BOARD MEETING AGENDA – JUNE 13, 2016

1. Call to Order
   • Public Participation Sign-In Request
2. Review of Agenda / Executive Sessions
4. Approval of Minutes
   • May 9, 2016 Board meeting minutes - amended
   • May 23, 2016 Board meeting minutes
5. Public Comments
6. Action / Discussion Items:

   **FINANCE AND ADMINISTRATION**

   **WATER**

   **WASTEWATER**
   • Suburban Division – Heidelberg Heights Sanitary Sewer Lateral Rehabilitation Project (blue)
   • Wastewater Rate Schedule – Addition of Lowhill Township to Rate Schedule (yellow)
   • Administrative Order – Discussion of Future Board Presentations (see Project Update report for description)
7. Monthly Project Updates / Information Items (1st Board meeting per month)
8. Monthly Financial Review (2nd Board meeting per month)
9. Monthly System Operations Overview (2nd Board meeting per month)
10. Staff Comments
11. Solicitor's Comments
12. Public Comments / Other Comments
13. Executive Sessions
14. Adjournment

UPCOMING BOARD MEETINGS
Meetings begin at Noon at LCA’s Main Office, unless noted otherwise below.

June 27, 2016
July 11, 2016
July 25, 2016

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.
The Regular Meeting of the Lehigh County Authority was called to order at 12:17 p.m. on Monday, May 9, 2016, Chairman Brian Nagle presiding. Other Members present at the commencement of the meeting were: Linda Rosenfeld, Kevin Baker, Tom Muller, Richard Bohner, Norma Cusick, Scott Bieber and Deana Zosky. Authority Staff present were Liesel Gross, Ed Klein, Pat Mandes, Frank Leist, Brad Landon, John Parsons, Chuck Volk, and Lisa Miller.

**REVIEW OF AGENDA**

Liesel Gross stated that there will not be an Executive Session after the regular meeting.

**APPROVAL OF MINUTES**

*April 25, 2016 Regular Meeting Minutes*

Chairman Nagle said there is one correction on page 2, paragraph 4, the word *in* should be added after *included*.

On a motion by Richard Bohner, seconded by Norma Cusick, the Board approved the Minutes of the April 25, 2016 Regular meeting as corrected (8-0).

**PUBLIC COMMENTS**

None.

**ACTION AND DISCUSSION ITEMS**

Ted Lyons arrived at 12:20 p.m.

*Suburban Division – Western Weisenberg Wastewater Treatment Plant Improvements*

Frank Leist gave an overview and background of the project which implements the Gannett Fleming, Inc. recommendations to correct the cold weather nitrification issue at the Western Weisenberg wastewater treatment plant. The improvements will include insulating the exposed exterior reactor walls, covering the two reactor tanks and insulating the blower piping. Submersion heaters will also be installed in the reactor tanks. This project will be funded by the LCA Suburban Western Weisenberg division.

Mr. Leist is asking for approval of the Budget Amendment in the amount of $251,095.00, Capital Project Authorization – Amendment No. 1 for the Construction Phase in the amount of $529,595.00 which includes the Professional Services Authorization – Amendment No. 1 for construction and engineering to Gannett Fleming, Inc. in the amount of $9,600.00, Professional Services Authorization – Amendment No. 3 for management and inspection to Cowan Associates, Inc. in the amount of $31,000.00, awarding of the construction contracts to JEV Construction LLC for the general contract in the amount of $394,500.00 and Albarelle Electric for the electrical contract in the amount of $37,494.00.

The reason for the budget amendment request is that originally, the emersion heaters were to be installed in 2017 but after re-evaluation of the inhibitory impact that the elevated levels of cooper, zinc and quaternary ammonia in the wastewater influent had on the nitrification process during cold weather, it was moved up to 2016. Also, the general contract bid prices exceeded the engineer’s estimate, and some expenditures anticipated for 2015 were actually spent in early 2016.

Scott Bieber questioned if the designer of the project, or the Authority, overlooked the specifications on this project when it was designed. Mr. Leist explained that standard assumptions were made by the design engineer as to how the plant would operate properly, but those are in question because of the unique characteristics of the waste stream for this plant.
Deana Zosky said that she is not supportive of budget amendment approvals until we know where we are with the budget. Mr. Leist explained that without approval of this project, the Authority will likely be in violation of the NPDES permit during periods of cold weather, as it has been in the past, so it is important to implement the changes now during the construction season before winter arrives.

