>	<b>692,236</b>	<b>1,121,188</b>	<b>5,797,689</b>	<b>7,611,113</b>	<b>130,452</b>	<b>630,271</b>	<b>984,881</b>	<b>1,745,604</b>
<b>FUND NET CASH FLOWS</b>	<b>(485,427)</b>	<b>(1,891,800)</b>	<b>(9,255,314)</b>	<b>(11,632,542)</b>	<b>806,020</b>	<b>7,556,058</b>	<b>59,299,522</b>	<b>67,661,600</b>	<b>2,633,939</b>	<b>4,703,254</b>	<b>55,832,338</b>	<b>63,169,531</b>	<b>1,446,849</b>	<b>347,045</b>	<b>2,940,507</b>	<b>4,734,400</b>
<b>DEBT SERVICE RATIO</b>																
<b>Debt Service Ratio (Indenture Based)</b>																
Total Operating Revenues	1,343,245	(770,585)	4,946,519	5,519,179	17,419,721	17,161,729	58,218,846	92,800,296	17,524,394	19,201,227	56,080,070	92,805,692	17,485,300	19,128,454	55,555,506	92,169,260
Total Operating Expenses (Cash Based)	(762,809)	(1,258,093)	(1,646,779)	(3,667,680)	(11,554,955)	(15,250,603)	(20,870,533)	(47,676,092)	(11,756,350)	(15,995,862)	(24,018,892)	(51,771,104)	(12,040,242)	(15,238,763)	(24,255,560)	(51,534,565)
Interest Income	75,919	53,480	483,059	612,458	697,464	636,313	5,755,319	7,089,096	692,236	632,188	5,797,689	7,122,113	130,452	130,271	984,881	1,245,604
Annual Lease Payment (City)	-	-	(109,019)	(109,019)	-	-	(1,308,224)	(1,308,224)	-	-	(1,308,224)	(1,308,224)	-	-	(1,308,224)	(1,308,224)
Total Non-Operating Revenues (Expenses)	70,216	4,348	275,423	349,986	929,534	1,391,719	(2,132,573)	188,680	1,207,362	1,511,128	3,615,564	6,334,054	1,128,574	1,564,753	3,699,400	6,392,722
<b>Cash Available For Debt Service</b>	<b>726,571</b>	<b>(1,970,851)</b>	<b>3,949,204</b>	<b>2,704,925</b>	<b>7,491,764</b>	<b>3,939,157</b>	<b>39,662,836</b>	<b>51,093,757</b>	<b>7,667,642</b>	<b>5,348,681</b>	<b>40,166,207</b>	<b>53,182,530</b>	<b>6,704,084</b>	<b>5,584,715</b>	<b>34,676,003</b>	<b>46,964,802</b>
Interest Paid	97,264	15,495	1,109,894	1,222,652	1,167,162	185,934	13,318,734	14,671,830	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	2,254,324	1,010,486	2,945,000	6,209,810	2,254,324	1,010,486	2,945,000	6,209,810	2,254,324	1,010,486	2,945,000	6,209,810
<b>Total Debt Service</b>	<b>285,124</b>	<b>99,702</b>	<b>1,355,311</b>	<b>1,740,137</b>	<b>3,421,486</b>	<b>1,196,420</b>	<b>16,263,734</b>	<b>20,881,640</b>	<b>3,421,486</b>	<b>1,196,420</b>	<b>16,263,734</b>	<b>20,881,640</b>	<b>3,421,486</b>	<b>1,196,420</b>	<b>16,260,397</b>	<b>20,878,303</b>
<b>Debt Service Ratio</b>	<b>2.55</b>	<b>(19.77)</b>	<b>2.91</b>	<b>1.55</b>	<b>2.19</b>	<b>3.29</b>	<b>2.44</b>	<b>2.45</b>	<b>2.24</b>	<b>4.47</b>	<b>2.47</b>	<b>2.55</b>	<b>1.96</b>	<b>4.67</b>	<b>2.13</b>	<b>2.25</b>

LEHIGH COUNTY AUTHORITY  
FINANCIAL STATEMENTS - SUBURBAN WATER  
For the Period Ended December 31, 2024

STATEMENTS OF ACTIVITIES

	Month				
	Actual	Q4 FC	Prior Year	FC Var	PY Var
Operating Revenues:					
User Charges	1,343,245	1,583,250	1,324,664	(240,004)	18,581
Connection & System Charges	31,769	282,286	206,776	(250,517)	(175,007)
Other Miscellaneous Revenues	38,447	55,027	155,606	(16,580)	(117,159)
Total Operating Revenues	1,413,461	1,920,563	1,687,047	(507,102)	(273,586)
Operating Expenses:					
Personnel	411,907	24,766	(19,101)	(387,142)	(431,009)
Shared Services - General & Administrative	59,215	109,117	56,525	49,902	(2,691)
Utilities	21,944	63,351	52,260	41,407	30,316
Materials and Supplies	89,684	204,082	112,879	114,398	23,195
Miscellaneous Services	180,058	103,806	508,619	(76,253)	328,560
Treatment and Transportation	-	-	-	-	-
Depreciation and Amortization	297,790	890,483	1,063,048	592,693	765,258
Major Maintenance Expenses	-	-	-	-	-
Other Miscellaneous	-	93,100	-	93,100	-
Total Operating Expenses	1,060,599	1,488,704	1,774,229	428,105	713,630
Net Operating Profit	352,862	431,859	(87,183)	(78,998)	440,045
Non-Operating Income (Expense)					
Interest Income	75,919	479,250	30,616	(403,330)	45,303
Interest (Expense)	(84,433)	(34,905)	255,948	(49,528)	(340,381)
Other Miscellaneous	-	(12,312)	4,785,105	12,312	(4,785,105)
Net Non-Operating Income (Expense)	(8,513)	432,033	5,071,669	(440,547)	(5,080,183)
Net Income (Loss)	344,348	863,892	4,984,487	(519,544)	(4,640,138)

