



## BOARD MEETING AGENDA – June 26, 2017

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 public record. Recordings may be retained or destroyed at LCA's discretion.

- *Public Participation Sign-In Request*

2. Review of Agenda / Executive Sessions

3. Approval of Minutes

- *May 22, 2017 Board meeting minutes*

4. Public Comments

5. Action / Discussion Items:

### **FINANCE AND ADMINISTRATION**

#### **WATER**

- *Suburban Division – Pine Lakes Pumping Station Improvements (blue)*
- *Suburban Division – Asset Management Facility Upgrades (yellow)*
- *Allentown Division – Pre-Lease Valve Replacements (green)*
- *Stormwater Injection Wells – Discussion only*

#### **WASTEWATER**

- *Allentown Division – Manhole Collars with Water Tight Frame and Covers: Cycle 4 (ivory)*

6. Monthly Project Updates / Information Items (1<sup>st</sup> Board meeting per month) – **June 2017 report attached**

7. Monthly Financial Review (2<sup>nd</sup> Board meeting per month) – **May 2017 report attached**

8. Monthly System Operations Overview (2<sup>nd</sup> Board meeting per month) – **May 2017 report attached**

9. Staff Comments

10. Solicitor's Comments

11. Public Comments / Other Comments

12. Executive Sessions

13. Adjournment

#### **UPCOMING BOARD MEETINGS**

*Meetings begin at Noon at LCA's Main Office, unless noted otherwise below.*

July 10, 2017

July 24, 2017

August 14, 2017

#### **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**  
**May 22, 2017**

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The Regular Meeting of the Lehigh County Authority was called to order at 12:02 p.m. on Monday, May 22, 2017, Chairman Nagle presiding. Other Members present at the commencement of the meeting were: Linda Rosenfeld, Jeff Morgan, Richard Bohner, Norma Cusick, Scott Bieber and Ted Lyons. Authority Staff present were Liesel Gross, Brad Landon, Chuck Volk, Ed Klein, Pat Mandes, Chris Moughan, John Parsons and Phil DePoe.

**REVIEW OF AGENDA**

Chairman Nagle announced that today's Board meeting is being videotaped and streaming live and recordings will be posted to the Authority's website.

Liesel Gross noted there are no Agenda changes and there will be an Executive Session regarding potential litigation.

**APPROVAL OF MINUTES**

**May 8, 2017 Regular Meeting Minutes**

On a motion by Richard Bohner, seconded by Linda Rosenfeld, the Board approved the Minutes of the May 8, 2017 meeting as presented (7-0).

**PUBLIC COMMENTS**

None.

**ACTION AND DISCUSSION ITEMS**

**2016 Audit & Financial Statements**

Brad Landon clarified that no Board action is required for this item other than an acknowledgement of receipt of the auditors' report.

Ed Klein introduced Corey Troutman and Nate Schwartz from Zelenkoske Axelrod, LLC, who conducted the Authority's 2016 audit. Mr. Troutman provided a brief overview of the audit process and explained that the audit report is presented with a clean opinion with no material issues or weaknesses noted. The audit was completed in accordance with generally accepted accounting principles, and there were no disagreements with Authority management in the preparation of audit statements. Mr. Schwartz provided a more detailed review of the financial statements and notes offered in the audit report. He explained the most notable item included in the Authority's financial outlook is the 2018 debt service payment anticipated, which includes a \$19 million principle payment that may require additional financing. He noted that the concession lease agreement with Allentown is a unique arrangement that makes the financial review more complicated, but that the staff was cooperative and responsive throughout the audit process. Mr. Klein provided additional recognition for the accounting department staff who put the extra effort into ensuring the accuracy of the Authority's financial reporting process.

After a series of questions from Board members that were answered by Mssrs. Troutman and Schwartz, Brian Nagle noted that the Board acknowledges receipt of the 2016 Audit & Financial Statements.

**Suburban Water Capital Financing – Parameters Resolution (Resolution 5-2017-1)**

Liesel Gross introduced Chris Gibbons from Concord Financial, the Authority's financial advisor, and Kevin Reid from King Spry, the Authority's bond counsel.

Mr. Gibbons reviewed key elements of the Preliminary Official Statement, the ratings review from Standard & Poors, and his firm's financial analysis relating to the issuance of approximately \$15.5 million in tax-exempt bonds to fund capital improvements to the Authority's Suburban Division water system. Mr. Gibbons

drew attention the “AA/Stable” bond rating provided by Standard & Poors, which is a favorable rating allowing for lower interest expense over the life of the bonds. He explained that the Authority will issue bonds through a competitive online sale beginning as early as May 23, 2017, following the parameters outlined in Resolution 5-2017-1 and his financial report. Key components of the bond issue are total borrowing amount up to \$19 million, interest rate projections, and the requirement that the Authority utilize a minimum of 85 percent of the proceeds within three years of the issue.

Mr. Reid provided a more detailed overview of the role of Bond Counsel, and reviewed additional terms of Resolution 5-2017-1. He highlighted that the Resolution specifies that revenues only from the Suburban water system are pledged for this bond issue, and other key parameters. Acting as Bond Counsel, King Spring will manage the paperwork related to closing on the bond issue and will provide an opinion to the federal government that the Authority’s bond issue qualifies for tax-exempt financing.

Ted Lyons inquired whether the Authority would receive multiple bidders for this bond issue. Mr. Gibbons explained that there may be multiple parties bidding, especially in light of the favorable bond rating, but that the sale will likely be with a single entity with the most favorable bid, and then that purchaser will distribute through its consortium.

Brian Nagle asked what happens if the Authority is unable to spend 85% of the bond proceeds within three years. Mr. Reid explained that the tax-exempt status of the bond issue may be jeopardized in that case. Liesel Gross also explained that the total funding amount of \$14.9 million was based on the project needs outlined in the first three years of the current capital plan, so that it is expected this threshold will be met.

On a motion by Linda Rosenfeld, seconded by Norma Cusick, the Board adopted Resolution 5-2017-1 authorizing the issuance of bonds for the Suburban Division water system in accordance with the parameters set forth therein (7-0).

Chris Gibbons, Kevin Reid, Corey Troutman and Nate Schwartz left the meeting at 12:32 p.m.

### **Tank Painting Project – Heidelberg Heights Wastewater Treatment Plant**

Chuck Volk provided an overview of the project, which includes repainting of the sequencing batch reactor tanks at the wastewater treatment plant in Heidelberg Township. Three bids were received, and the staff recommends awarding the work to J.P. Smith Contractors, Inc.

Some discussion followed. Mr. Volk explained that this contractor has extensive experience with this work. The bids were issued and managed through the PennBid program online.

Jeff Morgan noted that he is familiar with this contractor and has had satisfactory experience with their work.

On a motion by Linda Rosenfeld, seconded by Norma Cusick, the Board approved the Capital Project Authorization – Construction Phase in the amount of \$82,770.00, which includes the Construction Contract awarded to J.P. Smith Contractors, Inc., in the amount of \$70,770.00 (7-0).

### **Allentown Division – Wastewater Treatment Plant: Security Upgrades**

Phil DePoe explained the project, which includes the installation of security upgrades at the wastewater treatment plant in Allentown. The equipment for this project was purchased through a prior Board authorization. This project is categorized as “Uncompleted Work” in the lease agreement with Allentown, which means the City will pay for the work, but also approves the project scope. Any items that were not approved by the City may be completed at a later date as an expense to the Authority.

On a motion by Norma Cusick, seconded by Jeff Morgan, the Board approved the Capital Project Authorization – Construction Phase in the amount of \$251,719.00, which includes the Electrical Contract awarded to Albarell Electric in the amount of \$189,864.00 (7-0).

**MONTHLY FINANCIAL REVIEW**

Ed Klein gave an overview of the April 2017 Financial Report, including a short PowerPoint presentation outlining key performance indicators.

**MONTHLY SYSTEM OPERATIONS OVERVIEW**

John Parsons reviewed the April 2017 Operations Report that was attached to the Board agenda. Mr. Parsons noted the Pennsylvania Department of Environmental Protection has lifted the Drought Watch for all counties in Pennsylvania. He also noted that the investigation regarding the available technology to implement the recommended stream monitoring program is continuing and will be presented to the Board at a later time. Scott Bieber asked if the staff had ruled out the use of stream gages provided by the U.S. Geological Service. Mr. Parsons responded that this will be part of the overall cost evaluation prior to moving forward with the monitoring program.

Brian Nagle asked for additional details about the emergency declaration that was noted in the April 2017 Operations Report. Mr. Parsons explained that a sanitary sewer overflow occurred in April due to a blockage of a manhole, not caused by a rain event. Due to the size of the blockage, specialized equipment was required, including bypass pumping to eliminate the discharge of sewage to the environment during the repair. This incident was reported to the appropriate regulatory agencies, as well as to the City of Allentown for inclusion in their project to repair manholes.

**STAFF COMMENTS**

None.

**SOLICITOR'S COMMENTS**

None.

**PUBLIC COMMENTS / OTHER COMMENTS**

None.

**EXECUTIVE SESSION**

Chairman Nagle called an Executive Session at 1:15 p.m. to discuss potential litigation. Attorneys Alessandra Hylander and Devin Chwastyk of McNees Wallace & Nurick LLC entered the meeting at this time.

The Executive Session ended at 2:07 p.m.

**REGULAR SESSION**

Scott Bieber inquired about the progress on investigating the permit process for stormwater injection wells. Brad Landon responded that the staff has a meeting scheduled with the Department of Environmental Protection on June 22, 2017, so the topic may be appropriate to discuss again with the Board at the June 26, 2017 meeting.

**ADJOURNMENT**

There being no further business, the Chairman adjourned the meeting at 2:08 p.m.

Secretary

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## MEMORANDUM

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**Date:** June 26, 2017

**To:** Lehigh County Authority Board  
**From:** Amy Kunkel, LCA Project Engineer  
**Subject:** Suburban Division – Pine Lakes Pumping Station Improvements –  
Construction Phase

**MOTIONS / APPROVALS REQUESTED:**

No.	Item	Amount
1	<b>Capital Project Authorization – Construction Phase</b>	<b>\$540,994.00</b>
2	Construction Contract - General: DESCCO Design Construction, Inc	\$366,879.00
3	Construction Contract – Electrical (*) PSI Pumping Solutions, Inc	\$81,300.00
4	Professional Services – Construction Phase Engineering (*) JMT, Inc	\$9,050.00
5	Professional Services – Construction Phase Inspection (*) Cowan Associates, Inc	\$8,765.00

(\*) Included in Capital Project Authorization

**BACKGROUND**

The Pine Lakes Division is located in Lynn Township and was acquired from a developer in 2002. The system provides service to 60 customers in the Pine Lakes of Lynn Subdivision. The water supply source is two wells which pump into a below-grade hydro-pneumatic tank.

**PROJECT OVERVIEW**

This project includes the conversion of the aged existing hydro-pneumatic station serving the development to a variable frequency drive controlled double-pumping system. The project will also include the addition of a new 10,000 gallon steel non-pressure class underground water storage tank and other miscellaneous improvements. A SCADA (supervisory control and data acquisition) system will be installed to allow full remote control and monitoring of the facilities.

**FUNDING**

The Project will be funded by the LCA Suburban Division.

**BUDGET AMENDMENT**

Not required

**PROJECT STATUS**

Board approval is requested for the Construction Phase.

**THIS APPROVAL – CONSTRUCTION PHASE**

**BIDDING SUMMARY**

This project consists of two contracts. The project was originally bid in July 2016. Bids for construction came in at \$599,191 for both general and electrical contracts. It was decided then to reject all bids and rebid the project in 2017, due to high bid prices and lack of bidders. The project was advertised for bid in late April and bids were received via PennBid on June 1, 2017, the results of which are as follows:

<b>General Construction</b>	
<b>Bidder</b>	<b>Bid Amount</b>
<b>DESCCO Design Construction, Inc.</b>	<b>\$366,879.00</b>
<b>PSI Pumping Solutions, Inc.</b>	<b>\$378,800.00</b>
<b>Zimmerman Environmental</b>	<b>\$39,6242.00</b>
<b>Bellview Pump, LLC</b>	<b>\$418,000.00</b>
<b>JEV Construction LLC</b>	<b>\$474,500.00</b>
<b>Eastern Environmental Contractors, Inc.</b>	<b>\$516,600.00</b>
<b>Blooming Glen Contractors WW</b>	<b>\$557,962.00</b>
<b>Electrical Construction</b>	
<b>Bidder</b>	<b>Bid Amount</b>
<b>PSI Pumping Solutions, Inc.</b>	<b>\$81,300.00</b>
<b>Eastern Environmental Contractors, Inc.</b>	<b>\$94,240.00</b>
<b>Blooming Glen Contractors WW</b>	<b>\$125,840.00</b>
<b>Shannon A. Smith, Inc.</b>	<b>\$128,650.00</b>

DESCCO has extensive experience with new and rehabilitation construction work at water and wastewater facilities, and LCA staff have worked with them on prior non-LCA projects with satisfactory performance. PSI Pumping Solutions also has extensive water and wastewater facility construction experience, including electrical work, and we are also familiar with this firm from prior non-LCA projects. Both firms' qualifications and experience statements indicate numerous projects of similar scope and type. The bid documents are in order and the firms appear well qualified to perform the work.

**PROFESSIONAL SERVICES**

Construction engineering is to be performed by JMT, Inc. and part-time inspection services are to be performed by Cowan Associates, Inc.

**PROJECT SCHEDULE**

Based on contract award following the June 26, 2017 Board meeting, it is anticipated that the project will be completed by early 2018.

**FUTURE AUTHORIZATIONS**

None



## CAPITAL PROJECT AUTHORIZATION

<b>PROJECT NO.:</b>	SD-W-15-4	<b>BUDGET FUND:</b>	Suburban Div\Water\Capital
<b>PROJECT TITLE:</b>	Suburban Division Pine Lakes Pumping Station Improvements – Construction Phase -	<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>	\$540,994		
<b>TO DATE (W/ ABOVE)</b>	\$720,486		

**DESCRIPTION AND BENEFITS:**

This Authorization is for the construction of improvements which includes the conversion of the aged existing hydro-pneumatic station serving the development to a variable frequency drive controlled double-pumping system. The project will also include the addition of a new 10,000 gallon steel non-pressure class underground water storage tank and other miscellaneous improvements. A SCADA (supervisory control and data acquisition) system will be installed to allow full remote control and monitoring of the facilities. This authorization takes us through construction phase.