The Board had a discussion regarding performance guarantee and the original plant design specifications.

On a motion by Linda Rosenfeld, seconded by Tom Muller, the Board approved the Budget Amendment in the amount of $251,095.00, Capital Project Authorization – Amendment No. 1 for the Construction Phase in the amount of $529,595.00 which includes the Professional Services Authorization – Amendment No. 1 for construction and engineering to Gannett Fleming, Inc. in the amount of $9,600.00, Professional Services Authorization – Amendment No. 3 for management and inspection to Cowan Associates, Inc. in the amount of $31,000.00, awarding of the construction contracts to JEV Construction LLC for the general contract in the amount of $394,500.00 and Albarell Electric for the electrical contract in the amount of $37,494.00 (9-0).

Additional discussion occurred regarding a performance guarantee for design and other engineering work performed by consultants. Frank Leist said that he will pursue looking into performance guarantee requirements. Brad Landon explained that the Authority typically does not request a performance guarantee in the fashion suggested by various board members, per se, from professionals, only contractors. With professionals, the requirements are that the engineers shall perform their services at the level customary for competent and prudent engineers performing such services at the time and place where the services are provided. Any issues that may arise would be worked out either through the errors and omissions language in the contract or through their professional insurance coverage. Frank explained that the plant performs adequately when the waste stream is within the design specifications. He agreed to look at future engineering contracts to determine when a performance guarantee would be desired.

**Suburban Division – SCARP – Western Lehigh Interceptor Test and Seal Project**

Pat Mandes reviewed the project and informed the Board that in June, the Authority will be prepared to give a more detailed status report presentation on the work completed to date and future work planned to address the USEPA Administrative Order. Ms. Mandes provided a handout regarding costs to date on the project. Chuck Volk, Project Manager on this project, described the project, which consists of sanitary sewer cleaning, inspections via closed circuit TV, cured-in-place point repairs, pressure testing and chemical grout sealing of pipe joints, and post construction inspection for sanitary sewer lines located in western and central Lehigh County previously identified as areas subjected to infiltration leakage. The sewer pipeline areas included in portions of the Western Lehigh Interceptor are Alburtis/Macungie Trunk line, Breinigsville Trunk lines and several additional sections of pipe at the connection to the WLI, all totaling 10.4 miles. The project will be funded by the LCA Suburban Division.

Discussion followed regarding quantifying the results of this project. Chuck Volk and Pat Mandes explained the difficulty in quantifying how much infiltration will be removed from a system due to the many variables. A large amount of data was collected from the predesign studies and will be used as a baseline for the projects. This project does have a performance criteria with strict specifications and a rigorous schedule. The Board asked, upon completion of the project and to satisfy the EPA regarding the EPA Administrative Order, will the Authority be able to quantify the amount of infiltration and inflow (I&I) that was removed. Pat Mandes said that the Authority’s consultant, Arcadis, will use the hydraulic model and additional flow metering data to provide more comprehensive data to EPA.

Mr. Volk is asking for approval of the Capital Project Authorization for the construction phase in the amount of $1,828,500.00 which includes Contract Award for the Test & Seal contract (AMB trunk lines and SAPR lines) to Video Pipe Services, Inc. in the amount of $1,590,000.00 and the Professional Services Authorization – Amendment No. 24 for construction engineering, management and inspection to Arcadis in the amount of $198,500.00.

On a motion by Scott Bieber, seconded by Linda Rosenfeld, the Board approved the Capital Project Authorization for the construction phase in the amount of $1,828,500.00 which includes Contract Award for
the Test & Seal contract (AMB trunk lines and SAPR lines) to Video Pipe Services, Inc. in the amount of $1,590,000.00 and the Professional Services Authorization – Amendment No. 24 for construction engineering, management and inspection to Arcadis in the amount of $198,500.00 (9-0).