CASH FLOW STATEMENT

Cash Flows From Operating Activities					
Operating Revenues	1,413,461	1,920,563	1,687,047	(507,102)	(273,586)
Operating Expenses (ex D&A)	(762,809)	(598,221)	(711,181)	(164,588)	(51,628)
Non-Cash Working Capital Changes	(121,870)	1,030,675	355,473	(1,152,545)	(477,343)
Net Cash Provided by (Used in) Operating Activities	528,782	2,353,017	1,331,338	(1,824,235)	(802,556)
Cash Flows From Financing Activities					
Capital Contributions	-	-	-	-	-
Proceeds New Borrowing	-	-	-	-	-
Interest Payments	-	(800)	(904)	800	904
Principal Payments	-	(9,098)	(6,339)	9,098	6,339
Net Cash Provided by (Used in) Financing Activities	-	(9,899)	(7,243)	9,899	7,243
Cash Flows from Capital and Related Activities					
Non-Operating Income (Expenses)	-	(12,312)	(104,544)	12,312	104,544
Capital Expenditures, net	(1,090,129)	(65,000)	(1,356,036)	(1,025,129)	265,907
Net Cash Provided By (Used In) Capital and Related Activities	(1,090,129)	(77,312)	(1,460,580)	(1,012,817)	370,451
Cash Flows From Investing Activities					
Investments Converting To Cash	-	-	-	-	-
Purchased Investments	-	(245,000)	-	245,000	-
Interest Income	75,919	479,250	30,616	(403,330)	45,303
Net Cash Provided By (Used In) Investing Activities	75,919	234,250	30,616	(158,330)	45,303
FUND NET CASH FLOWS	(485,427)	2,500,056	(105,868)	(2,985,484)	(379,559)

DEBT SERVICE RATIO

Debt Service Ratio (Indenture Based)					
User Charges	1,343,245	1,583,250	1,324,664	(240,004)	18,581
Operating Expenses (Cash Based)	(762,809)	(598,221)	(711,181)	(164,588)	(51,628)
Interest Income	75,919	479,250	30,616	(403,330)	45,303
Annual Lease Payment (City)	-	-	-	-	-
Non-Operating Revenues (Expenses)	70,216	325,001	5,147,487	(254,786)	(5,077,271)
Cash Available For Debt Service	726,571	1,789,280	5,791,586	(1,062,709)	(5,065,015)
Debt Service					
Interest Paid	95,561	95,561	108,179	-	(12,618)
Debt Retirement (Principal Payments)	173,481	173,481	167,545	-	5,936
Total Debt Service	269,042	269,042	275,724	-	(6,682)
Debt Service Ratio	2.70	6.65	21.00	(3.95)	(18.30)

Suburban - Water					
Year To Date					
Actual	Q4 FC	Prior Year	FC Var	PY Var	
17,419,721	17,524,394	16,493,151	(104,673)	926,570	
781,191	1,034,156	730,402	(252,964)	50,790	
149,898	176,276	207,520	(26,377)	(57,622)	
18,350,811	18,734,826	17,431,073	(384,015)	919,738	
4,267,610	4,271,437	3,475,597	3,827	(792,013)	
818,660	1,066,844	725,136	248,184	(93,524)	
492,836	531,376	489,997	38,541	(2,839)	
889,667	1,086,624	688,942	196,956	(200,725)	
5,086,183	4,706,969	4,077,315	(379,213)	(1,008,867)	
-	-	-	-	-	
3,573,453	3,650,624	3,898,085	77,170	324,632	
-	-	-	-	-	
-	93,100	-	93,100	-	
15,128,409	15,406,973	13,355,072	278,564	(1,773,337)	
3,222,402	3,327,853	4,076,001	(105,451)	(853,599)	
697,464	692,236	339,479	5,228	357,985	
(1,436,834)	(1,353,641)	(954,076)	(83,193)	(482,758)	
(1,556)	(3,070)	4,805,551	1,514	(4,807,106)	
(740,926)	(664,475)	4,190,954	(76,450)	(4,931,879)	
2,481,476	2,663,377	8,266,955	(181,901)	(5,785,478)	

18,350,811	18,734,826	17,431,073	(384,015)	919,738	
(11,554,955)	(11,756,350)	(9,456,987)	201,394	(2,097,969)	
(1,514,019)	(362,014)	(2,364,689)	(1,152,005)	850,670	
5,281,836	6,616,462	5,609,397	(1,334,626)	(327,561)	
-	-	-	-	-	
5,241,371	5,241,371	6,950,000	-	(1,708,629)	
(1,146,731)	(1,167,162)	(1,298,151)	20,431	151,420	
(2,081,771)	(2,254,324)	(2,010,541)	172,553	(71,231)	
2,012,869	1,819,885	3,641,309	192,984	(1,628,440)	
(1,556)	(3,070)	(84,098)	1,514	82,543	
(7,429,593)	(6,491,575)	(6,085,513)	(938,019)	(1,344,080)	
(7,431,149)	(6,494,644)	(6,169,612)	(936,505)	(1,261,537)	
735,000	735,000	988,000	-	(253,000)	
(490,000)	(735,000)	(979,000)	245,000	489,000	
697,464	692,236	339,479	5,228	357,985	
942,464	692,236	348,479	250,228	593,985	
806,020	2,633,939	3,429,573	(1,827,918)	(2,623,553)	

17,419,721	17,524,394	16,493,151	(104,673)	926,570	
(11,554,955)	(11,756,350)	(9,456,987)	201,394	(2,097,969)	
697,464	692,236	339,479	5,228	357,985	
-	-	-	-	-	
929,534	1,207,362	5,743,472	(277,828)	(4,813,938)	
7,491,764	7,667,642	13,119,116	(175,879)	(5,627,352)	
1,146,731	1,146,731	1,298,151	-	(151,420)	
2,081,771	2,081,771	2,010,541	-	71,231	
3,228,502	3,228,502	3,308,691	-	(80,189)	
2.32	2.37	3.97	(0.05)	(1.64)	

Full Year					
Actual	Budget	Prior Year	Bud Var	PY Var	
17,419,721	17,485,300	16,493,151	(65,579)	926,570	
781,191	950,850	730,402	(169,659)	50,790	
149,898	177,724	207,520	(27,826)	(57,622)	
18,350,811	18,613,874	17,431,073	(263,063)	919,738	
4,267,610	4,269,081	3,475,597	1,471	(792,013)	
818,660	1,136,102	725,136	317,442	(93,524)	
492,836	537,998	489,997	45,162	(2,839)	
889,667	1,197,810	688,942	308,143	(200,725)	
5,086,183	4,806,151	4,077,315	(280,032)	(1,008,867)	
-	-	-	-	-	
3,573,453	3,517,000	3,898,085	(56,453)	324,632	
-	-	-	-	-	
-	93,100	-	93,100	-	
15,128,409	15,557,242	13,355,072	428,833	(1,773,337)	
3,222,402	3,056,632	4,076,001	165,770	(853,599)	
697,464	130,452	339,479	567,012	357,985	
(1,436,834)	(1,167,162)	(954,076)	(269,672)	(482,758)	
(1,556)	-	4,805,551	(1,556)	(4,807,106)	
(740,926)	(1,036,710)	4,190,954	295,784	(4,931,879)	
2,481,476	2,019,922	8,266,955	461,554	(5,785,478)	