Previous Authorizations	
Planning Phase	\$8,610
Design Phase	\$122,574
SCADA	\$48,308

REQUESTED THIS AUTHORIZATION	
Construction Phase	
<b>Staff</b>	<b>\$30,000</b>
<b>Professional Services</b>	
<b>Construction Engineering - JMT, Inc.</b>	<b>\$9,050</b>
<b>Construction Inspection – Cowan Associates, Inc.</b>	<b>\$8,765</b>
<b>Contract 1-General Construction</b>	<b>\$366,879</b>
<b>Contract 2-Electrical Construction</b>	<b>\$81,300</b>
<b>Miscellaneous</b>	<b>\$5,000</b>
<b>Contingency</b>	<b>\$40,000</b>
<b>Total This Authorization</b>	<b>\$540,994</b>

Future Authorization	
None	

<i>Total Estimated Project</i>	<i>\$720,486</i>
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**REVIEW AND APPROVALS:**

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





**Lehigh County Authority**

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(610)398-2503 \* FAX (610)398-8413 \* Email: service@lehighcountyauthority.org

**PROFESSIONAL SERVICES AUTHORIZATION**

**Professional:** COWAN ASSOCIATES, INC.  
120 Penn Am Drive  
PO Box 949  
Quakertown, PA 18951

**Date:** June 26, 2017

**Requested By:** Amy Kunkel

**Approvals**

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

**Chief Executive**

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

**Suburban Division- Pine Lakes Pumping Station Improvements**

**This Authorization- Construction Phase, \$8,765**

Cowan Associates, Inc. will provide construction inspection related services for the aforementioned project

<b>Professional Services</b>
1. Attend Pre-Construction Meeting
2. Attend Progress Meeting
3. Provide Inspection Services
4. Assess work for Contractor Payments and work completion
5. Compile and review as-built drawings; from Contractors

**Cost Estimate** (not to be exceeded without further authorization): **\$8,765**

**Time Table and Completion Deadline:** As required to meet construction timeline requirements.

**(For Authority Use Only)**

**Authorization Completion:**

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



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**PROFESSIONAL SERVICES AUTHORIZATION  
Amendment No. 1**

**Professional:** JMT, INC.  
7535 Windsor Drive  
Suite 204B  
Allentown, PA 18195

**Date:** June 26, 2017

**Requested By:** Amy Kunkel

**Approvals**

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

**Chief Executive**

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

**Suburban Division- Pine Lakes Pumping Station Improvements**

*Previous Authorizations- Design Phase; \$50,854*

**This Authorization- Construction Phase, \$9,050**

JMT, Inc. will provide construction engineering related services for the aforementioned project

<b>Professional Services</b>
1. Attend Pre-Construction Meeting and Prepare/distribute Minutes
2. Attend Progress Meetings
3. Respond to design related RFIs
4. Log, review and process shop drawing submittals
5. Attend Substantial Completion Meeting

**Cost Estimate** (not to be exceeded without further authorization): **\$59,904**

**Time Table and Completion Deadline:** As required to meet construction timeline requirements.

**(For Authority Use Only)**

**Authorization Completion:**

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

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## MEMORANDUM

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**Date:** June 26, 2017

**To:** Lehigh County Authority Board  
**From:** Charles Volk, LCA Chief Capital Works Officer  
**Subject:** Suburban Division – Water and Wastewater Facilities Asset Management  
Upgrades – Construction Phase

**MOTIONS / APPROVALS REQUESTED:**

No.	Item	Amount
1	Capital Project Authorization – Construction Phase	\$961,796
2	Construction Contract - General: JEV Construction, LLC (*)	\$623,340
3	Construction Contract – Electrical Blooming Glen Contractors (*)	\$240,856
4	Professional Services – Construction Phase Engineering DHuy Engineering (*)	\$37,600

(\*) Included in Capital Project Authorization

**BACKGROUND**

Many of LCA’s Suburban Division water and sewer facilities include components that are approaching the end of their design service life, and a comprehensive facilities evaluation was performed in 2016 to provide updated condition assessments with recommendations for upgrades. Utilizing asset management protocols for mitigating criticality and preserving level of service, an upgrade project was designed that includes nine (9) water facilities and two (2) wastewater facilities with the highest overall facility risk rating. The construction project includes structural, HVAC, and electrical upgrades to prolong service life, satisfy current codes, and mitigate risk.

**PROJECT OVERVIEW**

The asset management upgrade work, consisting of structural, HVAC, and electrical rehabilitation, is to be performed at the following facilities:

Water Facilities:

- WL-6

- NL15-16
- Beverly Hills
- WL-13
- Clearview Farms
- WL10
- WL11
- WL16
- WL19

Wastewater Facilities:

- Lynn Township Wastewater Treatment Plant
- Western Lehigh Interceptor - 8 Siphon Chambers

**FUNDING**

The Project will be funded by the LCA Suburban Division

**BUDGET AMENDMENT**

Not required

**PROJECT STATUS**

Board approval is requested for the Construction Phase.

**BIDDING SUMMARY – CONSTRUCTION PHASE**

This project consists of two contracts. The project was advertised for bid in late April and bids were received via PennBid on May 30, 2017, the results of which are as follows:

<b>General Construction</b>	
<b>Bidder</b>	<b>Bid Amount</b>
<b>JEV Construction LLC</b>	<b>\$623,340.00</b>
<b>Blooming Glen Contractors (Clinton NJ)</b>	<b>\$635,535.00</b>
<b>Electrical Construction</b>	
<b>Bidder</b>	<b>Bid Amount</b>
<b>Blooming Glen Contractors (Clinton NJ)</b>	<b>\$240,856.00</b>
<b>No others</b>	

JEV has extensive experience with new and rehabilitation construction work at water and wastewater facilities, and has performed satisfactory work on prior LCA projects. Blooming Glen also has extensive water and wastewater facility construction experience, including electrical work, and is currently completing the KIWWTP digester cover replacement for LCA, in addition to numerous prior projects. Both firms' qualifications and experience statements indicate numerous projects of similar scope and type. The bid documents are in order and the firms appear well qualified to perform the work.

**PROFESSIONAL SERVICES**

Construction engineering and part-time inspection services is to be performed by D'Huy Engineering.

**PROJECT SCHEDULE**

Based on contract award following the June 26, 2017 Board meeting, it is anticipated that the project will be completed by the end of the year.

**FUTURE AUTHORIZATIONS**

None

## CAPITAL PROJECT AUTHORIZATION

<b>PROJECT NO.:</b>	SD-S-11 & SD-W-11	<b>BUDGET FUND:</b>	Suburban Capital
<b>PROJECT TITLE:</b>	Suburban Division Water and Wastewater Facilities Asset Management Upgrades	<b>PROJECT TYPE:</b>	<input checked="" type="checkbox"/> Construction <input type="checkbox"/> Engineering Study <input type="checkbox"/> Equipment Purchase
<b>THIS AUTHORIZATION:</b>	\$961,796		
<b>TO DATE (W/ ABOVE)</b>	\$1,081,796		

**DESCRIPTION AND BENEFITS:**

This project is the result of a Suburban Division Asset Management Facility Condition Assessment performed in 2016, which evaluated numerous water and sewer facilities and assigned risk ratings for each station based on probability and consequence of failure. The recommendations from that study provided the basis of design for this construction project, the scope of which includes nine (9) water facilities and two (2) wastewater facilities. The construction project includes structural, HVAC, and electrical upgrades to prolong service life, satisfy current codes, and mitigate risk.

**Authorization Status:**

<i>Previous Authorizations</i>	
<i>Study Phase</i>	<i>\$120,000</i>
<b>Requested This Authorization</b>	
<b>Construction Phase</b>	
<b>Contract No. 1 GC: JEV Construction</b>	<b>\$623,340</b>
<b>Contract No. 2 EC: Blooming Glen Contractors</b>	<b>\$240,856</b>
<b>Staff</b>	<b>\$20,000</b>
<b>Professional Services – Construction Engineering: D’Huy Engineering</b>	<b>\$37,600</b>
<b>Contingency</b>	<b>\$40,000</b>
<b>Total This Authorization</b>	<b>\$961,796</b>

Future Authorization	
None	

<i>Total Estimated Project</i>	<i>\$1,081,796</i>
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**REVIEW AND APPROVALS:**

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







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**PROFESSIONAL SERVICES AUTHORIZATION**

Professional: D’HUY ENGINEERING, INC.  
One East Broad St., Suite 310  
Bethlehem, PA 18018

**Date:** June 26, 2017

**Requested By:** Charles Volk

Approvals

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

**Chief Executive**

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

**Description of Services (Work Scope, Steps, Check Points, etc.):**

**Suburban Division – Facility Condition Assessments, Water and Sewer Facilities**

D’Huy Engineering, Inc. will perform construction phase engineering, inspection, and management services for the construction of the Suburban Division Water and Wastewater Facilities Asset Management Upgrade Project, in accordance with their proposal dated June 7, 2017. The scope of services includes the following:

<b>Professional Services</b>
1. Conduct pre-construction conference
2. Conduct progress meetings.
3. Perform project administration services, including payment application review, change order, coordination, etc.
4. Respond to contractor requests for information (RFIs)
5. Perform shop drawing review, approval, and distribution.
6. Conduct a minimum of three, 3-hour inspections per facility, and additional visits up to 24 hours total.
7. Perform twelve 2-hour inspection visits to the siphon chambers.
8. Perform one substantial completion inspection per facility per contract.
9. Complete one combined final completion inspection per facility for both contracts.
10. Construction management

**Cost Estimate (not to be exceeded without further authorization):** \$37,600

**Time Table and Completion Deadline:** Assumes work will be substantially complete by the end of October 2017.

**(For Authority Use Only)**

**Authorization Completion:**

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

**PROFESSIONAL SERVICES AUTHORIZATION  
INDEMNIFICATION  
Allentown Division  
WWTP: Digester Cover System Replacements**

(To be signed by Professional and returned to the Authority)

I am or represent the Professional indicated above, and as such I am authorized to:

Accept the terms of the professional services authorization dated January 19, 2015 attached; and

Agree to indemnify and hold harmless LCA, the City of Allentown, their employees, agents, officials, representatives, attorneys, and assigns from any and all liability, arising out of all activities conducted by the Consultant in connection with this contract and/or the Consultant's performance hereof, including but not limited to payment of all fees for its/their attorneys and all incidental litigation expenses in the event LCA or any of its employees, agents, officials, representatives, attorneys, and assigns are sued upon a claim emanating from the Consultant's performance thereof. Professional shall not, however, be liable for any portion of a judgment nor associated litigation expenses, including attorney's fees, ultimately determined to be the result of the negligence of the Authority.

\_\_\_\_\_  
Name (signature):

\_\_\_\_\_  
Name (printed)

Title: \_\_\_\_\_



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**MEMORANDUM**

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**Date:** June 16, 2017

**To:** Lehigh County Authority Board

**From:** Jason Peters, Capital Projects Coordinator

**Subject:** Allentown Division- Pre-Lease Valve Replacement Project  
Construction Phase

**MOTIONS /APPROVALS REQUESTED:**

No.	Item	Amount
1	<u>Capital Project Authorization:</u> Construction Phase	\$1,033,556
2	<u>Contract Award:</u> General Construction – <i>Wexcon, Inc.</i> (*)	\$881,030
3	<u>Professional Services Authorization:</u> Construction Engineering, Management and Inspection Services Amendment No. 1 – <i>Barry Isett &amp; Associates, Inc.</i> (*)	\$17,526

(\*) Included in Capital Project Authorization

**PROJECT OVERVIEW:**

This project consists of the replacement of a minimum of 50 inoperable valves in multiple locations throughout the City of Allentown (COA) that existed prior to the lease settlement. The replacement of these valves will allow for greater operation flexibility in the water system, particularly when planned or unplanned outages occur, increasing the reliability of water service for our customers.

This project has been identified in the Lease Concession as Uncompleted Work and is required to be completed by Lehigh County Authority (LCA).

**FUNDING:**

The project is identified as Uncompleted Work and will be funded by the COA.

**PROJECT STATUS:**

In February 2015 the Board approved the Design Phase of the Project. Working closely with all necessary LCA staff, COA and other outside agencies, LCA obtained all approvals and permits required for Construction Phase of this project.

**THIS APPROVAL - CONSTRUCTION PHASE:**

Includes the replacement of a minimum of 50 inoperable valves in multiple locations throughout the City of Allentown. Inoperable valves limit operations personnel from properly isolating system areas during maintenance and line repairs.

**BIDDING SUMMARY - CONSTRUCTION CONTRACTS:**

The project was advertised for bid on April 21, 2017. A pre-bid meeting was held on April 28, 2017, and bids were opened on May 30, 2017. Bid results are as follows:

<b>General Construction</b>	
<b>Bidder</b>	<b>Amount</b>
<i>Wexcon, Inc.</i>	<i>\$881,030</i>
Anrich, Inc.	\$970,098
Jaoa & Bradley Construction Co., Inc.	\$1,132,625

Reference checks for Wexcon, Inc. (Mohrsville PA) have identified no negative issues and the firm has completed numerous projects of similar size and nature. The firm appears qualified to perform the work and all bidding requirements have been met. Therefore, we recommend awarding the General Construction contract to Wexcon, Inc., subject to the receipt of the necessary Performance Bonds, Insurance and other required documentation.

**PROFESSIONAL SERVICES:**

Barry Isett & Associates, Inc., our design consultant, will provide Construction Engineering, Management and Inspection related services for the construction phase of the project. The work will generally include:

- Coordinate the issuance and receipt of all construction documents.
- Conduct a pre-construction meeting and prepare and distribute meeting minutes.
- Review all contractor submittals in accordance to the contract documents.
- Provide interpretations and clarification of the contract document to all requests for information.
- Provide full-time construction inspection.
- Prepare daily written and photo documentation.
- Review, prepare and recommend change orders as necessary.
- Conduct construction progress meeting as frequent as every 2 weeks and prepare and distribute meeting minutes.
- Provide progress reports to LCA and the City on a monthly basis based on the progress meetings minutes.
- Prepare record drawings.
- Prepare punch list and closeout documents.
- Coordinate and attend post-construction site visit and walk over.

- Collect GPS data of as-built construction information.

A Professional Services Authorization is attached for Board approval.

**SCHEDULE:**

Assuming approval of the Construction Phase at the June 26, 2017 Board meeting, all pre-lease valves replacements are anticipated to be operational by October 1, 2017 (i.e. the substantial completion date).

**FUTURE AUTHORIZATIONS:**

No future authorizations are anticipated at this time.

## CAPITAL PROJECT AUTHORIZATION

<b>PROJECT NO.:</b>	AD-W-17-3	<b>BUDGET FUND:</b>	Allentown Div\Water\Capital
<b>PROJECT TITLE:</b>	<b>Allentown Division – Pre-Lease Valve Replacement Project- Construction Phase</b>	<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>	<b>\$ 1,033,556</b>		
<b>To Date (W/Above)</b>	<b>\$1,117,102</b>		

**DESCRIPTION AND BENEFITS:**

This project will consist of the replacement of a minimum of 50 inoperable valves in multiple locations throughout the City of Allentown (COA) that existed prior to the lease settlement. The replacement of these valves will allow for greater operation flexibility in the water system particularly when planned or unplanned outages occur, increasing the reliability of water service for our customers.

Please reference the cover memo for additional information.