**Suburban Division – Wynnewood Terrace Test and Seal Project**

Chuck Volk informed the Board that this is part of the previous bid for the Western Lehigh Test and Seal project, and there is a budget amendment request for this project to be completed in the Wynnewood Terrace system. The reason for the budget amendment request is that upon completion of the design by Arcadis, the scope increased because of what was found in the system and also because of the rigorous schedule required by the contractor. Also, the bid prices exceeded the engineer’s estimate. The goal of this project is to reduce infiltration leakage into the sewage collection system for Wynnewood Terrace and reduce hydraulic overload conditions at the wastewater treatment plant and preserve capacity in the sewage collection system. Ed Klein stated that the costs for this project will come out of project reserves.

Mr. Volk is asking for approval of the Budget Amendment in the amount of $144,895.00, the Capital Project Authorization – Construction Phase in the amount of $319,895.00 which includes the Professional Services Authorization to Arcadis, Inc. for construction, inspection, and engineering in the amount of $40,630.00 and awarding the construction contract to Video Pipe Services, Inc. in the amount of $261,765.00.

On a motion by Ted Lyons, seconded by Norma Cusick, the Board approved the Budget Amendment in the amount of $144,895.00, the Capital Project Authorization – Construction Phase in the amount of $319,895.00 which includes the Professional Services Authorization to Arcadis, Inc. for construction, inspection, and engineering in the amount of $40,630.00 and awarding the construction contract to Video Pipe Services, Inc. in the amount of $261,765.00 (9-0).

**PROJECT UPDATES/INFORMATION ITEMS**

Liesel Gross said that the Monthly Project Update currently shows only one action item for the May 23, 2016 Board meeting.

**FINANCIAL REVIEW**

Ed Klein presented the Board with updated financial sheets for March 2016. He explained the new format of the report that is similar to audited statements, which was requested by the Finance Committee. He informed the Board that he spent time reviewing the past two years of the budget and is in the process of re-phasing it. He said that the revenues are close to what was budgeted if it were phased correctly. The next step is to complete a second quarter forecast. Deana Zosky thanked Ed for moving the Authority forward on the process of monthly financials and would like consideration to be given to the reserves regarding what they are and what we are using them for both operating and long term. She suggested that the reserve roll-forward should be provided with the monthly financial analysis along with sources and uses of reserves. Liesel Gross agreed that the reserve balances and remaining bond funds are important components to this ongoing discussion. She explained that the ongoing investigation and discussion about the Authority’s long-term financial health is an evolving process as we learn more about industry best practices and more detail will be brought to the Board as this information is gathered.

**SYSTEM OPERATIONS OVERVIEW**

None.

**STAFF COMMENTS**

Liesel Gross informed the Board about the Authority’s annual drinking water week event, HydroMania, which takes place on May 12th, and invited them to attend the event.

Ms. Gross also stated that we need to bring the email usage issue to a close. Two Board members require hand-on instruction, which will be done at the end of the meeting. At that time, Authority issues
communicated through email will be migrated from Board member's personal email address to solely the Board member's LCA address.

**SOLICITOR’S COMMENTS**

Brad Landon stated that closing on the Lowhill Township Sewer System Acquisition will be June 8, 2016.

**PUBLIC COMMENTS / OTHER COMMENTS**

Frank Leist informed the Board that the Wastewater Transportation Agreement with Lower Macungie Township has been approved and signed by Lower Macungie Township and will be provided to the Board for consideration at the next Board meeting.

Scott Bieber inquired about the Authority’s response to the Lehigh County Commissioners regarding the Resolution on lead. Liesel Gross said that the Authority is following the path that was discussed at the April Board meeting and that has generated some interest from customers in the water testing program. The Authority is continuing to develop its own educational materials and have updated the website with the information. June will mark the beginning of the three-year lead and copper required monitoring and testing period and the next two quarters of customer newsletters will also include educational information on lead.

**EXECUTIVE SESSION**

None.

**ADJOURNMENT**

There being no further business, the Chairman adjourned the meeting at 1:39 p.m.

__________________________________________
Richard H. Bohner
Secretary
The Regular Meeting of the Lehigh County Authority was called to order at 12:20 p.m. on Monday, May 23, 2016, Chairman Brian Nagle presiding. Other Members present at the commencement of the meeting were: Linda Rosenfeld, Richard Bohner, Norma Cusick, Scott Bieber and Ted Lyons. Authority Staff present were Liesel Gross, Ed Klein, Pat Mandes, Frank Leist, Brad Landon, Chuck Volk, Phil DePoe and Lisa Miller.