18,350,811	18,613,874	17,431,073	(263,063)	919,738	
(11,554,955)	(12,040,242)	(9,456,987)	485,287	(2,097,969)	
(1,514,019)	1	(2,364,689)	(1,514,020)	850,670	
5,281,836	6,573,633	5,609,397	(1,291,796)	(327,560)	
-	-	-	-	-	
5,241,371	5,230,000	6,950,000	11,371	(1,708,629)	
(1,146,731)	(1,167,162)	(1,298,151)	20,431	151,420	
(2,081,771)	(2,254,324)	(2,010,541)	172,553	(71,231)	
2,012,869	1,808,514	3,641,309	204,355	(1,628,440)	
(1,556)	-	(84,098)	(1,556)	82,543	
(7,429,593)	(7,065,750)	(6,085,513)	(363,843)	(1,344,080)	
(7,431,149)	(7,065,750)	(6,169,612)	(365,399)	(1,261,537)	
735,000	-	988,000	735,000	(253,000)	
(490,000)	-	(979,000)	(490,000)	489,000	
697,464	130,452	339,479	567,012	357,985	
942,464	130,452	348,479	812,012	593,985	
806,020	1,446,849	3,429,573	(640,828)	(2,623,553)	

17,419,721	17,485,300	16,493,151	(65,579)	926,570	
(11,554,955)	(12,040,242)	(9,456,987)	485,287	(2,097,969)	
697,464	130,452	339,479	567,012	357,985	
-	-	-	-	-	
929,534	1,128,574	5,743,472	(199,040)	(4,813,938)	
7,491,764	6,704,084	13,119,116	787,680	(5,627,352)	
1,146,731	1,167,162	1,298,151	(20,431)	(151,420)	
2,081,771	2,254,324	2,010,541	(172,553)	71,231	
3,228,502	3,421,486	3,308,691	(192,984)	(80,189)	
2.32	1.96	3.97	0.36	(1.64)	

LEHIGH COUNTY AUTHORITY  
VARIANCE ANALYSIS - YTD  
For the Period Ended December 31, 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	Q4 FC	FC Var	Comments
17,419,721	17,524,394	(104,673)	Higher industrial, commercial, and residential revenue more than offset by lower miscellaneous revenues
781,191	1,034,156	(252,964)	Lower Developer reimbursement
149,898	176,276	(26,377)	
<b>18,350,811</b>	<b>18,734,826</b>	<b>(384,015)</b>	<b>Lower user charges and lower system charges</b>
4,267,610	4,271,437	3,827	
818,660	1,066,844	248,184	
492,836	531,376	38,541	
889,667	1,086,624	196,956	
5,086,183	4,706,969	(379,213)	
-	-	-	
3,573,453	3,650,624	77,170	
-	-	-	
-	93,100	93,100	
<b>15,128,409</b>	<b>15,406,973</b>	<b>278,564</b>	<b>Favorable across the board except for higher services spending</b>
<b>3,222,402</b>	<b>3,327,853</b>	<b>(105,451)</b>	<b>Lower operating revenues partially offset by lower operating expenses</b>
697,464	692,236	5,228	
(1,436,834)	(1,353,641)	(83,193)	
(1,556)	(3,070)	1,514	
<b>(740,926)</b>	<b>(664,475)</b>	<b>(76,450)</b>	<b>Higher interest expense</b>
<b>2,481,476</b>	<b>2,663,377</b>	<b>(181,901)</b>	<b>Lower and operating income and higher interest expense</b>

18,350,811	18,734,826	(384,015)	
(11,554,955)	(11,756,350)	201,394	
(1,514,019)	(362,014)	(1,152,005)	
<b>5,281,836</b>	<b>6,616,462</b>	<b>(1,334,626)</b>	<b>Lower operating revenues and unfavorable working capital movements</b>
-	-	-	
5,241,371	5,241,371	-	
(1,146,731)	(1,167,162)	20,431	
(2,081,771)	(2,254,324)	172,553	
<b>2,012,869</b>	<b>1,819,885</b>	<b>192,984</b>	<b>Lower debt service</b>
(1,556)	(3,070)	1,514	
(7,429,593)	(6,491,575)	(938,019)	
<b>(7,431,149)</b>	<b>(6,494,644)</b>	<b>(936,505)</b>	<b>Higher capex</b>
735,000	735,000	-	
(490,000)	(735,000)	245,000	
697,464	692,236	5,228	
<b>942,464</b>	<b>692,236</b>	<b>250,228</b>	<b>Favorable financial activities</b>
<b>806,020</b>	<b>2,633,939</b>	<b>(1,827,918)</b>	<b>Lower cash from operations and higher capex</b>

LEHIGH COUNTY AUTHORITY  
FINANCIAL STATEMENTS - SUBURBAN WASTEWATER  
For the Period Ended December 31, 2024

STATEMENTS OF ACTIVITIES

Operating Revenues:

User Charges	(770,585)	1,484,479	1,966,431	(2,255,065)	(2,737,016)
Connection & System Charges	-	573,837	34,348	(573,837)	(34,348)
Other Miscellaneous Revenues	30	927	60	(897)	(30)

Total Operating Revenues (770,555) 2,059,244 2,000,839 (2,829,799) (2,771,394)

Operating Expenses:

Personnel	163,474	(681)	194,176	(164,155)	30,702
Shared Services - General & Administrative	19,475	36,285	27,964	16,810	8,489
Utilities	9,917	29,756	19,041	19,839	9,124
Materials and Supplies	45,156	66,506	48,503	21,351	3,348
Miscellaneous Services	631,258	828,470	1,351,624	197,211	720,366
Treatment and Transportation	388,812	457,731	275,000	68,919	(113,812)
Depreciation and Amortization	625,549	1,002,785	1,043,254	377,236	417,705
Major Maintenance Expenses	-	-	(2,706)	-	(2,706)
Other Miscellaneous	-	22,100	133,968	22,100	133,968

Total Operating Expenses 1,883,642 2,442,952 3,090,824 559,311 1,207,183

Net Operating Profit

(2,654,197) (383,709) (1,089,986) (2,270,488) (1,564,211)