Previous Authorizations	
Design Phase	\$83,546

REQUESTED THIS AUTHORIZATION	
Construction Phase	
<b>Staff</b>	<b>\$80,000</b>
<b>Professional Services</b>	
<b>Construction Administration, Inspection &amp; Closeout</b>	<b>\$17,526</b>
<b>General Construction Contract</b>	<b>\$881,030</b>
<b>Miscellaneous</b>	<b>\$5,000</b>
<b>Contingency</b>	<b>\$50,000</b>
<b>Total This Authorization</b>	<b>\$1,033,556</b>

Future Authorization	
None	

<i>Total Estimated Project</i>	<i>\$1,117,102</i>
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**REVIEW AND APPROVALS:**

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



**Lehigh County Authority**

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

**PROFESSIONAL SERVICES AUTHORIZATION  
Amendment No.1**

**Professional:** BARRY ISETT & ASSOCIATES  
85 S. Route 100

**Date:** June 16, 2017

**Requested By:** Jason Peters

**Approvals:** \_\_\_\_\_

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

**Chief Executive**

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

**Allentown Division – Pre-Lease Valve Replacements**

*Previous Authorization – Design Phase: \$23,546*

**This Authorization – Construction Phase: \$17,526**

Barry Isett & Associates will perform the following Construction related services for the Allentown Division – Pre-Lease Valve Replacement Project

Professional Services
1. Construction Engineering Services
2. Construction Management Services
3. Construction Inspection Services

**Note:** This project is identified as Uncompleted Work and will be funded by the City of Allentown.

**Cost Estimate (total not to be exceeded without further authorization):** \$41,072

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

(For Authority Use Only)

**Authorization Completion:**

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



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# MEMORANDUM

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**Date:** June 26, 2017

**To:** LCA Board of Directors  
**From:** Phil DePoe, LCA Capital Works Program Manager  
**Subject:** Allentown Division  
Manhole Chimneys (*i.e. Methodologies of Affixing Frame and Covers to Brick Sanitary Sewer Manholes*) – (Cycle 4) Construction Phase

**MOTIONS / APPROVALS REQUESTED:**

No.	Item	Amount
1	<i>Capital Project Authorization – Construction Phase</i>	\$58,000
2	<i>Contract Awards – Construction: Joao &amp; Bradley (*)</i>	\$49,460

(\*) *Included in the Capital Project Authorization.*

**PROJECT OVERVIEW:**

This project will install a frame and cover anchoring system for 10 aged brick manholes identified by previous City staff. The selected anchoring systems are intended to eliminate sewage overflows during high flow events. In addition, all manholes for this project will receive new bolt-down frames if not installed.

**FINANCIAL:**

The project is identified as Administrative Order Work and will be funded by the City.

**PROJECT STATUS:**

In accordance with the Lease Agreement, the City is responsible for determining what Administrative Order (AO) work is to take place, and LCA is responsible to execute said work. The design phase of this project was previously authorized by LCA.

The project was advertised for bid on June 2, 2017. A pre-bid meeting was held on June 8, 2017. Bids were received on June 15, 2017.

**THIS APPROVAL - CONSTRUCTION PHASE:**

Award is contingent upon receipt of the signed Agreement, Performance and Payment Bond, and required insurance paperwork.

**BIDDING SUMMARY - CONSTRUCTION CONTRACT:**

This project requires a General Construction Contract. The bidding results, which reflect the Base Bid, are as follows:

Contractor	Cost
<i>Joao &amp; Bradley Construction Co.</i>	<i>\$49,460.00</i>
Quick Precision Solutions, LLC	\$59,990.00

Joao & Bradley Construction Co. successfully executed this project in 2014, 2015, and 2016. Therefore, we recommend awarding the General Construction to Joao & Bradley subject to receipt of the necessary Performance Bonds, Insurance and other required documentation.

**PROFESSIONAL SERVICES:**

None required. The City is providing construction inspection services.

**PROJECT SCHEDULE:**

Assuming approval of the Construction Phase at the June 26, 2017 Board Meeting, Notice to Proceed will be issued early July 2017 with an estimated completion date of late August 2017.

**FUTURE AUTHORIZATIONS:**

None anticipated.

## CAPITAL PROJECT AUTHORIZATION

<b>PROJECT NO.:</b>	AD-S-17-4	<b>BUDGET FUND:</b>	Allentown Div\Wastewater\Capital
<b>PROJECT TITLE:</b>	Allentown Division Manhole Chimneys (Cycle 4) - Construction Phase	<b>PROJECT TYPE:</b>	<input checked="" type="checkbox"/> Construction <input type="checkbox"/> Engineering Study <input type="checkbox"/> Equipment Purchase <input type="checkbox"/> Amendment No. 1
<b>THIS AUTHORIZATION:</b>	\$58,000		
<b>TO DATE (W/ABOVE):</b>	\$65,000		

**DESCRIPTION AND BENEFITS:**

This project will install a frame and cover anchoring system for 10 aged brick manholes identified by current LCA and City staff. The selected anchoring systems are intended to eliminate sewage overflows during high flow events. In addition, all manholes for this project will receive new bolt-down frames if not installed.

The design phase of this project was previously authorized. The project is identified as Administrative Order Work and will be funded by the City. The project is anticipated to be complete by late August 2017.

Please reference the cover memo for additional information.

**Authorization Status:**

Previous Authorizations	
Design Phase	\$7,000
REQUESTED THIS AUTHORIZATION	
<b>Construction Phase</b>	
Staff	\$ 5,000
Professional Services	0
General Construction Contract	49,460
Additional Authorization <sup>(1)</sup>	3,540
Contingencies	0
<b>Total This Authorization</b>	<b>\$ 58,000</b>

(1) This project will be funded by the City - the intent is to utilize a total sum of \$65,000. The City will provide authorization for additional manholes if necessary to reach their targeted budget goal.

Future Authorization	
None Anticipated	\$0
<b>Total Estimated Project</b>	<b>\$65,000</b>

**REVIEW AND APPROVALS:**

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

**FINANCE & ADMINISTRATION**

**ACTION ITEMS**

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**DISCUSSION ITEMS**

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**1. LCA Strategic Goals & Key Performance Indicators – July meeting date TBD**

Authority staff will present a 2<sup>nd</sup> Quarter update on strategic goals, and share preliminary concepts of performance indicators (measures) being established to track and communicate organizational performance in the key attributes selected for improvement.

**2. Geographic Information System (GIS) Field Application – July meeting date TBD**

Authority staff will present a demonstration of a new application (app) for mobile devices that has been developed in-house to support field crews locating Authority assets.

**INFORMATION ITEMS**

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**1. 2018-2021 Capital Plan**

Staff is beginning to prepare project details for the annual revision / update of the Authority’s 5-year Capital Plan. Preliminary details will be presented to the Board in July or August, with public comment period and adoption planned for September and October 2017.

**3. Recently Purchased Investments – Certificates of Deposit (CDs)**

CERTIFICATES OF DEPOSIT						
Fund	Bank	Location	Gross Amount	Date of Purchase	Date Due	Net Rate %
LLRI CR	Medallion Bank	Salt Lake City, Ut	250,000.00	5/1/17	5/1/19	1.5
Cons Wtr (2)	American Express Bank, FSB	Salt Lake City, Ut	248,000.00	5/3/17	5/3/19	1.55
WW Capac	Marlin Business Bank	Salt Lake City, Ut	248,000.00	5/10/17	5/10/19	1.5
LLRI CR	Synchrony Bank	Draper Ut	248,000.00	5/26/17	5/28/19	1.65

Cons Wtr (2)	Consolidated Water (2)
LLRI CR	Little Lehigh Relief Interceptor Capital Reserves
Cons LL2 (314)	Consolidated Little Lehigh Relief Interceptor 2
WW Capac	Wastewater Capacity
2010 Wtr Cons A	2010 Water Construction, Series A Bond
Wtr R&R	Renewal and Replacement

## WATER

### **ACTION ITEMS**

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1. **Suburban Division – Pine Lakes Pumping Station Improvements – June 26, 2017**

This project was originally bid in July 2016 and bids were subsequently rejected due to the lack of competitiveness and significant exceedance of the engineer's estimate. The purpose of this project is to upgrade the original hydropneumatic well station (built in mid-1970s) to continue the level of service, replace aged and problematic equipment, reduce the probability and consequence of risk, and prolong the useful life of the station. The station is to be upgraded to a double pumping variable speed system with full SCADA telemetry. The project bids were opened on June 1 and staff requests authorization and award at the June 26, 2017 Board meeting.

2. **Suburban Division – Asset Management Facility Upgrades – June 26, 2017**

Project includes the construction of improvements that were identified and prioritized in the Building Condition and Assessment Study prepared by D'Huy Engineering in accordance with LCA's asset management goal. The project scope includes structural, HVAC, and electrical/code improvements to be performed on facilities that were assigned a high risk score (high consequence and probability of failure). Nine (9) water facilities and two (2) wastewater facilities are part of the project scope. The project bids were opened on May 30, and staff requests authorization and award at the June 26, 2017 Board meeting.

3. **Allentown Division – Pre-Lease Valve Replacements – June 26, 2017**

The project scope includes the replacement of approximately 50 inoperable valves in multiple locations throughout the City that existed prior to the lease settlement. The project is classified as uncompleted work and will be funded by the City of Allentown. The project bids were opened on May 30 and staff requests authorization and award at the June 26, 2017 Board meeting.

### **DISCUSSION ITEMS**

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1. **Stormwater Injection Wells – June 26, 2017**

Authority staff will share information gathered from meetings/discussions with representatives from the Lehigh County Conservation District and the Pa. Department of Environmental Protection about the permitting process for stormwater injection wells and ways for the Authority to participate in the process to ensure its concerns about source water protection are addressed.

### **INFORMATION ITEMS**

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1. **Allentown Division – Water Main Replacement Program- Cycle 3**

The project is the replacement of 4.39 miles of aged and/or failing Cast Iron water main in multiple locations throughout the City. The Construction phase was approved at the 4/11/16 Board meeting. The contractor, Joao & Bradley, Inc, completed construction according to schedule. As of May 31, 2017, LCA officially submitted all project closeout documentation for the required CCRC report to the City of Allentown. This Project is identified as Schedule-7 Work and is funded by LCA Allentown Division.

2. **Allentown Division - Water Filtration Plant / Water Distribution: Flood Pump Replacement**

Upgrades to the existing stormwater pump/control for the WFP and D&C parking lot are needed due to equipment age. The existing flood pump (centrifugal) will be replaced with a new submersible flood pump. Miscellaneous electrical upgrades will also occur. In addition, a new raw water magmeter and two new chemical feed tanks will be installed at the Water Filtration

Plant. Board Approval was granted at the January 23<sup>rd</sup> Board Meeting. Construction began in April of 2017 and completion is expected by August of 2017. This capital project is funded by the LCA Allentown Division. **(No Change)**

3. **Allentown Division – Water System Master Plan**

This project involves the creation of a Master Plan for the Allentown Water Plant, water storage tanks, water storage reservoirs, pressure booster stations, raw water springs, and surface water intakes. The Master Plan will involve several key sections including, but not limited to: full-scale condition assessments, treatment process optimization, and development of short term/long term capital plans. The Master Plan is a requirement included within the City of Allentown lease, and it also needs to be updated every 5 years throughout the life of the lease. The project kick-off meeting with Arcadis was held on May 4, 2016. Multiple workshops have also been held since then. Condition Assessments and process control audits/optimizations are to the point of final drafts and short-term and long-term capital plans are being developed. The project continues to move forward and is scheduled to be completed in June/July 2017 and it will be funded by the LCA Allentown Division.

4. **Allentown Division – Schantz Spring Main Replacement**

The project is the replacement of approximately 2,000 linear feet of 1903 vintage 30-inch diameter water main in Martin Luther King, Jr. Boulevard from the Water Filtration Plant heading towards Schribers Bridge. This project also includes addressing other leaks that were identified during the “SmartBall” technology leak detection work completed by the City of Allentown (COA). Design is currently being finalized following review of 90% design plans by the City. This Project is identified as Schedule-7 Work and will be funded by LCA Allentown Division. **(No Change)**

5. **Allentown Division – Hamilton Street Cedar Creek Bridge Water Main Relocation Project**

As part of the Pennsylvania Rapid Bridge Replacement Program, the replacement of the Cedar Creek Bridge on Hamilton Street has required the relocation of approximately 500 linear feet of water main. The Design phase was approved at the December 2016 Board meeting. As of June 2, 2017 LCA's engineer, Gannett Fleming, submitted the design of the relocation plans to the state and is awaiting their response/approval. It is anticipated that this work will be reimbursed 100% by the state and that all construction related activities will be incorporated within the state's work.

6. **Suburban Division – CLD Auxiliary Pump Station Project**

The project will feature the installation of a new booster pumping station and water main extension to pump water from the Lower System to the Upper System. The project will also involve installation of a SCADA system. The Public Water Supply (PWS) permit application package and 70% design drawings were received from the consultant and reviewed and returned by LCA with comments. **(No Change)**

7. **Suburban Division – Crestwood Alternate Water Supply**

The project consists of abandonment of existing wells and storage tank currently serving higher elevation customers and a connection of the pumping station to the main North Whitehall Division System. The project will also involve installation of a SCADA system. The project was advertised for bid on June 6 and bids will be received on July 7, 2017.

8. **Suburban Division – Route 309 Crossing at Sand Spring Road**

A 12” water line will cross Route 309 through a previously installed 24” casing. Completion of this line will bring public water to the property line of Lehigh Carbon Community College. The design phase is completed. PennDOT Highway Occupancy Permits have been obtained. An

easement agreement was secured with LCCC. The project is anticipated to be constructed as part of the upcoming Suburban Division main replacement project **(No Change)**.

**9. Suburban Division - Water Main Replacement Program Cycles 1 & 2**

The project consists of the replacement of 2.85 miles of aged and/or failing cast iron water main. The Construction phase was approved at the 4/11/16 Board meeting. As of May 6, 2017 the contractor, Anrich Inc., completed all punch list items and deficiencies. LCA is in the process of closing out the project by mid-summer 2017.

**10. Suburban Division - Water Main Replacement Program Cycle 3**

The project consists of the replacement of a minimum of 1 mile of aged and/or failing cast iron water main. The design phase of this project was approved in early 2015. As of June 2, 2017 LCA's engineer, Gannett Fleming, submitted 90% design plans for LCA review and comment. The project is anticipated to be bid in Summer 2017.

**11. Suburban Division – Upper Milford-CLD Interconnection Project (Kohler Tract)**

The project will feature the installation of a new booster pumping station and water main extension to pump water from the Central Lehigh Division (CLD) to the 125-lot Kohler Tract subdivision in Upper Milford Township. Design has commenced and we are in the process of easement value determination and preparing offers to the three property owners where easements are needed. Design will be completed by the end of 2017.

**12. Suburban Division – Well Abandonments**

The project consists of the abandonment of six wells that are no longer used due to water quality issues: WL4, WL7, NL7, NL8, NL9, and NL10. ARRO Consulting Engineers has been contacted to prepare a proposal for professional services.

**13. Developments**

Water system construction is occurring in the following developments:

- Highgate, Phase 3 (Dunbar Tract) SF4/5, 17 residential lots (sfd), UMT
- Spring View (Bortz Tract), 14 commercial units, UMT
- Trexler Business Center, 1 Commercial Lot with 6 commercial buildings, LMT
- Trexler Fields, Phase 1B/8/9, 100 residential lots (sfa), UMT

Water system plans are being reviewed for the following developments:

- 67 Werley Road, 112 apartments & clubhouse, UMT
- Ciocca Audi, 1 additional commercial building at existing business, LMT
- Diocesan Pastoral Center, 2 commercial lots, 3 additional lots and residual lot for existing cemetery, LMT
- Farr Tract, 17 residential lots (sfd), LMT
- Grant Street Townes, 18 residential lots (sfa), WashT
- Green Acres Mobile Home Court, master meter 590 existing units (sfd), UMT
- Hickory Park Estates, 3 residential lots (sfd), UMT
- Hillview Farms, 31 residential lots (sfd), LMT/SWT
- Indian Creek Industrial Park, 6 commercial lots, UMiIT, water and sewer
- Kohler Tract, 125 residential lots (sfa), UMiIT, water and sewer
- Lehigh Hills, Lot 2 Pad Sites, 2 commercial lots, UMT
- Lehigh Hills, Lot 5, Phase 1, 273 apartments & clubhouse, UMT
- Mary Ann's Plaza, 1 lot with 12 commercial units, NWT
- Morgan Hills, 40 residential lots (sfd), WeisT, water and sewer
- North Whitehall Commercial Center (Walmart), 5 commercial lots, NWT, water & sewer
- Schoeneck Road – Lot 1, 1 lot warehouse, LMT, water
- Shepherd's Corner, 1 commercial lot, LMT

Weilers Road Twins, 82 residential lots (sfa), UMT  
Woodmere Estates, 60 residential units (sfd), UMT



## WASTEWATER

### ACTION ITEMS

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1. **Allentown Division – Manhole Collars with Water Tight Frame and Covers: Cycle 4 – June 26, 2017**

This project will permanently secure the frame and cover of 10 aged brick manholes identified by current LCA and City staff. This work will eliminate inflow from entering these manholes and eliminate the potential for sanitary sewer overflows (SSOs) from these manholes. Board approval of this project is requested at the June 26, 2017 Meeting. Construction is expected to begin in July of 2017. The project is identified as Administrative Order work and will be funded by the City. This will be the final cycle of the project.