REVIEW OF AGENDA

Liesel Gross stated that there are two additional items under Staff Comments and the Organizational Goal #4 – Organizational Development – 2nd Quarter update will be discussed in Executive Session because it involves personnel. Two additional items are also planned for Executive Session.

Scott Bieber asked for a discussion item be added to the agenda related to the proposed stormwater injection wells at a development site in Upper Macungie Township. Chairman Nagle agreed to discuss this item in the Water section of the meeting agenda.

APPROVAL OF MINUTES

May 9, 2016 Regular Meeting Minutes

Richard Bohner said there is one correction on page 3, under Financial Review second to the last sentence, the word and should be an.

On a motion by Richard Bohner, seconded by Norma Cusick, the Board approved the Minutes of the May 9, 2016 Regular meeting as corrected (6-0).

Liesel Gross said that there are two comments that were submitted in writing by Deana Zosky. Chairman Nagle said that in order to clarify these comments, he requested that the tapes be reviewed for accuracy.

PUBLIC COMMENTS

Mike Siegel thanked the Board for going ahead with Western Lehigh Interceptor Test & Seal project. He said it shows good faith effort on behalf of the Board. He also expressed his concerns about the drought effecting the base flow of the Little Lehigh Creek. He would like to see the Board and Authority Staff push conservation and get the word out to the public and also have our drought plan ready. Mr. Siegel said he is also concerned about the land development along Schantz Road in Lower Macungie Township off of Hamilton Boulevard and South Cedarbrook Road, the Eastern Industries property. He is concerned about whether the LCA system at Schantz Spring will be protected from any potential spills that may go into the soil and aquifer. He asked that the Board look at the plan and think about protecting the spring. Chairman Nagle said this is a good point and thanked Mr. Siegel.

ACTION AND DISCUSSION ITEMS

Allentown Division – Water Filtration Plant: Filter Room Ceiling Improvements

Phil DePoe gave an overview of the project which consists of the installation of a new PVC linear panel system on the walls and ceilings in the clerestory area of the Water Filtration Plant’s filter room. The project is required because of the possibility of filter water contamination from falling debris, continuous maintenance issues and aesthetics. He is asking for approval of the Capital Project Authorization – Construction Phase in the amount of $306,000.00 which includes the Professional Services Authorization to D’Huy Engineering in the amount of $10,500.00 and award of the general contract to Machemer Contracting, Inc. in the amount of $265,500.00. The project will be funded by the LCA Allentown Division.

On a motion by Ted Lyons, seconded by Norma Cusick, the Board approved the Capital Project Authorization – Construction Phase in the amount of $306,000.00 which includes the Professional Services
Authorization to D’Huy Engineering in the amount of $10,500.00 and award of the general contract to Machemer Contracting, Inc. in the amount of $265,500.00 (6-0).

Chairman Nagle asked Board members if they were interested in a tour of the Water Filtration Plant. He felt that with ongoing projects at the plants, it was a good idea for the Board to see them. Liesel Gross said that she will poll the Board for a tour date and will coordinate it with John Parsons.

**Stormwater Injection Wells – Upper Macungie Township**

Scott Bieber asked about the Injection Wells in Upper Macungie Township that he read about in the paper. Frank Leist said the Authority is aware of the project and has commented on the preliminary plan and stated the Authority’s position that injection wells not be used within the Karst geology of this region due to the potential impact to the Authority’s drinking water sources. He informed the Board that the Authority has no real authority to stop injection wells; it is dictated by the Environmental Protection Agency (EPA). The next step is that the developers have to provide detailed information on their stormwater management plan to Lehigh County Conservation District. Since the Authority has a working partnership with the Conservation District, when the technical information is complete, the Conservation District will seek the Authority’s input.

Mr. Bieber asked Mr. Leist to provide a copy of the letter he received to the Board.

Mike Siegel reported that he attended the hearing for this project and voiced the same concerns as Mr. Bieber. He said what makes this matter worse is that it is next to the quarry. He informed the Board that the attorney for the project did not recognize that the Authority had commented on the project.