Non-Operating Income (Expense)

Interest Income	53,480	404,820	46,670	(351,341)	6,809
Interest (Expense)	(2,718)	(19,246)	(12,920)	16,528	10,202
Other Miscellaneous	4,318	(72,749)	620,292	77,066	(615,975)

Net Non-Operating Income (Expense) 55,079 312,826 654,042 (257,747) (598,963)

Net Income (Loss)

(2,599,118) (70,883) (435,943) (2,528,235) (2,163,175)

CASH FLOW STATEMENT

Cash Flows From Operating Activities

Operating Revenues	(770,555)	2,059,244	2,000,839	(2,829,799)	(2,771,394)
Operating Expenses (ex D&A)	(1,258,093)	(1,440,167)	(2,050,276)	182,074	792,183
Non-Cash Working Capital Changes	2,867,788	(2,304,174)	1,062,098	5,171,962	1,805,690

Net Cash Provided by (Used in) Operating Activities 839,140 (1,685,097) 1,012,661 2,524,238 (173,520)

Cash Flows From Financing Activities

Capital Contributions	-	-	-	-	-
Proceeds New Borrowing	-	-	-	-	-
Interest Payments	(21,742)	(27,604)	(12,243)	27,604	12,243
Principal Payments	(189,163)	(48,569)	189,163	48,569	48,569

Net Cash Provided by (Used in) Financing Activities - (216,767) (60,811) 216,767 60,811

Cash Flows from Capital and Related Activities

Non-Operating Income (Expenses)	4,318	(72,749)	620,292	77,066	(615,975)
Capital Expenditures, net	(2,788,738)	(3,539,145)	(1,727,916)	750,407	(1,060,822)

Net Cash Provided By (Used In) Capital and Related Activities (2,784,420) (3,611,894) (1,107,624) 827,473 (1,676,797)

Cash Flows From Investing Activities

Investments Converting To Cash	-	1,670,000	499,000	(1,670,000)	(499,000)
Purchased Investments	-	(1,180,000)	(245,000)	1,180,000	245,000
Interest Income	53,480	404,820	46,670	(351,341)	6,809

Net Cash Provided By (Used In) Investing Activities 53,480 894,820 300,670 (841,341) (247,191)

FUND NET CASH FLOWS

(1,891,800) (4,618,937) 144,896 2,727,137 (2,036,696)

DEBT SERVICE RATIO

Debt Service Ratio (Indenture Based)

User Charges	(770,585)	1,484,479	1,966,431	(2,255,065)	(2,737,016)
Operating Expenses (Cash Based)	(1,258,093)	(1,440,167)	(2,047,570)	182,074	789,478
Interest Income	53,480	404,820	46,670	(351,341)	6,809
Annual Lease Payment (City)	-	-	-	-	-
Non-Operating Revenues (Expenses)	4,348	502,016	654,700	(497,668)	(650,352)

Cash Available For Debt Service (1,970,851) 951,149 620,231 (2,921,999) (2,591,081)

Interest Paid	10,145	10,145	12,296	-	(2,151)
Debt Retirement (Principal Payments)	239,844	239,844	48,028	-	191,816

Total Debt Service 249,989 249,989 60,325 - 189,665

Debt Service Ratio

(7.88) 3.80 10.28 (11.69) (18.17)

Suburban - Wastewater

Year To Date

Actual	Q4 FC	Prior Year	FC Var	PY Var
--------	-------	------------	--------	--------

17,161,729	19,201,227	18,488,050	(2,039,498)	(1,326,321)
1,350,898	1,652,882	1,371,193	(301,985)	(20,296)
405	2,618	585	(2,213)	(180)

18,513,031 20,856,727 19,859,828 (2,343,696) (1,346,797)

1,740,883	1,740,118	1,811,893	(764)	71,010
329,877	428,822	337,395	98,945	7,519
263,757	320,045	238,267	56,288	(25,491)
378,342	472,867	391,409	94,525	13,068
7,030,638	7,492,424	7,678,739	461,786	648,101
5,507,107	5,519,486	3,903,664	12,379	(1,603,443)
6,956,464	7,031,500	6,705,023	77,236	(251,440)
-	-	-	-	-
-	22,100	133,968	22,100	133,968

22,207,067 23,027,362 21,200,358 820,295 (1,006,708)

(3,694,035) (2,170,635) (1,340,530) (1,523,401) (2,353,505)

636,313	632,188	454,362	4,125	181,951
(136,537)	(178,764)	(155,847)	42,227	19,311
40,416	(144,372)	707,714	184,788	(667,298)

540,193 309,052 1,006,228 231,140 (466,036)

(3,153,843) (1,861,583) (334,302) (1,292,260) (2,819,541)

Full Year

Actual	Budget	Prior Year	Bud Var	PY Var
--------	--------	------------	---------	--------

17,161,729	19,128,454	18,488,050	(1,966,725)	(1,326,321)
1,350,898	1,695,900	1,371,193	(345,003)	(20,296)
405	2,900	585	(2,495)	(180)

18,513,031 20,827,254 19,859,828 (2,314,223) (1,346,797)

1,740,883	1,766,601	1,811,893	25,718	71,010
329,877	456,840	337,395	126,963	7,519
263,757	313,870	238,267	50,113	(25,491)
378,342	518,722	391,409	140,380	13,068
7,030,638	7,631,090	7,678,739	600,452	648,101
5,507,107	4,529,540	3,903,664	(977,567)	(1,603,443)
6,956,464	7,031,500	6,705,023	75,036	(251,440)
-	-	-	-	-
-	22,100	133,968	22,100	133,968

22,207,067 22,270,263 21,200,358 63,196 (1,006,708)

(3,694,035) (1,443,009) (1,340,530) (2,251,026) (2,353,505)

636,313	130,271	454,362	506,042	181,951
(136,537)	(185,934)	(155,847)	49,397	19,311
40,416	(134,047)	707,714	174,463	(667,298)

540,193 (189,710) 1,006,228 729,903 (466,036)

(3,153,843) (1,632,719) (334,302) (1,521,124) (2,819,541)