### DISCUSSION ITEMS

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### INFORMATION ITEMS

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1. **Allentown Division – Wastewater Treatment Plant: Miscellaneous Improvements**

On 12/20/2016, the drive on Final Settling Tank #5 at Kline's Island WWTP experienced a complete failure. The drive is the original unit that was installed during construction of the clarifier in 1968. Procurement of a replacement drive has a long lead time of 14-17 weeks (update: the drive has been installed and the clarifier is now fully operational), which would place installation of the drive on a schedule well into the spring months when peak flows are often experienced - and all tanks and drives must be fully operational. An emergency declaration allows staff to reduce this installation time by several weeks. A request for a retroactive emergency declaration was requested and approved at the January 9, 2017 Board meeting. The remaining mechanisms of Clarifier #5 and #6 have also reached the end of its useful life and will be replaced in late 2017. The design is currently underway and construction approval is expected this summer. This capital project will be funded by the LCA Allentown Division.

2. **Allentown Division – Wastewater Treatment Plant: Digester Cover Replacements**

This project involves the cover replacement of both the Primary Digester No. 1 and the Secondary Digester (the cover for Primary Digester No. 2 was previously replaced in 2010). A Major Capital Improvement (MCI) Conceptual Design has been approved by the City. Board approval of the construction phase was received at the 2/8/16 Board Meeting. The new Secondary Digester cover was installed in late October 2016 and construction was completed in late February of 2017. The new Primary No. 1 Digester is expected to be installed and operational by October 2017. This Project is identified in the Lease as a Schedule 7 (required) project and will be funded by the LCA Allentown Division. **(No Change)**

3. **Allentown Division – Kline's Island WWTP Phase 1 AO Improvements: Conceptual Design Development**

This portion of the Phase 1 Administrative Order project will develop conceptual designs for the blending and flow equalization alternatives at the wastewater treatment plant. This conceptual design concept has been approved by the City. The City has directed LCA to proceed with these alternatives pending a final determination in late May of 2017. Board approval has been approved for the development of this conceptual design (later to be included in the RFP for full design services). Board approval for the full engineering design phase of the project will be requested in Q4 of 2017. The project is identified as Administrative Order Work and will be funded by the City. Construction is expected to begin in early 2019 and is expected to be complete in late 2020.

4. **Allentown Division – Wastewater Treatment Plant: WWTP Security Upgrades**

This project involves the installation of security related equipment upgrades at the Kline's Island Wastewater Treatment Plant (WWTP). Enhanced security will further reduce the risk of breaches that may impair the operation of the facility. Board Approval of the CoStars Agreement with Tyco (to purchase the security cameras, doors, etc. upfront) was granted at the January 23rd Board Meeting. Approval of the electrical contractor to install the security equipment will was granted at the May 22, 2017 Board Meeting. Construction of the project is expected to begin in July of 2017. This Project is identified as an Uncompleted Work (UW) in the Lease Agreement and will be funded by the City of Allentown.

5. **Allentown Division – Wastewater Treatment Plant: Electrical Substation Replacements**

This project involves the replacement of the existing 12.4 kV Switchgear and existing Substation No. 1 and No. 2. The equipment was installed in 1977 and has reached the end of its useful life. The City has reviewed this and has approved this project as a Major Capital Project. Approval of the design engineer was granted at the May 8, 2017 Board Meeting. Approval of the construction contract will be requested at the December 11, 2017 Board Meeting. Construction of the project is expected to begin in January of 2018. This Major Capital Project will be funded by the LCA Allentown Division

6. **Suburban Division – Spring Creek Pump Station**

This project involves the following upgrades to the existing pumping station: Install a comminutor to reduce buildup of debris on the bar screens, replace the manually operated weir gates with new motorized weir gates, and upgrades to the SCADA system. Design of the project is 75% complete, with bid phase expected to begin in August 2017.

7. **Suburban Division – Test & Seal Project, Western Lehigh Interceptor Service Area**

Project consists of sanitary sewer cleaning, inspections via CCTV, cured-in-place point repairs, pressure testing and chemical grout sealing of joints, and post construction inspection for sanitary sewer lines located in western and central Lehigh County previously identified as areas subject to leakage. This project is part of the SCARP program. Construction began in August 2016 and is expected to finish by Summer 2017. **(No Change)**

8. **Suburban Division – Lynn Township WWTP Improvements, Phases 1 & 2**

This project will upgrade the wastewater treatment plant (WWTP) headworks to install a mechanical fine screen, in order to protect the influent pumps and mitigate rag buildup. The project is being funded by the Lynn Township Suburban Division. The Notice to Proceed was issued on 4/24/17. Due to the long lead time for delivery of the mechanical screen, work under the general construction contract is not anticipated to start until August. Some electrical work may be undertaken in the meantime. **(No change)**

9. **Suburban Division – SCARP**

Monthly meetings with the LCA Suburban Division Signatories began in January to negotiate a Memo of Cooperation for completion of the SCARP Capital Improvements Plan. Cash flow plans prepared by the Program Consultant have been presented to the Signatories so they can begin analyzing their borrowing needs and schedule. A communications plan has been developed to help the Signatories with discussions with their Boards and the public. The LCA AO Program Consultant will be making a presentation at both LMT and Macungie Borough at their request. Meetings are also taking place monthly with the City Signatories in preparation for signing a Memo of Understanding.

Negotiations have begun with the City Solicitor's on a Memo of Understanding for the AO Project and means for paying for the City infrastructure.

A meeting between the City, LCA, EPA, and DEP has been scheduled in Philadelphia in mid-June. Attorneys for all parties will be present. The City capital improvements plan and the LCA capital improvements plan will be presented in anticipation for the December 31 submission to EPA.

10. **Suburban Division – Park Pump Station Upgrade**

The Park Pump Station is to be upgraded to address station capacity and age/condition issues, and prolong the service life of this critical facility. The existing pumps are to be replaced with dry pit submersible units, existing motors are to be replaced with high efficiency units, and the old rheostat type motor drives are to be replaced with variable speed drives. The MCC is also to be replaced along with miscellaneous mechanical improvements. The project is currently in design phase with design completion and start of bid phase planned for Fall 2017. **(No change)**



# LEHIGH COUNTY AUTHORITY

FINANCIAL REPORT – MAY 2017

# FINANCIAL REPORT

## MAY 2017

### 1. SUMMARY

#### A. Month

MONTH	MAY 2017						
	Actual	Forecast	Budget	Prior Year	FC Var	Bud Var	PY Var
<b>Income Statement</b>							
Suburban Water	93,775	5,528	(68,171)	85,268	88,247	161,946	8,507
Suburban Wastewater	121,035	136,316	62,136	(9,166)	(15,281)	58,899	130,202
City Division	(625,913)	(689,370)	(1,271,591)	(391,996)	63,457	645,678	(233,917)
<b>Cash Flow Statement (Indirect)</b>							
Suburban Water	(42,987)	(401,011)	(587,404)	101,266	358,024	544,417	(144,253)
Suburban Wastewater	374,116	233,538	(230,810)	194,347	140,578	604,926	179,768
City Division	900,967	770,594	84,237	867,693	130,373	816,730	33,274

#### Net income

Suburban Water and Suburban Wastewater reported positive net income for the month. City Division was negative.

Compared to forecast, Suburban Water was better, Suburban Wastewater was lower, and City Division was better.

Compared to budget, all three funds were better.

#### Cash Flows

Suburban Wastewater and City Division reported positive cash flows for the month.

Compared to forecast, all three funds had better cash flows.

Compared to budget, all three funds were better.

#### B. YTD

YTD	MAY 2017						
	Actual	Forecast	Budget	Prior Year	FC Var	Bud Var	PY Var
<b>Income Statement</b>							
Suburban Water	(42,794)	(167,431)	(232,392)	206,747	124,637	189,598	(249,541)
Suburban Wastewater	539,564	388,532	(205,413)	283,715	853,431	3,398,215	476,205
City Division	(1,825,676)	(1,907,852)	(5,214,675)	(3,463,471)	82,176	3,388,999	1,637,794
<b>Cash Flow Statement (Indirect)</b>							
Suburban Water	(734,680)	(1,120,126)	(2,828,557)	323,936	385,446	2,093,877	(1,058,616)
Suburban Wastewater	1,728,072	874,640	(1,670,143)	1,251,866	853,431	3,398,215	476,205
City Division	5,423,727	5,319,967	2,320,465	2,968,179	103,760	3,103,262	2,455,548
<b>Debt Service Coverage Ratio</b>							
Suburban Water	1.43	1.32	1.10	1.67	0.10	0.32	(0.25)
Suburban Wastewater	8.97	8.41	2.32	7.62	0.56	6.65	1.35
City Division	1.39	1.37	1.13	1.30	0.02	0.26	0.09

## Net income

YTD net income for Suburban Wastewater was positive but negative for both Suburban Water and City Division.

Compared to forecast, however, all three funds had better net income.

Compared to budget, all three funds are better.

## Cash Flows

YTD cash flows for both Suburban Wastewater and City Division were positive.

All three funds reported a cash flow that was higher than forecast.

All three funds have better than budget cash flow.

## Debt Service Coverage Ratio

YTD debt service coverage ratios are better than forecast and budget across all three funds and the ratios for all three funds are better than the 1.20 internal target.

## 2. SUBURBAN WATER

### A. Month

MONTH - SUBURBAN WATER	MAY 2017						
	Actual	Forecast	Budget	Prior Year	FC Var	Bud Var	PY Var
<b>Income Statement</b>							
Operating Revenues	674,048	667,789	695,883	648,062	6,259	(21,835)	25,986
Operating (Expenses)	(632,664)	(662,566)	(734,533)	(584,879)	29,902	101,869	(47,786)
Operating Income	41,384	5,223	(38,650)	63,183	36,161	80,034	(21,799)
Non-Operating Revenues (Expenses)	136,180	120,483	66,167	105,931	15,697	70,013	30,249
Income Before Interest	177,564	125,706	27,517	169,114	51,858	150,047	8,450
Interest Income	7,097	6,795	16,667	4,473	302	(9,570)	2,624
Interest Expense	(90,886)	(126,973)	(112,355)	(88,319)	36,087	21,469	(2,566)
Capital Contributions	-	-	-	-	-	-	-
<b>NET INCOME</b>	<b>93,775</b>	<b>5,528</b>	<b>(68,171)</b>	<b>85,268</b>	<b>88,247</b>	<b>161,946</b>	<b>8,507</b>

Net income was positive and was favorable to forecast by \$88k. We had favorable variances to forecast across all major categories.

MONTH - SUBURBAN WATER	MAY 2017						
	Actual	Forecast	Budget	Prior Year	FC Var	Bud Var	PY Var
<b>Cash Flow Statement (Indirect)</b>							
Net Income	93,775	5,528	(68,171)	85,268	88,247	161,946	8,507
Add: Depreciation & Amortization	245,832	245,832	245,833	245,832	-	(1)	-
Add: Non-Cash Interest Expense	-	1	-	-	(1)	-	-
Add: Capex Charged to Expense	1,825	187	8,333	91	1,638	(6,508)	1,734
Principal Payments	(138,969)	(128,565)	(152,816)	(136,592)	(10,404)	13,847	(2,376)
Investments Converting To Cash	-	-	-	-	-	-	-
New Borrowing	-	-	-	-	-	-	-
Capital Expenditures	(245,450)	(523,994)	(620,583)	(93,333)	278,544	375,133	(152,117)
<b>NET FUND CASH FLOWS</b>	<b>(42,987)</b>	<b>(401,011)</b>	<b>(587,404)</b>	<b>101,266</b>	<b>358,024</b>	<b>544,417</b>	<b>(144,253)</b>

Cash flows were negative but better than forecast by \$358k with a favorable effect from higher net income and lower capital spending.

## B. YTD

YTD - SUBURBAN WATER	MAY 2017						
	Actual	Forecast	Budget	Prior Year	FC Var	Bud Var	PY Var
<b>Income Statement</b>							
Operating Revenues	3,472,268	3,459,946	3,587,878	3,455,702	12,322	(115,610)	16,566
Operating (Expenses)	(3,176,663)	(3,230,830)	(3,672,665)	(3,070,330)	54,167	496,002	(106,333)
Operating Income	295,606	229,116	(84,787)	385,372	66,489	380,393	(89,766)
Non-Operating Revenues (Expenses)	138,294	114,417	330,835	223,780	23,876	(192,541)	(85,486)
Income Before Interest Expense	433,899	343,534	246,048	609,152	90,366	187,851	(175,253)
Interest Income	32,157	33,974	83,335	39,605	(1,817)	(51,178)	(7,448)
Interest Expense	(508,851)	(544,939)	(561,775)	(442,010)	36,088	52,924	(66,840)
Capital Contributions	-	-	-	-	-	-	-
<b>NET INCOME</b>	<b>(42,794)</b>	<b>(167,431)</b>	<b>(232,392)</b>	<b>206,747</b>	<b>124,637</b>	<b>189,598</b>	<b>(249,541)</b>

YTD net income was negative but is \$125k better than forecast. This is due favorable variances across all categories except for interest income where we are down slightly.

Compared to budget, net income is favorable by \$190k due mainly, to lower operating expenses.

YTD - SUBURBAN WATER	MAY 2017						
	Actual	Forecast	Budget	Prior Year	FC Var	Bud Var	PY Var
<b>Cash Flow Statement (Indirect)</b>							
Net Income	(42,794)	(167,431)	(232,392)	206,747	124,637	189,598	(249,541)
Add: Depreciation & Amortization	1,229,160	1,229,160	1,229,165	1,229,160	-	(5)	-
Add: Non-Cash Interest Expense	-	2	-	(0)	(2)	-	0
Add: Capex Charged to Expense	2,825	934	41,665	2,395	1,891	(38,840)	430
Principal Payments	(663,580)	(642,824)	(764,080)	(682,411)	(20,756)	100,500	18,830
Investments Converting To Cash	-	-	-	-	-	-	-
New Borrowing	-	-	-	-	-	-	-
Capital Expenditures	(1,260,291)	(1,539,968)	(3,102,915)	(431,956)	279,676	1,842,624	(828,336)
<b>NET FUND CASH FLOWS</b>	<b>(734,680)</b>	<b>(1,120,126)</b>	<b>(2,828,557)</b>	<b>323,936</b>	<b>385,446</b>	<b>2,093,877</b>	<b>(1,058,616)</b>

YTD cash flow is negative but is \$385k favorable to forecast on higher net income driven and lower capital spending.

Compared to budget, cash flow is favorable by \$2.1m on higher net income along with lower capital spending.