**Lehigh County Authority/Upper Milford Township & Lower Macungie Township Wastewater Transportation Agreement**

Frank Leist described the agreement which allows for the conveyance of wastewater from the Upper Milford Township system to the Lower Macungie system to the treatment plant and also formalizes the distribution across Waterfall Crossing and Watermill development, as well as any future discharges from Lower Macungie Township, into the Upper Milford sewer system which were covered in letter agreements in the 1990s.

On a motion by Norma Cusick, seconded by Linda Rosenfeld, the Board approved the Lehigh County Authority/Upper Milford Township & Lower Macungie Township Wastewater Transportation Agreement (6-0).

**PROJECT UPDATES/INFORMATION ITEMS**

None.

**FINANCIAL REVIEW**

Ed Klein presented the Board with updated re-phased financial sheets for the 2nd Quarter forecast and the April 2016 Financials, along with showing a PowerPoint presentation. He reviewed the March financials based on a re-phased and roll-forward forecast. At the end of March, the Revenue, Expenses and Cash Flow are significantly better than prior to the re-phasing. The April forecast looks positive as well. Moving forward, forecasting will take place monthly to show a clear budget history.

Liesel Gross highlighted the line in the new financial statement that is labeled *Previous Funding of Capex*. This line highlights that additional funding is available through the use of prior borrowed funds and capital reserves, but requires additional discussion so the staff and Board are fully aware of the balances available in reserves and bond funds for future capital spending. She explained that this line was not previously in the Board’s financial discussions earlier this year, resulting in the negative numbers in the cash flow that was discussed at the time.
Chairman Nagle asked if the Authority will be conducting a rate study. Liesel Gross said the Authority’s rate consultant will be coming in June to do a review with staff and a determination made at that time if a rate study is required. Ed Klein said the decision to conduct a rate study will depend on future capital requirements and whether existing reserve funds will be adequate to fund those requirements in the near term.

Chairman Nagle asked about the Audit. Ed Klein reported that it is ongoing and the Auditors are working on data from the Pennsylvania Municipal Retirement System. He estimates completion sometime in June.

**SYSTEM OPERATIONS OVERVIEW**

Sine John Parsons was unable to attend the Board Meeting, Liesel Gross reviewed the April 2016 report, highlighting that there were no significant issues reported, no notices of violations or sanitary sewer overflows for the month of April.

Chairman Nagle reported that he attended the semi-annual Signatory meeting, which was very informative, and plans to attend them in the future. He reported that Robert Kerchusky had provided a presentation at that meeting regarding the February rain event that dropped three inches of rain in a few hours and reported on how significantly it could have affected Kline’s Island Wastewater Treatment Plant.

**STAFF COMMENTS**

Liesel Gross informed the Board that new maps were handed out regarding the water and wastewater service areas. The maps were recently completed by the Authority’s new GIS Specialist, Mark Bowen, and are for the Board Member Handbook.

Liesel Gross brought to the attention of the Board a letter prepared by the Authority to the Internal Revenue Service (IRS) regarding their proposed revision to the definition of “Political Subdivision for purposes of qualifying for tax-exempt bonds.

**SOLICITOR’S COMMENTS**

None.

**PUBLIC COMMENTS / OTHER COMMENTS**

Ted Lyons informed the Board that The Authority magazine has a good article on lead and suggested they all read it.

**EXECUTIVE SESSION**

The Chairman called an Executive Session at 1:25 p.m. to discuss personnel issues and additional items regarding potential litigation.

The Executive Session ended at 2:34 p.m.

**ADJOURNMENT**

There being no further business, the Chairman adjourned the meeting at 2:34 p.m.

__________________________________________
Richard H. Bohner
Secretary
MEMORANDUM

Date: June 13, 2016

To: Authority Board

From: Charles Volk

Subject: Suburban Division – Heidelberg Heights Sewer Lateral Rehabilitation Project – Construction Phase

MOTIONS / APPROVALS REQUESTED:

<table>
<thead>
<tr>
<th>No.</th>
<th>Item</th>
<th>Amount</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>Capital Project Authorization – Construction Phase</td>
<td>$46,660</td>
</tr>
<tr>
<td>2(1) Construction Contract:</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>National Water Main Cleaning Company</td>
<td>$46,660</td>
</tr>
</tbody>
</table>

(1) Included in the Capital Project Authorization.