LEHIGH COUNTY AUTHORITY  
VARIANCE ANALYSIS - YTD  
For the Period Ended December 31, 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	Q4 FC	FC Var	Comments	
17,161,729	19,201,227	(2,039,498)	Lower municipal charges	
1,350,898	1,652,882	(301,985)		
405	2,618	(2,213)		
18,513,031	20,856,727	(2,343,696)	Lower user charges and lower system charges	
1,740,883	1,740,118	(764)		
329,877	428,822	98,945		
263,757	320,045	56,288		
378,342	472,867	94,525		
7,030,638	7,492,424	461,786		
5,507,107	5,519,486	12,379		
6,956,464	7,031,500	75,036		
-	-	-		
-	22,100	22,100	Almost entirely favorable across the board	
22,207,067	23,027,362	820,295		
(3,694,035)	(2,170,635)	(1,523,401)	Lower operating revenues	
636,313	632,188	4,125		
(136,537)	(178,764)	42,227		
40,416	(144,372)	184,788		
540,193	309,052	231,140		
(3,153,843)	(1,861,583)	(1,292,260)	Lower net operating profit a little offset by favorable financial activity	
18,513,031	20,856,727	(2,343,696)	Lower net operating income more than offset by favorable working capital movements	
(15,250,603)	(15,995,862)	745,259		
4,821,472	(350,650)	5,172,122		
8,083,901	4,510,215	3,573,685		
-	-	-		
11,000,000	11,000,000	-		
(121,742)	(185,934)	64,192		
(2,878,132)	(1,010,486)	(1,867,646)		
8,000,126	9,803,580	(1,803,454)	Higher debt service	
40,416	(144,372)	184,788		
(9,693,698)	(10,587,357)	893,659		
(9,653,282)	(10,731,729)	1,078,447	Lower capex	
2,408,000	2,408,000	-		
(1,919,000)	(1,919,000)	-		
636,313	632,188	4,125		
1,125,313	1,121,188	4,125		
7,556,058	4,703,254	2,852,804	Higher cash from operating activities and lower capex offset partly by higher debt service	

LEHIGH COUNTY AUTHORITY  
FINANCIAL STATEMENTS - CITY DIVISION  
For the Period Ended December 31, 2024

STATEMENTS OF ACTIVITIES

Operating Revenues:

User Charges	4,946,519	3,120,858	4,899,868	1,825,661	46,651
Connection & System Charges	235,017	745,185	1,158,118	(510,167)	(923,101)
Other Miscellaneous Revenues	40,406	2,026	38,267	38,380	2,138
<b>Total Operating Revenues</b>	<b>5,221,942</b>	<b>3,868,069</b>	<b>6,096,254</b>	<b>1,353,873</b>	<b>(874,312)</b>

Operating Expenses:

Personnel	1,113,202	1,481,830	1,277,168	368,628	163,966
Shared Services - General & Administrative	141,385	219,866	148,864	78,481	7,479
Utilities	69,780	350,083	122,946	280,302	53,166
Materials and Supplies	164,477	455,793	432,095	291,316	267,618
Miscellaneous Services	156,808	390,773	497,654	233,965	340,846
Treatment and Transportation	-	600	-	600	-
Depreciation and Amortization	765,849	917,960	1,053,413	152,111	287,564
Major Maintenance Expenses	1,126	3,987,631	(843,590)	3,986,505	(844,716)
Other Miscellaneous	-	-	5,782,103	-	5,782,103
<b>Total Operating Expenses</b>	<b>2,412,627</b>	<b>7,804,536</b>	<b>8,470,653</b>	<b>5,391,909</b>	<b>6,058,026</b>

Net Operating Profit

	<b>2,809,315</b>	<b>(3,936,467)</b>	<b>(2,374,399)</b>	<b>6,745,782</b>	<b>5,183,714</b>
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Non-Operating Income (Expense)

Interest Income	483,059	4,268,125	342,986	(3,785,065)	140,074
Interest (Expense)	(1,710,759)	(4,271,723)	(4,466,401)	2,560,963	2,755,641
Other Miscellaneous	-	8,733,578	12,740	(8,733,578)	(12,740)

Net Non-Operating Income (Expense)

	<b>(1,227,700)</b>	<b>8,729,980</b>	<b>(4,110,675)</b>	<b>(9,957,680)</b>	<b>2,882,975</b>
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Net Income (Loss)

	<b>1,581,615</b>	<b>4,793,513</b>	<b>(6,485,074)</b>	<b>(3,211,898)</b>	<b>8,066,689</b>
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CASH FLOW STATEMENT

Cash Flows From Operating Activities

Operating Revenues	5,221,942	3,868,069	6,096,254	1,353,873	(874,312)
Operating Expenses (ex D&A)	(1,645,653)	(2,898,945)	(8,260,831)	1,253,292	6,615,178
Non-Cash Working Capital Changes	(8,695,219)	3,507,327	4,749,360	(12,202,546)	(13,444,579)

Net Cash Provided by (Used in) Operating Activities

	<b>(5,118,890)</b>	<b>4,476,451</b>	<b>2,584,784</b>	<b>(9,595,380)</b>	<b>(7,703,713)</b>
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Cash Flows From Financing Activities

Capital Contributions	-	-	-	-	-
Proceeds New Borrowing	-	-	-	-	-
Interest Payments	-	(6,775,545)	(5,951,378)	6,775,545	5,951,378
Principal Payments	-	3,341,934	(2,201,768)	(3,341,934)	2,201,768

Net Cash Provided by (Used in) Financing Activities

	<b>-</b>	<b>(3,433,611)</b>	<b>(8,153,145)</b>	<b>3,433,611</b>	<b>8,153,145</b>
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Cash Flows from Capital and Related Activities

Non-Operating Income (Expenses)	-	8,733,578	(5,200)	(8,733,578)	5,200
Capital Expenditures, net	(4,619,444)	(13,272,333)	(3,269,192)	8,652,889	(1,350,252)

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

	<b>(4,619,444)</b>	<b>(4,538,755)</b>	<b>(3,274,392)</b>	<b>(80,688)</b>	<b>(1,345,052)</b>
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Cash Flows From Investing Activities

Investments Converting To Cash	-	-	-	-	-
Purchased Investments	-	-	-	-	-
Interest Income	483,059	4,268,125	342,986	(3,785,065)	140,074

Net Cash Provided By (Used In) Investing Activities

	<b>483,059</b>	<b>4,268,125</b>	<b>342,986</b>	<b>(3,785,065)</b>	<b>140,074</b>
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FUND NET CASH FLOWS

	<b>(9,255,314)</b>	<b>772,209</b>	<b>(8,499,768)</b>	<b>(10,027,523)</b>	<b>(755,546)</b>
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DEBT SERVICE RATIO