### 3. SUBURBAN WASTEWATER

#### A. Month

MONTH - SUBURBAN WASTEWATER	MAY 2017						
	Actual	Forecast	Budget	Prior Year	FC Var	Bud Var	PY Var
<b>Income Statement</b>							
Operating Revenues	1,425,174	1,420,980	1,603,552	1,556,271	4,194	(178,378)	(131,097)
Operating (Expenses)	(1,374,020)	(1,379,370)	(1,546,447)	(1,606,720)	5,350	172,427	232,700
Operating Income	51,154	41,610	57,105	(50,449)	9,544	(5,951)	101,603
Non-Operating Revenues (Expenses)	100,571	108,204	66,083	58,108	(7,633)	34,488	42,463
Income Before Interest Expense	151,725	149,814	123,188	7,659	1,911	28,537	144,066
Interest Income	(12,004)	4,602	9,917	785	(16,606)	(21,921)	(12,789)
Interest Expense	(18,685)	(18,100)	(70,969)	(17,610)	(585)	52,284	(1,075)
Capital Contributions	-	-	-	-	-	-	-
<b>NET INCOME</b>	<b>121,035</b>	<b>136,316</b>	<b>62,136</b>	<b>(9,166)</b>	<b>(15,281)</b>	<b>58,899</b>	<b>130,202</b>

Net income was positive lower than forecast by \$15k on lower non-operating revenues and lower interest income. Interest income is being unfavorably impacted by lower invested balances.

MONTH - SUBURBAN WASTEWATER	MAY 2017						
	Actual	Forecast	Budget	Prior Year	FC Var	Bud Var	PY Var
<b>Cash Flow Statement (Indirect)</b>							
Net Income	121,035	136,316	62,136	(9,166)	(15,281)	58,899	130,202
Add: Depreciation & Amortization	364,694	364,694	327,083	334,133	-	37,611	30,561
Add: Non-Cash Interest Expense	3,448	2,928	-	2,865	520	3,448	583
Add: Capex Charged to Expense	-	-	25,000	119	-	(25,000)	(119)
Principal Payments	(39,449)	(39,602)	(93,946)	(41,812)	153	54,497	2,363
Investments Converting To Cash	-	-	-	-	-	-	-
New Borrowing	-	-	-	-	-	-	-
Capital Expenditures	(75,612)	(230,798)	(551,083)	(91,791)	155,186	475,471	16,179
<b>NET FUND CASH FLOWS</b>	<b>374,116</b>	<b>233,538</b>	<b>(230,810)</b>	<b>194,347</b>	<b>140,578</b>	<b>604,926</b>	<b>179,768</b>

Cash flows were positive and better than forecast due to lower capital spending.

#### B. YTD

YTD - SUBURBAN WASTEWATER	MAY 2017						
	Actual	Forecast	Budget	Prior Year	FC Var	Bud Var	PY Var
<b>Income Statement</b>							
Operating Revenues	7,115,814	7,144,898	7,501,667	7,459,370	(29,085)	(385,853)	(343,556)
Operating (Expenses)	(7,014,124)	(7,016,847)	(7,732,235)	(7,676,200)	2,723	718,111	662,076
Operating Income	101,689	128,051	(230,568)	(216,830)	(26,362)	332,257	318,519
Non-Operating Revenues (Expenses)	525,888	327,970	330,415	581,204	197,917	195,473	(55,316)
Income Before Interest Expense	627,577	456,021	99,847	364,374	171,556	527,730	263,203
Interest Income	2,267	23,009	49,585	3,904	(20,742)	(47,318)	(1,637)
Interest Expense	(90,280)	(90,499)	(354,845)	(84,563)	218	264,565	(5,717)
Capital Contributions	-	-	-	-	-	-	-
<b>NET INCOME</b>	<b>539,564</b>	<b>388,532</b>	<b>(205,413)</b>	<b>283,715</b>	<b>151,033</b>	<b>744,977</b>	<b>255,849</b>

YTD net income is positive and is better than forecast by \$151k due to higher tapping fees that are more than offsetting some of the smaller unfavorable variances.



Compared to budget, net income is up by \$755k lower operating expenses, higher tapping fees, and lower interest expense to offset an unfavorable operating revenue variance.

YTD - SUBURBAN WASTEWATER	MAY 2017						
	Cash Flow Statement (Indirect)	Actual	Forecast	Budget	Prior Year	FC Var	Bud Var
Net Income	539,564	388,532	(205,413)	283,715	151,032	744,977	255,849
Add: Depreciation & Amortization	1,823,470	1,823,470	1,635,415	1,670,665	-	188,055	152,805
Add: Non-Cash Interest Expense	14,361	14,639	-	14,634	(278)	14,361	(273)
Add: Capex Charged to Expense	133	-	125,000	940	133	(124,867)	(807)
Principal Payments	(197,634)	(198,010)	(469,730)	(197,663)	376	272,096	29
Investments Converting To Cash	-	-	-	-	-	-	-
New Borrowing	-	-	-	-	-	-	-
Capital Expenditures	(451,822)	(1,153,991)	(2,755,415)	(520,424)	702,169	2,303,593	68,602
<b>NET FUND CASH FLOWS</b>	<b>1,728,072</b>	<b>874,640</b>	<b>(1,670,143)</b>	<b>1,251,866</b>	<b>853,431</b>	<b>3,398,215</b>	<b>476,205</b>

YTD cash flow is positive and \$853k better than forecast due to higher net income and lower capital spending.

Compared to budget, cash flow is up by \$3.4m from higher net income and lower capital spending as well.

## 4. CITY DIVISION

### A. Month

MONTH - CITY DIVISION	MAY 2017						
	Income Statement	Actual	Forecast	Budget	Prior Year	FC Var	Bud Var
Operating Revenues	2,538,192	2,530,388	2,230,624	2,390,293	7,804	307,568	147,898
Operating (Expenses)	(1,916,128)	(1,942,188)	(1,871,840)	(1,565,502)	26,060	(44,288)	(350,626)
Operating Income	622,063	588,200	358,784	824,791	33,863	263,279	(202,728)
Non-Operating Revenues (Expenses)	(127,399)	(150,583)	(283,834)	(80,446)	23,184	156,435	(46,953)
Income Before Interest Expense	494,665	437,617	74,950	744,345	57,048	419,715	(249,681)
Interest Income	142,363	135,954	25,167	179,117	6,409	117,196	(36,754)
Interest Expense	(1,262,941)	(1,262,941)	(1,371,708)	(1,315,458)	-	108,767	52,517
Capital Contributions	-	-	-	-	-	-	-
<b>NET INCOME</b>	<b>(625,913)</b>	<b>(689,370)</b>	<b>(1,271,591)</b>	<b>(391,996)</b>	<b>63,457</b>	<b>645,678</b>	<b>(233,917)</b>

Net income was negative but \$63k better than forecast with favorable variances across all categories.

MONTH - CITY DIVISION	MAY 2017						
	Cash Flow Statement (Indirect)	Actual	Forecast	Budget	Prior Year	FC Var	Bud Var
Net Income	(625,913)	(689,370)	(1,271,591)	(391,996)	63,457	645,678	(233,917)
Add: Depreciation & Amortization	450,000	450,000	466,667	450,000	-	(16,667)	-
Add: Non-Cash Interest Expense	1,262,941	1,262,941	1,371,708	1,315,458	-	(108,767)	(52,517)
Add: Capex Charged to Expense	135,756	166,488	658,667	161,112	(30,732)	(522,911)	(25,356)
Principal Payments	-	-	-	-	-	-	-
Cash Outlays on Lease & Lease Reserve	-	-	(252,000)	-	-	252,000	-
Investments Converting To Cash	-	-	-	-	-	-	-
New Borrowing	-	-	-	-	-	-	-
Capital Expenditures	(321,816)	(419,465)	(889,214)	(666,881)	97,649	567,398	345,065
<b>NET FUND CASH FLOWS</b>	<b>900,967</b>	<b>770,594</b>	<b>84,237</b>	<b>867,693</b>	<b>130,373</b>	<b>816,730</b>	<b>33,274</b>

Cash flow was positive and was \$131k better than forecast due to higher net income and lower capital spending.

## B. YTD

YTD - CITY DIVISION	MAY 2017						
	Actual	Forecast	Budget	Prior Year	FC Var	Bud Var	PY Var
<b>Income Statement</b>							
Operating Revenues	13,333,795	13,314,937	12,296,400	12,523,263	18,858	1,037,395	810,532
Operating (Expenses)	(8,798,649)	(8,894,941)	(9,359,200)	(8,250,176)	96,291	560,551	(548,473)
Operating Income	4,535,146	4,419,996	2,937,200	4,273,087	115,149	1,597,946	262,058
Non-Operating Revenues (Expenses)	(231,342)	(192,914)	(1,419,170)	(1,339,485)	(38,428)	1,187,828	1,108,142
Income Before Interest Expense	4,303,803	4,227,082	1,518,030	2,933,602	76,721	2,785,773	1,370,201
Interest Income	185,225	179,770	125,835	180,217	5,455	59,390	5,008
Interest Expense	(6,314,705)	(6,314,705)	(6,858,540)	(6,577,290)	-	543,835	262,585
Capital Contributions	-	-	-	-	-	-	-
<b>NET INCOME</b>	<b>(1,825,676)</b>	<b>(1,907,852)</b>	<b>(5,214,675)</b>	<b>(3,463,471)</b>	<b>82,176</b>	<b>3,388,999</b>	<b>1,637,794</b>

YTD net income is negative but \$82k better than forecast with higher operating revenues and lower operating expenses partially offset by lower capital recovery and project reimbursement fees.

Compared to budget, income is \$3.4m favorable with favorable variances across all categories.

YTD - CITY DIVISION	MAY 2017						
	Actual	Forecast	Budget	Prior Year	FC Var	Bud Var	PY Var
<b>Cash Flow Statement (Indirect)</b>							
Net Income	(1,825,676)	(1,907,852)	(5,214,675)	(3,463,471)	82,176	3,388,999	1,637,794
Add: Depreciation & Amortization	2,250,000	2,250,000	2,333,335	2,250,000	-	(83,335)	-
Add: Non-Cash Interest Expense	6,314,705	6,314,705	6,858,540	6,577,290	-	(543,835)	(262,585)
Add: Capex Charged to Expense	442,358	432,439	3,293,335	1,208,588	9,919	(2,850,977)	(766,230)
Principal Payments	-	-	-	-	-	-	-
Cash Outlays on Lease & Lease Reserve	(252,000)	(252,000)	(504,000)	(250,000)	-	252,000	(2,000)
Investments Converting To Cash	-	-	-	-	-	-	-
New Borrowing	-	-	-	-	-	-	-
Capital Expenditures	(1,505,660)	(1,517,325)	(4,446,070)	(3,354,228)	11,665	2,940,410	1,848,568
<b>NET FUND CASH FLOWS</b>	<b>5,423,727</b>	<b>5,319,967</b>	<b>2,320,465</b>	<b>2,968,179</b>	<b>103,760</b>	<b>3,103,262</b>	<b>2,455,548</b>

YTD cash flow is positive and \$104k better than forecast on higher net income and lower capital spending.

Compared to budget, cash flow is up \$3.1m from higher net income and lower capital spending partially offset by higher interest expense and higher expensed capex.

## 5. FULL YEAR FORECAST

Through May, we are running favorable to forecast on net income and cash flow. That will help make up some of the interest income issue we reported for the Q2 forecast and provide some push to get us closer to budget than the forecast was.

We will report on June and then start another forecast cycle.

The Q2 Forecast for the full year is as follows:

	<u>Forecast</u>	<u>Budget</u>	<u>Variance to Budget</u>
<b>INCOME STATEMENT</b>			
Suburban Water	(240,735)	(34,673)	(206,061)
Suburban Wastewater	(235,352)	(237,977)	2,625
City Division	<u>(10,277,442)</u>	<u>(10,217,568)</u>	<u>(59,874)</u>
TOTAL LCA	<u>(10,753,529)</u>	<u>(10,490,218)</u>	<u>(263,311)</u>
<b>CASH FLOW STATEMENT</b>			
Suburban Water	8,746,797	(81,469)	8,828,266
Suburban Wastewater	37,287,310	7,121,675	30,165,635
City Division	<u>3,359,258</u>	<u>3,424,640</u>	<u>(65,382)</u>
TOTAL LCA	<u>49,393,365</u>	<u>10,464,846</u>	<u>38,928,519</u>
<b>DEBT SERVICE COVERAGE RATIO</b>			
Suburban Water	1.20	1.27	(0.07)
Suburban Wastewater	2.52	2.45	0.07
City Division	1.25	1.25	(0.00)

#### Net income

Suburban Water is down to budget due to lower interest income as invested balances are lower.

Suburban Wastewater is up slightly to budget.