BACKGROUND:
The goal of this project is to mitigate extraneous groundwater flow (infiltration) entering the sewage collection system via damaged pipeline areas. The repair areas were selected by LCA operations staff based on prior system CCTV work. The project will help reduce groundwater infiltration, which contributes to wet weather hydraulic overload conditions at the Heidelberg Heights wastewater treatment plant and can result in bypassing of untreated wastewater (and DEP violations) during significant storm events.

PROJECT OVERVIEW
The project scope entails the rehabilitation of four (4) leaking sewer laterals via internal cured-in-place liner installation. The project also includes installation of cured-in-place liner on 320 linear feet of 8-inch sewer main. Pre and post construction CCTV inspection is required by the contractor to verify satisfactory repair work.

FUNDING:
The Project will be funded by the LCA Suburban Heidelberg Heights 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 one contract. The project was advertised for bid on April 19, 2016. A mandatory pre-bid meeting was held on April 29, 2016. Bids were received on May 19, 2016, the results of which follow:

<table>
<thead>
<tr>
<th>Bidder</th>
<th>Bid Amount</th>
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</thead>
<tbody>
<tr>
<td>National Water Main Cleaning Co.</td>
<td>$46,660</td>
</tr>
<tr>
<td>Aqua Infrastructure Rehabilitation Co., LLC</td>
<td>$122,600</td>
</tr>
</tbody>
</table>

National Water Main Cleaning Co. has extensive experience in cleaning, inspecting, and remediating sanitary sewer pipes. The firm’s qualifications and experience statement indicates numerous large projects in major metropolitan areas of the mid-Atlantic region. The bid documents are in order and the firm appears well qualified for the project.

PROFESSIONAL SERVICES
None required.

PROJECT SCHEDULE:
Based on contract award following the June 13, 2016 board meeting, it is anticipated that the project will be completed by the end of summer 2017.

FUTURE AUTHORIZATIONS-
None
Sanitary Sewer Lateral Rehabilitation Project:

The project consists of the rehabilitation of four (4) leaking sanitary sewer laterals and 320 linear feet of leaking sanitary sewer main line. The project includes cleaning, inspections via closed circuit TV, lateral cleanout installation (4 locations), cured-in-place liner installation, and post construction inspection for sanitary sewer lines located in Heidelberg Heights system in northern Lehigh County. This project is part of a continued effort to reduce infiltration of groundwater into the system, which contributes to wet weather hydraulic overload conditions at the Heidelberg Heights wastewater treatment plant.

<table>
<thead>
<tr>
<th>Previous Authorizations</th>
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<tbody>
<tr>
<td>none</td>
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**REQUESTED THIS AUTHORIZATION**

<table>
<thead>
<tr>
<th>Construction Phase</th>
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<tbody>
<tr>
<td>Staff</td>
<td>$3,000</td>
</tr>
<tr>
<td>Sanitary Sewer Lateral Construction</td>
<td>$46,600</td>
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<tr>
<td>Contingency</td>
<td>$400</td>
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<td><strong>Total This Authorization</strong></td>
<td><strong>$50,000</strong></td>
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<table>
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<tr>
<th>Future Authorization</th>
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<tr>
<td>None</td>
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| **Total Estimated Project** | **$50,000** |

**REVIEW AND APPROVALS:**

<table>
<thead>
<tr>
<th>Project Manager</th>
<th>Date</th>
<th>Chief Executive Officer</th>
<th>Date</th>
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<td></td>
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<table>
<thead>
<tr>
<th>Chief Capital Works Officer</th>
<th>Date</th>
<th>Chairman</th>
<th>Date</th>
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<tr>
<td></td>
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</tbody>
</table>
UPPER MILFORD TOWNSHIP, WEISENBERG TOWNSHIP, HEIDELBERG HEIGHTS, WYNNEWOOD, SAND SPRING, WASHINGTON TOWNSHIP, LOWHILL TOWNSHIP, LYNN TOWNSHIP, WESTERN LEHIGH INTERCEPTOR & LITTLE LEHIGH RELIEF INTERCEPTOR SYSTEMS