Debt Service Ratio (Indenture Based)

User Charges	4,946,519	3,120,858	4,899,868	1,825,661	46,651
Operating Expenses (Cash Based)	(1,646,779)	(6,886,576)	(7,417,241)	5,239,797	5,770,462
Interest Income	483,059	4,268,125	342,986	(3,785,065)	140,074
Annual Lease Payment (City)	(109,019)	(109,019)	(113,432)	-	4,413
Non-Operating Revenues (Expenses)	275,423	9,480,789	1,209,126	(9,205,365)	(933,703)

Cash Available For Debt Service

	<b>3,949,204</b>	<b>9,874,177</b>	<b>(1,078,692)</b>	<b>(5,924,973)</b>	<b>5,027,896</b>
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

	<b>1,355,311</b>	<b>1,355,311</b>	<b>1,159,845</b>	<b>-</b>	<b>195,466</b>
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Debt Service Ratio

	<b>2.91</b>	<b>7.29</b>	<b>(0.93)</b>	<b>(4.37)</b>	<b>3.84</b>
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City Division

Year To Date

Actual	Q4 FC	Prior Year	FC Var	PY Var
58,218,846	56,080,070	52,162,410	2,138,776	6,056,436
3,020,974	3,529,115	5,487,746	(508,142)	(2,466,772)
254,620	86,448	182,595	168,172	72,025
<b>61,494,440</b>	<b>59,695,634</b>	<b>57,832,751</b>	<b>1,798,806</b>	<b>3,661,690</b>

11,840,977	13,927,623	11,576,407	2,086,646	(264,570)
2,127,009	2,446,827	2,040,469	319,817	(86,540)
1,833,941	2,018,931	1,898,483	184,990	64,543
3,081,830	3,280,826	3,218,805	198,996	136,975
1,936,805	2,332,686	2,247,835	395,882	311,030
11,933	12,000	11,307	67	(626)
6,437,020	6,260,297	6,755,624	(176,722)	318,604
38,038	4,000,000	-	3,961,962	(38,038)
-	-	5,782,103	-	5,782,103
<b>27,307,553</b>	<b>34,279,190</b>	<b>33,531,033</b>	<b>6,971,637</b>	<b>6,223,480</b>

Net Operating Profit

<b>34,186,888</b>	<b>25,416,445</b>	<b>24,301,718</b>	<b>8,770,443</b>	<b>9,885,170</b>
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Non-Operating Income (Expense)

5,755,319	5,797,689	3,466,498	(42,369)	2,288,821
(16,783,652)	(19,703,642)	(19,980,878)	2,919,990	3,197,226
(5,408,167)	5,001,417	-	(10,409,584)	(5,408,167)

Net Non-Operating Income (Expense)

<b>(16,436,500)</b>	<b>(8,904,536)</b>	<b>(16,514,379)</b>	<b>(7,531,963)</b>	<b>77,880</b>
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Net Income (Loss)

<b>17,750,388</b>	<b>16,511,908</b>	<b>7,787,339</b>	<b>1,238,480</b>	<b>9,963,049</b>
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61,494,440	59,695,634	57,832,751	1,798,806	3,661,690
(20,832,495)	(24,018,892)	(26,775,409)	3,186,398	5,942,914
(13,193,607)	(991,352)	3,580,831	(12,202,255)	(16,774,438)
<b>27,468,338</b>	<b>34,685,390</b>	<b>34,638,172</b>	<b>(7,217,051)</b>	<b>(7,169,834)</b>

55,000,000	55,000,000	1,371,118	-	53,628,882
(4,339,771)	(13,318,734)	(11,695,732)	8,978,963	7,355,961
(749,566)	(2,945,000)	(2,222,407)	2,195,434	1,472,841
<b>49,910,662</b>	<b>38,736,266</b>	<b>(12,547,021)</b>	<b>11,174,396</b>	<b>62,457,683</b>

(5,408,167)	3,693,193	(1,361,180)	(9,101,360)	(4,046,987)
(18,426,632)	(27,080,200)	(10,368,819)	8,653,568	(8,057,813)
<b>(23,834,798)</b>	<b>(23,387,007)</b>	<b>(11,729,999)</b>	<b>(447,792)</b>	<b>(12,104,800)</b>

-	-	-	-	-
-	-	-	-	-
5,755,319	5,797,689	3,466,498	(42,369)	2,288,821
<b>5,755,319</b>	<b>5,797,689</b>	<b>3,466,498</b>	<b>(42,369)</b>	<b>2,288,821</b>

FUND NET CASH FLOWS

<b>59,299,522</b>	<b>55,832,338</b>	<b>13,827,651</b>	<b>3,467,184</b>	<b>45,471,870</b>
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DEBT SERVICE RATIO

Debt Service Ratio (Indenture Based)

58,218,846	56,080,070	52,162,410	2,138,776	6,056,436
(20,870,533)	(28,018,892)	(26,775,409)	7,148,359	5,904,876
5,755,319	5,797,689	3,466,498	(42,369)	2,288,821
(1,308,224)	(12,210,091)	(1,361,180)	10,901,867	52,956
(2,132,573)	8,616,981	5,670,340	(10,749,554)	(7,802,913)

Cash Available For Debt Service

39,662,836	30,265,757	33,162,660	9,397,079	6,500,176
13,318,734	13,318,734	11,695,732	-	1,623,002
2,945,000	2,945,000	2,222,407	-	722,593

Total Debt Service

16,263,734	16,263,734	13,918,139	-	2,345,595
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Debt Service Ratio

<b>2.44</b>	<b>1.86</b>	<b>2.38</b>	<b>0.58</b>	<b>0.06</b>
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Full Year

Actual	Budget	Prior Year	Bud Var	PY Var
58,218,846	55,555,506	52,162,410	2,663,340	6,056,436
3,020,974	3,609,600	5,487,746	(588,626)	(2,466,772)
254,620	89,800	182,595	164,820	72,025
<b>61,494,440</b>	<b>59,254,906</b>	<b>57,832,751</b>	<b>2,239,534</b>	<b>3,661,690</b>

11,840,977	13,986,737	11,576,407	2,145,760	(264,570)
2,127,009	2,545,190	2,040,469	418,181	(86,540)
1,833,941	2,063,922	1,898,483	229,981	64,543
3,081,830	3,251,300	3,218,805	169,470	136,975
1,936,805	2,397,011	2,247,835	460,206	311,030
11,933	11,400	11,307	(533)	(626)
6,437,020	6,169,850	6,755,624	(267,170)	318,604
38,038	4,000,000	-	3,961,962	(38,038)
-	-	5,782,103	-	5,782,103
<b>27,307,553</b>	<b>34,425,410</b>	<b>33,531,033</b>	<b>7,117,857</b>	<b>6,223,480</b>