City Division is down due to lower interest income on lower invested balances

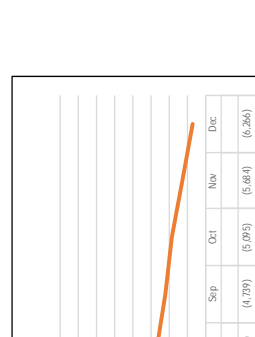
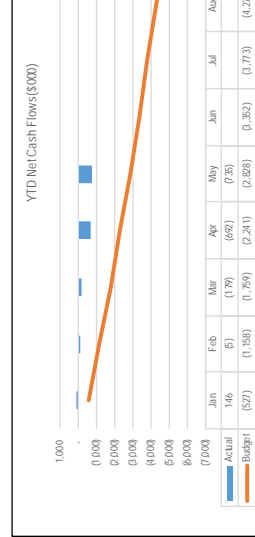
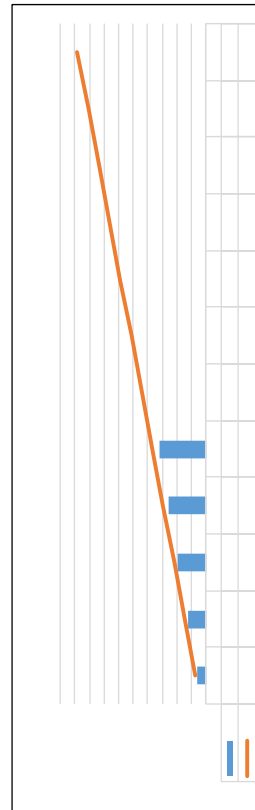
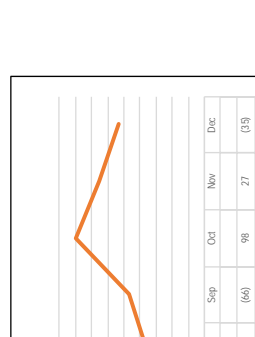
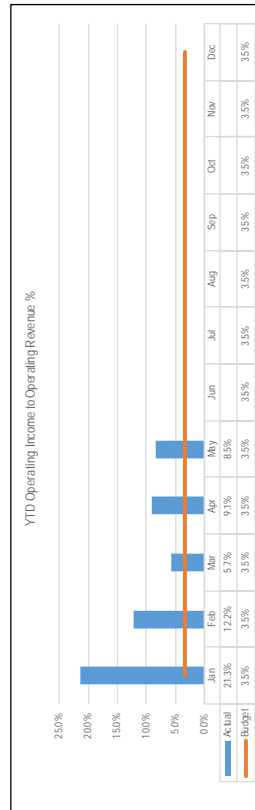
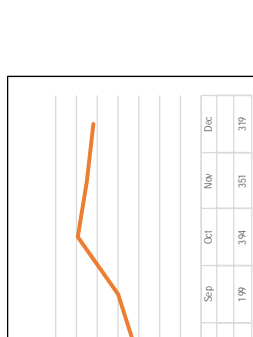
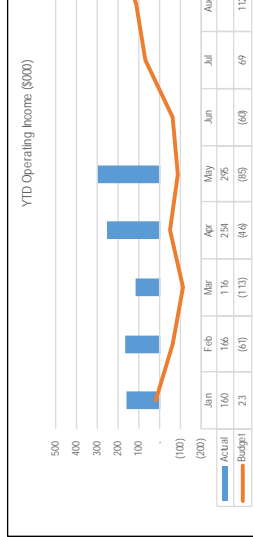
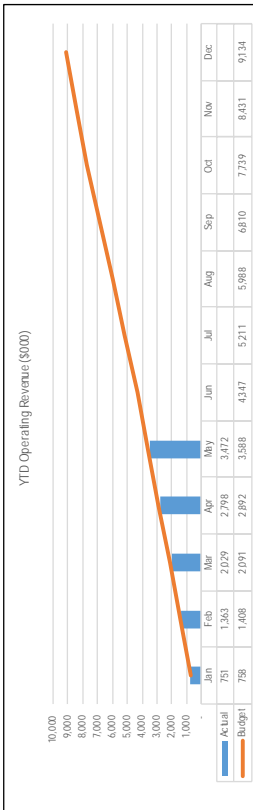
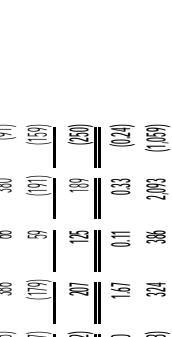
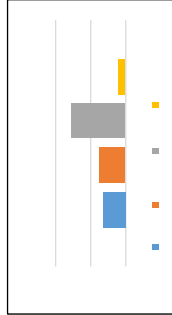
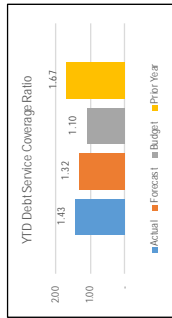
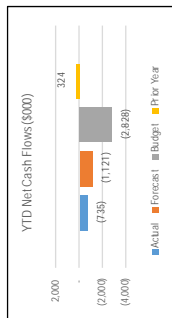
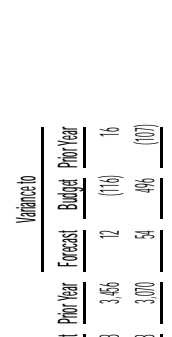
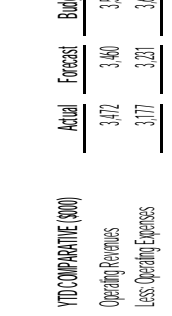
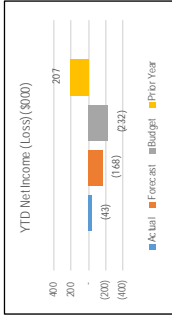
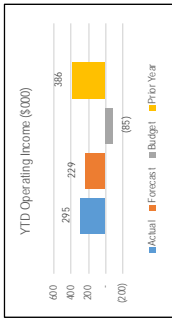
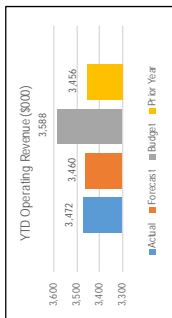
#### Cash Flows

Suburban Water is up due to higher borrowing – we are borrowing \$15m to cover projects for three years instead of the budgeted \$5.9m for one year. Adjusting for borrowing, cash flow would be down on lower interest income.

Suburban Wastewater is also up due to higher borrowing as the forecast has borrowing for \$25m of AO work along with an additional \$16m of other wastewater projects covering a three year period. Adjusting for borrowing, cash flow would be up slightly on higher net income.

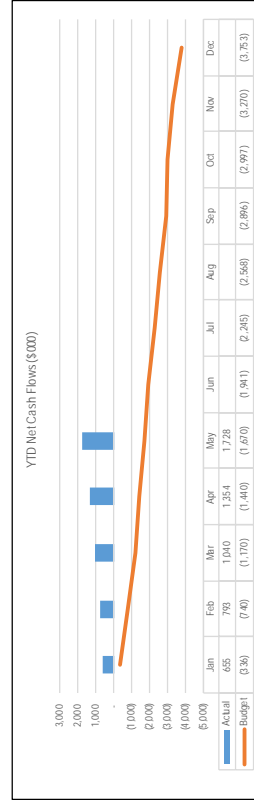
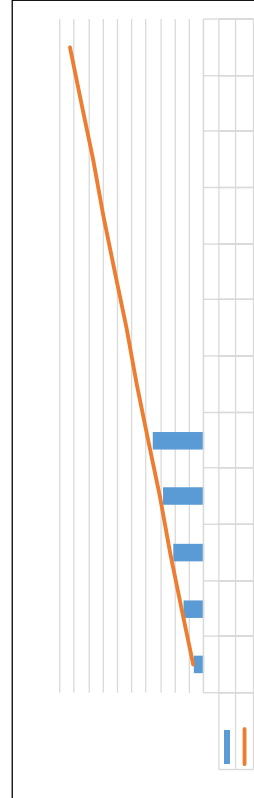
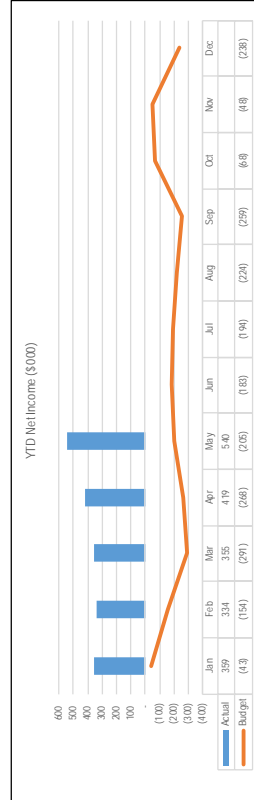
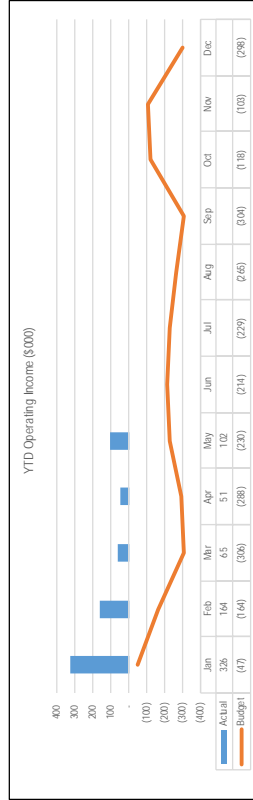
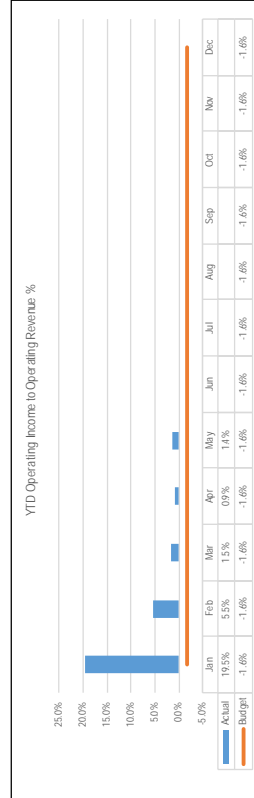
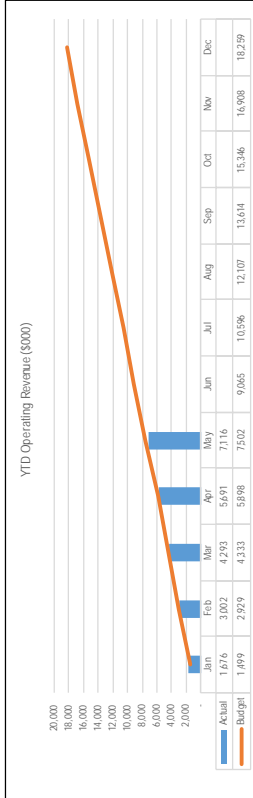
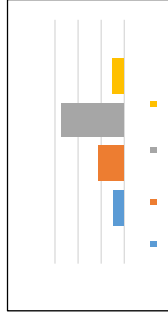
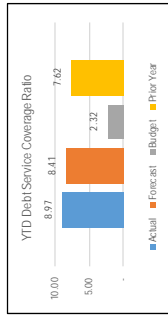
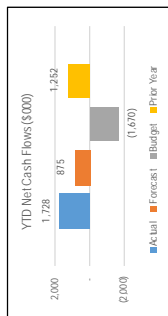
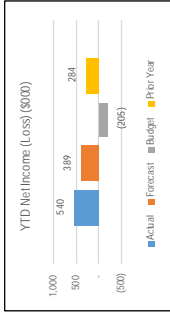
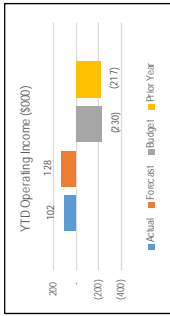
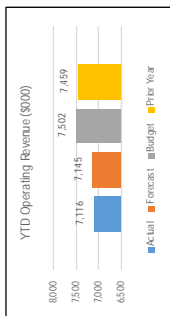
City Division is down on the lower interest income.

**DASHBOARD - SUBURBAN WATER  
MAY 2017**



LEHIGH COUNTY AUTHORITY															
SUBURBAN WATER															
MONTHLY FINANCIAL STATEMENTS															
MONTH - SUBURBAN WATER				MAY 2017				MAY 2017							
Income Statement	Actual	Forecast	Budget	Prior Year	FC Var	Bud Var	PY Var	Income Statement	Actual	Forecast	Budget	Prior Year	FC Var	Bud Var	PY Var
Operating Revenues	674,048	667,789	695,883	648,062	6,259	(21,835)	25,986	Operating Revenues	3,472,268	3,459,946	3,587,878	3,455,702	12,322	(115,610)	16,566
Operating (Expenses)	(632,664)	(662,566)	(734,533)	(584,879)	29,902	101,869	(47,786)	Operating (Expenses)	(3,176,663)	(3,230,830)	(3,672,665)	(3,070,330)	54,167	496,002	(106,333)
Operating Income	41,384	5,223	(38,650)	63,183	36,161	80,034	(21,799)	Operating Income	295,606	229,116	(84,787)	385,372	66,489	380,393	(89,766)
Non-Operating Revenues (Expenses)	136,180	120,483	66,167	105,931	15,697	70,013	30,249	Non-Operating Revenues (Expenses)	138,294	114,417	330,835	223,780	23,876	(192,541)	(85,486)
Income Before Interest	177,564	125,706	27,517	169,114	51,858	150,047	8,450	Income Before Interest Expense	433,899	343,534	246,048	609,152	90,366	187,851	(175,253)
Interest Income	7,097	6,795	16,687	4,473	302	(9,570)	2,624	Interest Income	32,157	33,974	83,335	39,605	(1,817)	(51,178)	(7,448)
Interest Expense	(90,886)	(126,979)	(112,355)	(89,319)	36,087	21,469	(2,566)	Interest Expense	(508,851)	(544,939)	(561,775)	(442,010)	36,086	52,924	(66,840)
Capital Contributions	-	-	-	-	-	-	-	Capital Contributions	-	-	-	-	-	-	-
<b>NET INCOME</b>	<b>93,775</b>	<b>5,528</b>	<b>(66,171)</b>	<b>85,268</b>	<b>88,247</b>	<b>161,946</b>	<b>8,507</b>	<b>NET INCOME</b>	<b>(42,794)</b>	<b>(167,431)</b>	<b>(232,392)</b>	<b>206,747</b>	<b>124,637</b>	<b>189,598</b>	<b>(249,541)</b>
MONTH - SUBURBAN WATER				MAY 2017				MAY 2017							
Cash Flow Statement (Indirect)	Actual	Forecast	Budget	Prior Year	FC Var	Bud Var	PY Var	Cash Flow Statement (Indirect)	Actual	Forecast	Budget	Prior Year	FC Var	Bud Var	PY Var
Net Income	93,775	5,528	(66,171)	85,268	88,247	161,946	8,507	Net Income	(42,794)	(167,431)	(232,392)	206,747	124,637	189,598	(249,541)
Add: Depreciation & Amortization	245,832	245,832	245,833	245,832	-	(1)	-	Add: Depreciation & Amortization	1,229,160	1,229,160	1,229,165	1,229,160	-	(5)	(5)
Add: Non-Cash Interest Expense	-	1	-	-	(1)	-	-	Add: Non-Cash Interest Expense	2	2	(0)	(0)	(2)	-	0
Add: Capex Charged to Expense	1,825	187	8,333	91	1,638	(6,508)	1,734	Add: Capex Charged to Expense	2,825	934	41,665	2,395	1,891	(38,840)	430
Principal Payments	(136,969)	(128,565)	(152,816)	(136,592)	(10,404)	13,847	(2,376)	Principal Payments	(663,590)	(642,824)	(764,080)	(682,411)	(20,756)	100,500	18,830
Investments Converting To Cash	-	-	-	-	-	-	-	Investments Converting To Cash	-	-	-	-	-	-	-
New Borrowing	-	-	-	-	-	-	-	New Borrowing	-	-	-	-	-	-	-
Capital Expenditures	(245,460)	(523,994)	(620,593)	(93,323)	278,544	375,133	(152,117)	Capital Expenditures	(1,260,291)	(1,539,968)	(3,102,915)	(431,956)	279,676	1,842,624	(628,336)
<b>NET FUND CASH FLOWS</b>	<b>(42,987)</b>	<b>(401,011)</b>	<b>(587,404)</b>	<b>101,266</b>	<b>358,024</b>	<b>544,417</b>	<b>(144,253)</b>	<b>NET FUND CASH FLOWS</b>	<b>(734,680)</b>	<b>(1,120,126)</b>	<b>(2,828,557)</b>	<b>323,936</b>	<b>385,446</b>	<b>2,093,877</b>	<b>(1,058,616)</b>
MONTH - SUBURBAN WATER				MAY 2017				MAY 2017							
Cash Flow Statement (Direct)	Actual	Forecast	Budget	Prior Year	FC Var	Bud Var	PY Var	Cash Flow Statement (Direct)	Actual	Forecast	Budget	Prior Year	FC Var	Bud Var	PY Var
Operating Revenues	674,048	667,789	695,883	648,062	6,259	(21,835)	25,986	Operating Revenues	3,472,268	3,459,946	3,587,878	3,455,702	12,322	(115,610)	16,566
Operating Expenses (Ex Depreciation)	(386,832)	(416,734)	(488,700)	(339,047)	29,902	101,868	(47,786)	Operating Expenses (Ex Depreciation)	(1,947,503)	(2,001,670)	(2,443,500)	(1,841,170)	54,167	496,997	(106,333)
Interest Income	7,097	6,795	16,667	4,473	302	(9,570)	2,624	Interest Income	32,157	33,974	83,335	39,605	(1,817)	(51,178)	(7,448)
Cash Available For Debt Service	294,313	257,850	223,850	313,488	36,463	70,463	(19,175)	Cash Available For Debt Service	1,556,923	1,482,251	1,227,713	1,654,137	64,672	329,210	(97,214)
Interest Payments	(60,886)	(126,972)	(112,355)	(89,319)	36,086	21,469	(2,566)	Interest Payments	(508,851)	(544,937)	(561,775)	(442,010)	36,086	52,924	(66,840)
Principal Payments	(136,969)	(128,565)	(152,816)	(136,592)	(10,404)	13,847	(2,376)	Principal Payments	(663,590)	(642,824)	(764,080)	(682,411)	(20,756)	100,500	18,830
Net Cash Available After Debt Service	64,458	2,313	(41,321)	88,576	62,145	105,779	(24,118)	Net Cash Available After Debt Service	384,492	304,490	(98,142)	529,716	80,002	482,634	(145,224)
Non-Operating Revenues (Expenses)	136,180	120,483	66,167	105,931	15,697	70,013	30,249	Non-Operating Revenues (Expenses)	138,294	114,417	330,835	223,780	23,876	(192,541)	(85,486)
Add: Capex Charged to Expense	1,825	187	8,333	91	1,638	(6,508)	1,734	Add: Capex Charged to Expense	2,825	934	41,665	2,395	1,891	(38,840)	430
Less: Project Reimbursement	(25,397)	(37,000)	(27,833)	-	11,603	2,436	(25,397)	Less: Project Reimbursement	(25,397)	(37,000)	(139,165)	-	11,603	113,768	(25,397)
Non-Cash Working Capital Changes	-	-	-	-	-	-	-	Non-Cash Working Capital Changes	-	-	-	-	-	-	-
Net Cash Available For Capital	177,066	85,983	5,346	194,598	91,063	171,720	(17,532)	Net Cash Available For Capital	500,214	382,841	135,193	755,891	117,373	385,021	(255,677)
Project Reimbursement	25,397	37,000	27,833	-	(11,603)	(2,436)	25,397	Project Reimbursement	25,397	37,000	139,165	-	(11,603)	(113,768)	25,397
Capital Contributions	-	-	-	-	-	-	-	Capital Contributions	-	-	-	-	-	-	-
Investments Converting To Cash	-	-	-	-	-	-	-	Investments Converting To Cash	-	-	-	-	-	-	-
New Borrowing	-	-	-	-	-	-	-	New Borrowing	-	-	-	-	-	-	-
Capital Expenditures	(245,460)	(523,994)	(620,593)	(93,323)	278,544	375,133	(152,117)	Capital Expenditures	(1,260,291)	(1,539,968)	(3,102,915)	(431,956)	279,676	1,842,624	(628,336)
<b>NET FUND CASH FLOWS</b>	<b>(42,987)</b>	<b>(401,011)</b>	<b>(587,404)</b>	<b>101,266</b>	<b>358,024</b>	<b>544,417</b>	<b>(144,253)</b>	<b>NET FUND CASH FLOWS</b>	<b>(734,680)</b>	<b>(1,120,126)</b>	<b>(2,828,557)</b>	<b>323,936</b>	<b>385,446</b>	<b>2,093,877</b>	<b>(1,058,616)</b>
DEBT SERVICE COVERAGE RATIO				DEBT SERVICE COVERAGE RATIO				DEBT SERVICE COVERAGE RATIO							
Total Cash Available For Debt Service	406,921	341,520	270,517	419,510	36,463	70,463	(19,175)	Total Cash Available For Debt Service	1,672,645	1,570,602	1,461,048	1,880,312	1,556,923	1,482,624	(187,712)
Debt Service	229,855	255,537	265,171	224,912	29,902	13,847	(2,376)	Debt Service	1,172,431	1,187,761	1,325,855	1,124,421	1,187,761	1,124,421	1,124,421
<b>DSCR</b>	<b>1.77</b>	<b>1.34</b>	<b>1.02</b>	<b>1.87</b>	<b>1.32</b>	<b>1.02</b>	<b>1.87</b>	<b>DSCR</b>	<b>1.43</b>	<b>1.32</b>	<b>1.10</b>	<b>1.67</b>	<b>1.32</b>	<b>1.10</b>	<b>1.67</b>

**DASHBOARD - SUBURBAN WASTEWATER  
MAY 2017**

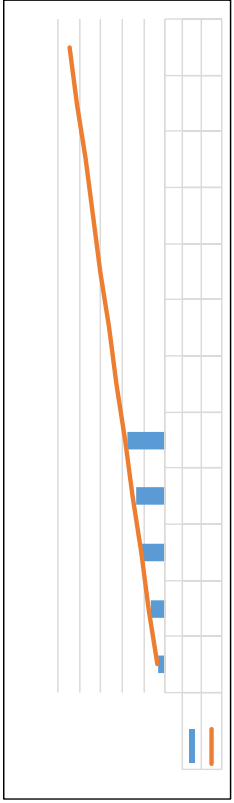
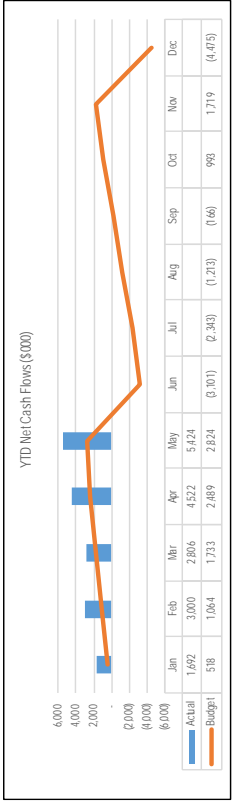
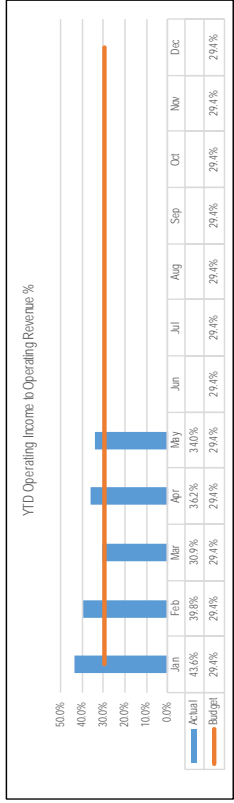
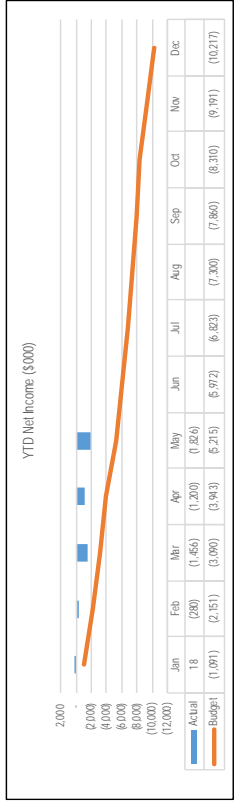
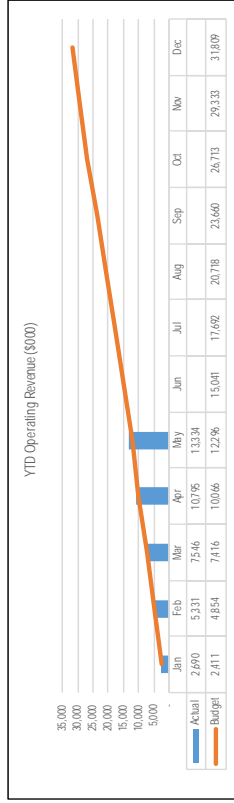
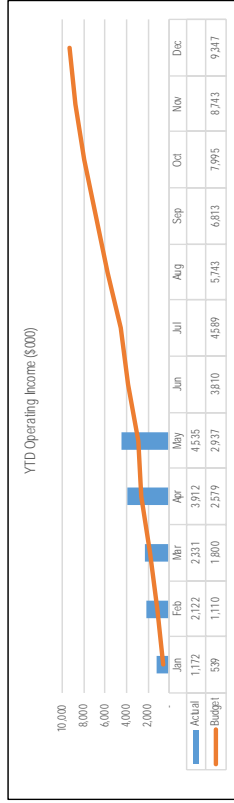
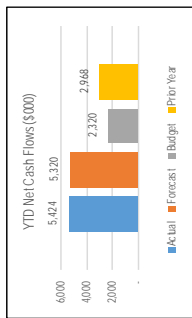
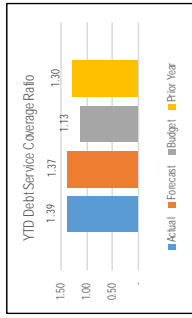
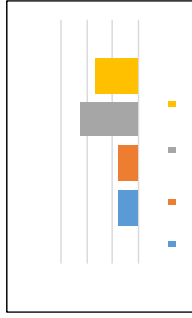
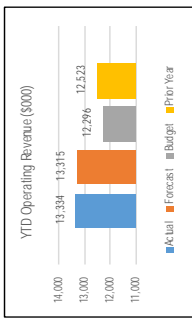
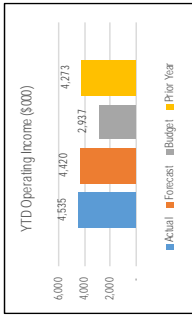
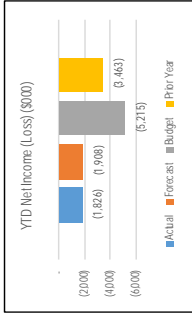


	Actual	Forecast	Budget	Prior Year	Variance to
<b>YTD COMPARATIVE (\$000)</b>					
Operating Revenues	7,116	7,145	7,502	7,459	(29)
Less: Operating Expenses	7,014	7,017	7,732	7,616	3
<b>Operating Income</b>	<b>102</b>	<b>128</b>	<b>(230)</b>	<b>(217)</b>	<b>(26)</b>
Other income (expenses)	438	261	25	501	177
<b>Net Income</b>	<b>540</b>	<b>389</b>	<b>(205)</b>	<b>284</b>	<b>151</b>
<b>Debt Service Coverage Ratio</b>	<b>8.97</b>	<b>8.41</b>	<b>2.32</b>	<b>7.62</b>	<b>0.56</b>
<b>Net Cash Flows</b>	<b>1,728</b>	<b>875</b>	<b>(1,670)</b>	<b>1,652</b>	<b>853</b>
					<b>3,398</b>
					<b>476</b>

LEHIGH COUNTY AUTHORITY SUBURBAN WASTEWATER MONTHLY FINANCIAL STATEMENTS											
MONTH - SUBURBAN WASTEWATER											
	Actual	Forecast	Budget	Prior Year	FC Var	Bud Var	PY Var				
	1,425,174	1,420,990	1,603,552	1,556,271	4,194	(178,378)	(131,097)				
Operating Revenues	(1,374,020)	(1,379,370)	(1,546,447)	(1,606,720)	5,350	172,427	232,700				
Operating (Expenses)	51,154	41,610	57,105	(60,449)	9,544	(5,951)	101,603				
Operating Income	100,571	108,204	66,083	58,108	(7,633)	34,488	42,463				
Non-Operating Revenues (Expenses)	151,725	149,814	123,188	7,659	1,911	28,537	144,066				
Income Before Interest Expense	(12,004)	4,602	9,917	785	(16,606)	(21,921)	(12,789)				
Interest Income	(18,685)	(18,100)	(70,969)	(17,610)	(585)	52,284	(1,075)				
Interest Expense	-	-	-	-	-	-	-				
Capital Contributions	-	-	-	-	-	-	-				
NET INCOME	121,035	136,316	62,136	(9,169)	(15,281)	96,899	130,202				
MONTH - SUBURBAN WASTEWATER											
	Actual	Forecast	Budget	Prior Year	FC Var	Bud Var	PY Var				
	121,035	136,316	62,136	(9,169)	(15,281)	96,899	130,202				
Net Income	364,694	364,684	327,083	334,133	-	37,611	30,561				
Add: Depreciation & Amortization	3,446	2,928	-	2,865	520	-3,448	583				
Add: Non-Cash Interest Expense	-	-	25,000	119	-	(25,000)	(119)				
Add: Capex Charged to Expense	(39,449)	(39,602)	(83,946)	(41,812)	153	54,497	2,363				
Principal Payments	-	-	-	-	-	-	-				
Investments Converting To Cash	-	-	-	-	-	-	-				
New Borrowing	(75,612)	(230,798)	(551,083)	(81,791)	155,186	475,471	16,179				
Capital Expenditures	374,116	233,538	(230,810)	194,347	140,578	604,926	179,768				
NET FUND CASH FLOWS											
MONTH - SUBURBAN WASTEWATER											
	Actual	Forecast	Budget	Prior Year	FC Var	Bud Var	PY Var				
	1,425,174	1,420,990	1,603,552	1,556,271	4,194	(178,378)	(131,097)				
Operating Revenues	(1,009,326)	(1,014,676)	(1,219,364)	(1,272,587)	5,350	210,038	263,261				
Operating Expenses (Ex: Depreciation)	(12,004)	4,602	9,917	785	(16,606)	(21,921)	(12,789)				
Interest Income	403,844	410,906	394,105	284,469	(7,062)	9,739	119,375				
Cash Available For Debt Service	(15,238)	(15,172)	(70,969)	(14,746)	(66)	55,731	(492)				
Interest Payments	(39,449)	(39,602)	(83,946)	(41,812)	153	54,497	2,363				
Principal Payments	349,157	356,132	229,190	227,911	(6,975)	119,967	121,246				
Net Cash Available For Debt Service	100,571	108,204	66,083	58,108	(7,633)	34,488	42,463				
Non-Operating Revenues (Expenses)	-	-	25,000	119	-	(25,000)	(119)				
Add: Capex Charged to Expense	-	-	-	-	-	-	-				
Less: Project Reimbursement	-	-	-	-	-	-	-				
Non-Cash Working Capital Changes	-	-	-	-	-	-	-				
Net Cash Available For Capital	449,728	454,336	320,273	286,139	(14,608)	129,455	163,569				
Project Reimbursement	-	-	-	-	-	-	-				
Capital Contributions	-	-	-	-	-	-	-				
Investments Converting To Cash	-	-	-	-	-	-	-				
New Borrowing	(75,612)	(230,798)	(551,083)	(81,791)	155,186	475,471	16,179				
Capital Expenditures	374,116	233,538	(230,810)	194,347	140,578	604,926	179,768				
NET FUND CASH FLOWS											
MONTH - SUBURBAN WASTEWATER											
	Actual	Forecast	Budget	Prior Year	FC Var	Bud Var	PY Var				
	7,115,814	7,144,898	7,501,667	7,459,370	(29,085)	(385,853)	(343,556)				
Operating Revenues	(7,014,124)	(7,016,847)	(7,732,235)	(7,676,200)	2,723	718,111	662,076				
Operating (Expenses)	101,689	128,051	(230,568)	(216,830)	(26,362)	332,257	318,519				
Operating Income	525,888	327,970	330,415	581,204	197,917	195,473	(65,316)				
Non-Operating Revenues (Expenses)	627,577	456,021	99,847	364,374	171,556	527,730	263,203				
Income Before Interest Expense	2,267	23,009	49,585	3,904	(20,742)	(47,318)	(1,637)				
Interest Income	(90,280)	(90,499)	(354,845)	(84,563)	218	264,565	(5,717)				
Interest Expense	-	-	-	-	-	-	-				
Capital Contributions	-	-	-	-	-	-	-				
NET INCOME	539,564	388,532	(205,413)	283,715	151,033	744,977	255,849				
MONTH - SUBURBAN WASTEWATER											
	Actual	Forecast	Budget	Prior Year	FC Var	Bud Var	PY Var				
	539,564	388,532	(205,413)	283,715	151,032	744,977	255,849				
Net Income	1,823,470	1,823,470	1,635,415	1,670,665	-	188,055	152,805				
Add: Depreciation & Amortization	14,361	14,639	-	14,634	(278)	14,361	(273)				
Add: Non-Cash Interest Expense	-	-	125,000	940	-	(124,867)	(607)				
Add: Capex Charged to Expense	(197,634)	(198,010)	(469,730)	(197,663)	376	272,096	29				
Principal Payments	-	-	-	-	-	-	-				
Investments Converting To Cash	-	-	-	-	-	-	-				
New Borrowing	(451,822)	(1,153,991)	(2,755,415)	(520,424)	702,169	2,303,593	68,602				
Capital Expenditures	1,728,072	874,640	(1,670,143)	1,251,866	853,431	3,398,215	476,205				
NET FUND CASH FLOWS											
MONTH - SUBURBAN WASTEWATER											
	Actual	Forecast	Budget	Prior Year	FC Var	Bud Var	PY Var				
	7,115,814	7,144,898	7,501,667	7,459,370	(29,085)	(385,853)	(343,556)				
Operating Revenues	(5,190,654)	(5,193,377)	(6,036,820)	(6,005,535)	2,723	906,166	814,881				
Operating Expenses (Ex: Depreciation)	2,267	23,009	49,585	3,904	(20,742)	(47,318)	(1,637)				
Interest Income	1,927,427	1,974,531	1,454,432	1,457,739	(47,104)	472,985	469,688				
Cash Available For Debt Service	(75,919)	(75,859)	(354,845)	(69,929)	(60)	278,926	(5,990)				
Interest Payments	(197,634)	(198,010)	(469,730)	(197,663)	376	272,096	29				
Principal Payments	1,653,873	1,700,661	629,857	1,190,146	(46,788)	1,024,016	463,727				
Net Cash Available For Debt Service	525,888	327,970	330,415	581,204	197,917	195,473	(65,316)				
Non-Operating Revenues (Expenses)	133	-	125,000	940	133	(124,867)	(807)				
Add: Capex Charged to Expense	-	-	-	-	-	-	-				
Less: Project Reimbursement	-	-	-	-	-	-	-				
Non-Cash Working Capital Changes	-	-	-	-	-	-	-				
Net Cash Available For Capital	2,179,893	2,028,632	1,085,272	1,772,291	151,262	1,094,621	407,603				
Project Reimbursement	-	-	-	-	-	-	-				
Capital Contributions	-	-	-	-	-	-	-				
Investments Converting To Cash	-	-	-	-	-	-	-				
New Borrowing	(451,822)	(1,153,991)	(2,755,415)	(520,424)	702,169	2,303,593	68,602				
Capital Expenditures	1,728,072	874,640	(1,670,143)	1,251,866	853,431	3,398,215	476,205				
NET FUND CASH FLOWS											
DEBT SERVICE COVERAGE RATIO											
Total Cash Available For Debt Service	2,453,447	2,302,501	1,909,847	2,039,883							
Debt Service	273,553	273,869	824,575	267,593							
DCSR	9.22	9.48	2.94	6.06							