Net Operating Profit

<b>34,186,888</b>	<b>24,829,496</b>	<b>24,301,718</b>	<b>9,357,392</b>	<b>9,885,170</b>
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Non-Operating Income (Expense)

5,755,319	984,881	3,466,498	4,770,438	2,288,821
(16,783,652)	(19,703,642)	(19,980,878)	2,919,990	3,197,226
(5,408,167)	8,733,892	-	(14,142,059)	(5,408,167)

Net Non-Operating Income (Expense)

<b>(16,436,500)</b>	<b>(9,984,869)</b>	<b>(16,514,379)</b>	<b>(6,451,631)</b>	<b>77,880</b>
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Net Income (Loss)

<b>17,750,388</b>	<b>14,844,627</b>	<b>7,787,339</b>	<b>2,905,761</b>	<b>9,963,049</b>
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61,494,440	59,254,906	57,832,751	2,239,534	3,661,690
(20,832,495)	(24,255,560)	(26,775,409)	3,423,065	5,942,914
(13,193,607)	(135,999)	3,580,831	(13,057,608)	(16,774,438)
<b>27,468,338</b>	<b>34,863,347</b>	<b>34,638,173</b>	<b>(7,395,008)</b>	<b>(7,169,834)</b>

55,000,000	8,555,508	1,371,118	46,444,492	53,628,882
(4,339,771)	(13,315,397)	(11,695,732)	8,975,626	7,355,961
(749,566)	(2,945,000)	(2,222,407)	2,195,434	1,472,841
<b>49,910,662</b>	<b>(7,704,889)</b>	<b>(12,547,021)</b>	<b>57,615,551</b>	<b>62,457,683</b>

(5,408,167)	7,425,668	(1,361,180)	(12,833,835)	(4,046,987)
(18,426,632)	(32,628,500)	(10,368,819)	14,201,869	(8,057,813)
<b>(23,834,798)</b>	<b>(25,202,832)</b>	<b>(11,729,999)</b>	<b>1,368,034</b>	<b>(12,104,800)</b>

LEHIGH COUNTY AUTHORITY  
VARIANCE ANALYSIS - YTD  
For the Period Ended December 31, 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	Q4 FC	FC Var	Comments
58,218,846	56,080,070	2,138,776	Higher municipal charges
3,020,974	3,529,115	(508,142)	Lower development reimbursement
254,620	86,448	168,172	
<b>61,494,440</b>	<b>59,695,634</b>	<b>1,798,806</b>	<b>Higher user charges partially offset by lower system charges</b>
11,840,977	13,927,623	2,086,646	
2,127,009	2,446,827	319,817	
1,833,941	2,018,931	184,990	
3,081,830	3,280,826	198,996	
1,936,805	2,332,686	395,882	
11,933	12,000	67	
6,437,020	6,260,297	(176,722)	
38,038	4,000,000	3,961,962	
<b>27,307,553</b>	<b>34,279,190</b>	<b>6,971,637</b>	<b>All discretionary categories favorable</b>
<b>34,186,888</b>	<b>25,416,445</b>	<b>8,770,443</b>	<b>Higher operating revenues and lower operating expenses</b>
5,755,319	5,797,689	(42,369)	
(16,783,652)	(19,703,642)	2,919,990	
(5,408,167)	5,001,417	(10,409,584)	
<b>(16,436,500)</b>	<b>(8,904,536)</b>	<b>(7,531,963)</b>	<b>Higher loan fees on larger borrowing</b>
<b>17,750,388</b>	<b>16,511,908</b>	<b>1,238,480</b>	<b>Higher net operating income offset by unfavorable financial activity</b>
61,494,440	59,695,634	1,798,806	
(20,832,495)	(24,018,892)	3,186,398	
(13,193,607)	(991,352)	(12,202,255)	
<b>27,468,338</b>	<b>34,685,390</b>	<b>(7,217,051)</b>	<b>Unfavorable working capital movements</b>
-	-	-	
55,000,000	55,000,000	-	
(4,339,771)	(13,318,734)	8,978,963	
(749,566)	(2,945,000)	2,195,434	
<b>49,910,662</b>	<b>38,736,266</b>	<b>11,174,396</b>	<b>Favorable debt service</b>
(5,408,167)	3,693,193	(9,101,360)	
(18,426,632)	(27,080,200)	8,653,568	
<b>(23,834,798)</b>	<b>(23,387,007)</b>	<b>(447,792)</b>	<b>Lower Capex more than offset by unfavorable financial activity</b>
-	-	-	
-	-	-	
5,755,319	5,797,689	(42,369)	
<b>5,755,319</b>	<b>5,797,689</b>	<b>(42,369)</b>	
<b>59,299,522</b>	<b>55,832,338</b>	<b>3,467,184</b>	<b>Lower cash from operations aided by lower debt service and lower capex with a partial offset from unfavorable financial activity</b>

LEHIGH COUNTY AUTHORITY  
CASH & INVESTMENT SUMMARY  
For the Period Ended December 31, 2024

	Suburban Water				Suburban Wastewater				City Division				Total			
	12/31/2024 Actual	2024 Forecast	2024 Budget	2023 Actual	12/31/2024 Actual	2024 Forecast	2024 Budget	2023 Actual	12/31/2024 Actual	2024 Forecast	2024 Budget	2023 Actual	12/31/2024 Actual	2024 Forecast	2024 Budget	2023 Actual
Cash																
Operating																
Unrestricted	(3,103,000)	10,495,080	13,136,985	8,385,525	718,687	15,344,540	3,976,076	3,779,293	19,271,292	24,886,500	15,263,906	13,483,582	16,703,054	50,440,210	32,376,967	25,648,400
Restricted	-	-	-	-	-	3,437	317	2,708	87,196,812	25,737,927	25,438,613	33,121,646	87,196,812	25,741,364	25,438,930	33,124,354
Total Operating	(3,103,000)	10,495,080	13,136,985	8,385,525	718,687	15,347,977	3,976,393	3,782,000	106,468,104	50,624,427	40,702,519	46,605,229	103,899,866	76,181,574	57,815,897	58,772,754
Capital																
Unrestricted	12,823,185	321,054	319,718	321,054	17,040,431	-	5,955,385	6,862,722	660,980	54,804,198	3,022,601	3,022,601	30,524,596	55,125,252	9,297,704	10,206,378
Restricted	-	-	-	-	829,253	338,677	338,360	338,677	7,526,754	7,531,579	7,500,035	7,500,035	8,356,007	7,870,256	7,838,396	7,838,712
Total Capital	12,823,185	321,054	319,718	321,054	17,869,685	338,677	6,293,745	7,201,399	8,187,733	62,335,777	10,522,636	10,522,636	38,880,603	62,995,508	17,136,099	18,045,090
Other Restricted																
Debt Reserves	1,658,337	2,184,599	1,656,568	1,660,215	-	-	-	-	31,800,765	30,004,516	28,335,482	30,004,516	33,459,102	32,189,115	29,992,050	31,664,731
Escrow - Developer Deposits	260,678	466,386	218,888	466,386	7,764	56,678	252,969	56,678	7,407	32,106	32,090	32,106	275,849	555,169	503,947	555,169
Total Other Restricted	1,919,015	2,650,984	1,875,456	2,126,600	7,764	56,678	252,969	56,678	31,808,171	30,036,622	28,367,571	30,036,622	33,734,951	32,744,284	30,495,996	32,219,900
Total Cash	11,639,200	13,467,119	15,332,159	10,833,179	18,596,136	15,743,332	10,523,107	11,040,077	146,464,009	142,996,826	79,592,726	87,164,487	176,515,419	171,921,366	105,447,992	109,037,744
Investments																
Operating																
Unrestricted	1,724,052	2,022,946	1,945,069	2,022,946	7,278,350	8,884,467	6,584,624	6,965,467	-	-	-	-	9,002,402	10,907,412	8,529,693	8,988,412
Restricted	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Operating	1,724,052	2,022,946	1,945,069	2,022,946	7,278,350	8,884,467	6,584,624	6,965,467	-	-	-	-	9,002,402	10,907,412	8,529,693	8,988,412
Capital																
Unrestricted	1,122,019	1,000,184	1,000,000	1,000,184	-	-	-	-	-	-	-	-	1,122,019	1,000,184	1,000,000	1,000,184
Restricted	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Capital	1,122,019	1,000,184	1,000,000	1,000,184	-	-	-	-	-	-	-	-	1,122,019	1,000,184	1,000,000	1,000,184
Other Restricted																
Debt Reserves	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Escrow	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Other Restricted	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Investments	2,846,071	3,023,129	2,945,069	3,023,129	7,278,350	8,884,467	6,584,624	6,965,467	-	-	-	-	10,124,421	11,907,596	9,529,693	9,988,596
Total Cash and Investments	14,485,271	16,490,248	18,277,228	13,856,308	25,874,486	24,627,798	17,107,731	18,005,544	146,464,009	142,996,826	79,592,726	87,164,487	186,639,840	183,828,961	114,977,685	119,026,340
Summary																
Cash																
Unrestricted	9,720,184	10,816,134	13,456,703	8,706,579	17,759,119	15,344,540	9,931,461	10,642,015	19,932,272	79,690,698	18,286,506	16,506,183	47,227,650	105,565,462	41,674,670	35,568,867
Restricted	1,919,015	2,650,984	1,875,456	2,126,600	837,017	398,792	591,646	398,062	126,531,737	63,306,128	61,306,220	70,658,304	129,287,769	66,355,904	63,773,322	73,182,966
Total Cash	11,639,200	13,467,119	15,332,159	10,833,179	18,596,136	15,743,332	10,523,107	11,040,077	146,464,009	142,996,826	79,592,726	87,164,487	176,515,419	171,921,366	105,447,992	108,751,833
Investments																
Unrestricted	2,846,071	3,023,129	2,945,069	3,023,129	7,278,350	8,884,467	6,584,624	6,965,467	-	-	-	-	10,124,421	11,907,596	9,529,693	9,988,596
Restricted	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Investments	2,846,071	3,023,129	2,945,069	3,023,129	7,278,350	8,884,467	6,584,624	6,965,467	-	-	-	-	10,124,421	11,907,596	9,529,693	9,988,596
Total Cash and Investments	14,485,271	16,490,248	18,277,228	13,856,308	25,874,486	24,627,798	17,107,731	18,005,544	146,464,009	142,996,826	79,592,726	87,164,487	186,639,840	183,828,961	114,977,685	118,740,429



CERTIFICATES OF DEPOSIT

DEC 2024

Fund	Bank	Location	Gross Amount	Date of Purchase	Date Due	Net Rate %
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NONE

## 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  
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  
Macungie Crossings Unit 2 6 commercial units, LMT  
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 Estates 2022 Apartments, LMT  
Towneplace Suites by Marriott, 91-room hotel, UMT  
Transedge Truck Center, Warehouse, UMT  
Trexler Point (Towns at Schaefer Run) 128 Townhouses UMT  
Upper Macungie Community Center UMT commercial lot, water and Main Extension  
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  
3121 Rt 309 Nexus 78, NWT, warehouse  
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 extension, Lowhill Township  
3400 Brookside Road, Indian Creek- 26 Single family homes-Main extension, LMT  
3952 Independence Drive, NW  
4054 Chestnut Street Single connection, Umliford  
6045 Reppert Lane 24 Town Homes, UMT  
7150 Hamilton Blvd, Bank, UMT  
Valley at Indian Creek 3510 Macungie Road 22 Single family homes-LMT  
5329-5347-5357 Hamilton Blvd., 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  
Cove at Millbrook, 16 Single Homes, LMT  
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  
Hamilton Square 2 Commercial Lots 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 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  
Twin Ponds 8739 Hamilton Blvd 22 Apts and 1 Daycare UMT  
PA Turnpike Lehigh Valley Interchange, UMT, Removal of domestic line.  
Western Lehigh Development, LMT Garage and office,  
V Parkland 9230 Long Lane, 16 Single family homes, UMT.

### **Sewage Facilities Planning Modules Reviewed in Prior Month:**

Northridge School	1600 Hanover Ave	Allentown	GPD 9,734
760 E Paoli St Minor Subdivision	760 E Paoli St	Salisbury	238
900 E Paoli St Minor Subdivision	900 E Paoli St	Salisbury	238
Lobst Lot Line Adjustment 413, 435 & 437 S 5th St	413, 435 & 437 S 5th St	Emmaus	0