**DASHBOARD - CITY DIVISION  
MAY 2017**

	Actual	Forecast	Budget	Prior Year	Forecast	Budget	Prior Year	Variance to
<b>YTD COMPARATIVE (\$000)</b>								
Operating Revenues	13,334	13,315	12,296	12,323	19	1,038	811	
Less Operating Expenses	8,709	8,836	9,359	8,250	36	550	(549)	
<b>Operating Income</b>	<b>4,625</b>	<b>4,479</b>	<b>2,937</b>	<b>4,073</b>	<b>115</b>	<b>1,538</b>	<b>262</b>	
<b>Other Income (Expense)</b>	<b>(16,361)</b>	<b>(6,228)</b>	<b>(8,152)</b>	<b>(7,736)</b>	<b>(33)</b>	<b>1,791</b>	<b>1,375</b>	
<b>Net Income</b>	<b>(11,736)</b>	<b>(1,749)</b>	<b>(5,215)</b>	<b>(3,663)</b>	<b>82</b>	<b>3,309</b>	<b>1,637</b>	
<b>Debt Service Coverage Ratio</b>	<b>1.39</b>	<b>1.37</b>	<b>1.13</b>	<b>1.30</b>	<b>0.02</b>	<b>0.26</b>	<b>0.09</b>	
<b>Net Cash Flows</b>	<b>5,424</b>	<b>5,320</b>	<b>2,320</b>	<b>2,968</b>	<b>104</b>	<b>3,104</b>	<b>2,456</b>	





LEHIGH COUNTY AUTHORITY CITY DIVISION MONTHLY FINANCIAL STATEMENTS												
MONTH - CITY DIVISION												
Income Statement	Actual	Forecast	Budget	Prior Year	FC Var	Bud Var	PY Var	YTD - CITY DIVISION Income Statement	Actual	Forecast	Budget	Prior Year
Operating Revenues	2,530,192	2,530,388	2,230,624	2,300,293	7,804	307,668	147,698	Operating Revenues	13,333,795	13,314,937	12,296,400	12,523,263
Operating (Expenses)	(1,916,129)	(1,942,188)	(1,871,840)	(1,955,502)	26,060	(44,288)	(350,628)	Operating (Expenses)	(8,798,649)	(8,894,941)	(9,859,200)	(8,250,178)
Operating Income	622,063	588,200	358,784	824,791	33,863	263,279	(202,728)	Operating Income	4,535,146	4,419,996	2,437,200	4,273,087
Non-Operating Revenues (Expenses)	(127,399)	(150,583)	(293,834)	(80,446)	23,184	156,435	(46,953)	Non-Operating Revenues (Expenses)	(231,342)	(192,914)	(1,419,170)	(1,339,485)
Income Before Interest Expense	494,665	437,617	74,950	744,345	57,048	419,715	(249,681)	Income Before Interest Expense	4,303,803	4,227,082	1,018,030	2,933,602
Interest Expense	142,363	135,954	25,167	179,117	6,409	117,196	(36,754)	Interest Expense	185,225	179,770	125,835	180,217
Capital Contributions	(1,262,941)	(1,262,941)	(1,371,708)	(1,315,458)	-	108,767	52,517	Capital Contributions	(6,314,705)	(6,314,705)	(6,858,540)	(6,577,290)
NET INCOME	(625,913)	(688,370)	(1,271,591)	(391,998)	63,457	645,678	(233,917)	NET INCOME	(1,825,676)	(1,907,852)	(5,214,675)	(3,463,471)
MONTH - CITY DIVISION												
Cash Flow Statement (Indirect)	Actual	Forecast	Budget	Prior Year	FC Var	Bud Var	PY Var	YTD - CITY DIVISION Cash Flow Statement (Indirect)	Actual	Forecast	Budget	Prior Year
Net Income	(625,913)	(688,370)	(1,271,591)	(391,998)	63,457	645,678	(233,917)	Net Income	(1,825,676)	(1,907,852)	(5,214,675)	(3,463,471)
Add: Depreciation & Amortization	450,000	450,000	466,667	450,000	-	(16,667)	-	Add: Depreciation & Amortization	2,250,000	2,250,000	2,250,000	2,250,000
Add: Non-Cash Interest Expense	1,262,941	1,262,941	1,371,708	1,315,458	(30,732)	(522,911)	(25,356)	Add: Non-Cash Interest Expense	6,314,705	6,314,705	6,858,540	6,577,290
Add: Capex Charged to Expense	135,756	166,488	658,667	161,112	-	-	-	Add: Capex Charged to Expense	442,358	432,439	3,293,335	1,208,588
Principal Payments	-	-	(252,000)	-	-	252,000	-	Principal Payments	(252,000)	(252,000)	(504,000)	(250,000)
Cash Outlays on Lease & Lease Reserve	-	-	-	-	-	-	-	Cash Outlays on Lease & Lease Reserve	-	-	-	-
Investments Converting To Cash	-	-	-	-	-	-	-	Investments Converting To Cash	-	-	-	-
New Borrowing	(321,816)	(419,465)	(889,214)	(666,881)	97,649	567,398	345,065	New Borrowing	(1,505,660)	(1,517,325)	(4,446,070)	(3,354,228)
Capital Expenditures	900,987	770,594	84,237	867,693	130,373	816,730	33,274	Capital Expenditures	5,423,727	5,319,967	2,320,465	2,968,179
NET FUND CASH FLOWS	1,214,427	1,174,154	860,618	1,453,908	40,273	363,809	(239,482)	NET FUND CASH FLOWS	6,970,371	6,849,767	5,386,370	6,703,304
MONTH - CITY DIVISION												
Cash Flow Statement (Direct)	Actual	Forecast	Budget	Prior Year	FC Var	Bud Var	PY Var	YTD - CITY DIVISION Cash Flow Statement (Direct)	Actual	Forecast	Budget	Prior Year
Operating Revenues	2,538,192	2,530,388	2,230,624	2,300,293	7,804	307,668	147,698	Operating Revenues	13,333,795	13,314,937	12,296,400	12,523,263
Operating Expenses (Ex Depreciation)	(1,466,128)	(1,492,188)	(1,405,173)	(1,115,502)	26,060	(60,955)	(350,628)	Operating Expenses (Ex Depreciation)	(6,544,941)	(6,644,941)	(7,035,865)	(6,000,176)
Interest Income	142,363	135,954	25,167	179,117	6,409	117,196	(36,754)	Interest Income	185,225	179,770	125,835	180,217
Cash Available For Debt Service	1,214,427	1,174,154	860,618	1,453,908	40,273	363,809	(239,482)	Cash Available For Debt Service	6,970,371	6,849,767	5,386,370	6,703,304
Interest Payments	-	-	-	-	-	-	-	Interest Payments	-	-	-	-
Principal Payments	-	-	-	-	-	-	-	Principal Payments	-	-	-	-
Net Cash Available For Debt Service	1,214,427	1,174,154	860,618	1,453,908	40,273	363,809	(239,482)	Net Cash Available For Debt Service	6,970,371	6,849,767	5,386,370	6,703,304
Non-Operating Revenues (Expenses)	(127,399)	(150,583)	(293,834)	(80,446)	23,184	156,435	(46,953)	Non-Operating Revenues (Expenses)	(231,342)	(192,914)	(1,419,170)	(1,339,485)
Add: Capex Charged to Expense	135,756	166,488	658,667	161,112	-	-	-	Add: Capex Charged to Expense	442,358	432,439	3,293,335	1,208,588
Less: Project Reimbursement	-	(1,199)	(327,750)	-	1,199	327,750	-	Less: Project Reimbursement	(123,698)	(165,996)	(1,638,750)	-
Cash Outlays on Lease & Lease Reserve	-	-	(252,000)	-	-	252,000	-	Cash Outlays on Lease & Lease Reserve	(252,000)	(252,000)	(504,000)	(250,000)
Non-Cash Working Capital Changes	-	-	-	-	-	-	-	Non-Cash Working Capital Changes	-	-	-	-
Net Cash Available For Capital	1,222,784	1,188,860	645,701	1,534,574	33,924	577,083	(311,790)	Net Cash Available For Capital	6,805,789	6,671,296	5,127,785	6,322,407
Project Reimbursement	-	1,199	327,750	-	(1,199)	(327,750)	-	Project Reimbursement	123,698	165,996	1,638,750	-
Capital Contributions	-	-	-	-	-	-	-	Capital Contributions	-	-	-	-
Investments Converting To Cash	-	-	-	-	-	-	-	Investments Converting To Cash	-	-	-	-
New Borrowing	-	-	-	-	-	-	-	New Borrowing	-	-	-	-
Capital Expenditures	(321,816)	(419,465)	(889,214)	(666,881)	97,649	567,398	345,065	Capital Expenditures	(1,505,660)	(1,517,325)	(4,446,070)	(3,354,228)
NET FUND CASH FLOWS	900,987	770,594	84,237	867,693	130,373	816,730	33,274	NET FUND CASH FLOWS	5,423,727	5,319,967	2,320,465	2,968,179
DEBT SERVICE COVERAGE RATIO												
Net Cash Available For Debt Service	1,222,784	1,188,860	897,701	1,534,574	130,373	816,730	33,274	Net Cash Available For Debt Service	7,057,789	6,923,296	5,831,795	6,572,407
Lease Reserve Balance	504,000	504,000	500,000	500,000	-	-	-	Lease Reserve Balance	504,000	504,000	500,000	500,000
Total Available	1,726,784	1,692,860	1,401,701	2,034,574	130,373	816,730	33,274	Total Available	7,561,789	7,427,296	6,331,795	7,072,407
Debt Service	1,087,310	1,087,310	1,087,310	1,031,060	-	-	-	Debt Service	5,436,550	5,436,550	5,436,550	5,436,550
DSCR	1.59	1.56	1.29	1.97	1.30	1.37	1.30	DSCR	1.39	1.37	1.13	1.30

Lehigh County Authority

System Operations Review - May 2017

Presented: June 26, 2017

<u>Critical Activities</u>	<u>System</u>	<u>Description</u>	<u>May-17</u>	<u>2017-to-Date</u>	<u>2016 Totals</u>	<u>Permit</u>
			<u>Daily Avg (MGD)</u>	<u>Daily Avg (MGD)</u>	<u>Daily Avg (MGD)</u>	<u>Daily Max (MGD)</u>
Water Production	Allentown	Total	21.27	21.23	20.41	39.0
		Schantz Spring	6.76	6.44	5.91	9.0
		Crystal Spring	3.92	3.90	3.86	4.0
		Little Lehigh Creek	10.51	10.81	10.46	30.0
		Lehigh River	0.07	0.07	0.18	28.0
	Central Lehigh	Total	9.94	9.05	9.27	19.04 MGD Avg
		Feed from Allentown	7.02	7.03	5.99	7.0 MGD Avg 10.5 MGD Max
		Well Production (CLD)	2.92	2.02	3.28	8.54 MGD Avg
		Sum of all (12) other Suburban Water Systems	0.17	0.17	0.19	1.71 Sum of all wells
Wastewater Treatment	Kline's Island	31.48	30.83	29.67	40.0	
	Pretreatment Plant	4.42	4.27	4.33	5.75 (design capacity)	
	Sum of all (5) other Suburban WW Systems	0.16	0.17	0.17	0.36	
			<u>May-17</u>	<u>2017-to-Date</u>	<u>2016 Totals</u>	
Precipitation Totals (inches)			4.21	17.18	36.82	
Compliance Reports Submitted to Allentown			18	140	269	
Notices of Violation (NOVs)	(Allentown + Suburban)		0	0	3	
Sanitary Sewer Overflows (SSOs)/Bypasses	(Allentown + Suburban)		2	10	16	
Main Breaks Repaired	Allentown		2	9	19	
	Suburban		0	3	11	
Customer Service Phone Inquiries	(Allentown + Suburban)		2,224	11,466	28,099	
Water Shutoffs for Non-Payment	(Allentown + Suburban)		98	738	1,685	
Injury Accidents	(Allentown + Suburban)		0	4	10	
Emergency Declarations	Allentown		0	(2) @ \$51,235	(2) @ \$87,079	
	Suburban		0	0	(1) @ \$33,495	

Significant Repairs:

KIWWTP Primary Digester #1 cover replacement is going well and construction is scheduled to be complete by the end of by Q3 2017.

Description of NOVs and/or SSOs:

There was (1) SSO in the city and (1) bypass in suburban during May. The city SSO resulted from a blockage on an 8" sanitary line. The bypass in suburban happened at Sand Springs WWTP and resulted from a 3/4" air line gate valve on the sludge wasting line not being fully closed. Neither event was due to a heavy rain event.

Other Highlights:

As of 6/16/2017, all counties in PA are in a "Normal" drought status. LCA is currently researching costs for establishing additional monitoring sites as we move towards a full-scale watershed monitoring program.