I. Schedule of Wastewater Rates

A. Lowhill Township System  
   (adopted 06/13/16; effective 06/08/16)

<table>
<thead>
<tr>
<th>Flow Charge</th>
<th>$/1,000 gals</th>
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</thead>
<tbody>
<tr>
<td>All Flow</td>
<td>4.53</td>
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<table>
<thead>
<tr>
<th>Fixed Charge per Quarter</th>
<th>$ per Equivalent Dwelling Unit (EDU)</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Multi-Family Residential</td>
<td>10.50</td>
</tr>
<tr>
<td>- All Other Accounts</td>
<td>21.00</td>
</tr>
</tbody>
</table>

B. Upper Milford Township System  
   (adopted 12/10/12; effective 01/01/13)

<table>
<thead>
<tr>
<th>Flow Charge</th>
<th>$/1,000 gals</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Flow</td>
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<tbody>
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<td>10.50</td>
</tr>
<tr>
<td>- All Other Accounts</td>
<td>21.00</td>
</tr>
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</table>

C. Weisenberg Township System  
   (adopted 12/10/12; effective 01/01/13)

<table>
<thead>
<tr>
<th>Flow Charge</th>
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<tr>
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<td>21.00</td>
</tr>
</tbody>
</table>
FINANCE & ADMINISTRATION

ACTION ITEMS

1. **Wastewater Capital Recovery Fees** – June 27, 2016
   The annual update to the Capital Recovery Fees for the Western Lehigh Interceptor (WLI), Little Lehigh Relief Interceptor (LLRI), the Upper Milford Collector (UMC), Arcadia West Wastewater (AWW) and Western Weisenberg Treatment Plant (WWTP) systems will be presented to the Board for consideration. The fee changes will be effective as of July 1, 2016.

2. **2015 Audit & Financial Statements** – July Board meeting date to be determined
   The Finance Committee will be invited to reconvene in June to review preliminary results.

DISCUSSION ITEMS

INFORMATION ITEMS

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

<table>
<thead>
<tr>
<th>CERTIFICATES OF DEPOSIT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fund</td>
</tr>
<tr>
<td>WW Capac</td>
</tr>
</tbody>
</table>

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

2. **Organizational Goals – Schedule of Status Reports**
   - Environmental & Regional Leadership – 7/11/2016 (tentative)
   - Financial Health – 7/25/2016 (tentative)
**WATER**

**ACTION ITEMS**

**DISCUSSION ITEMS**

**INFORMATION ITEMS**

1. **Suburban Division – Pumping Station Projects**
   This project will involve upgrades at two existing small system booster stations and the installation of one new major booster station in the Central Lehigh Division (CLD). The Pine Lakes Project will feature the conversion of the existing hydro-pneumatic station to a variable frequency drive controlled double pumping system (along with other miscellaneous improvements). The Crestwood 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 CLD Auxiliary Pump Station Project will feature the installation of a new booster station and main extension to pump water from the Lower to the Upper System. The projects will also involve installation/conversion to a SCADA system at each of the sites. The design for all three projects commenced in June 2015. The PADEP Public Water Supply (PWS) Permit applications were submitted for the Crestwood and Pine Lakes Projects. Comments on the CLD Auxiliary Pump Station Project PWS permit application were returned to our consultant.  

2. **Suburban Division – Capece Tract, WL #20 and Res #3 Improvements**
   WL #20 will be switched over to a variable frequency drive motor to better control power usage and maintain steady output. Reservoir #3 will receive a motor activated control valve to maintain filling capabilities and chlorine contact levels. Both facilities will receive an upgrade to their SCADA systems. PLC has been upgraded at Reservoir #3. HMI screens are scheduled to be modified on May 31 to include the new MOV and the VFDs. The design phase is under way.  

3. **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 under way. Penndot Highway Occupancy Permits have been obtained.  

4. **Allentown Division – Prelease Valve Replacements**
   The project is the replacement of approximately 55 inoperable valves in multiple locations throughout the City that existed prior to the lease settlement. Design is currently under way. This project is identified as Un-Completed Work and will be funded by the City.  

5. **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. Board approval of the Construction phase and budget amendment for this
project was given at the 4/11/16 Board meeting. Construction is anticipated to begin the second week in May 2016 by Anrich Inc. (No change)

6. **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. Board approval of the Construction phase and budget amendment for this project was given at the 4/11/16 Board meeting. Construction is anticipated to begin the first week in May 2016 by JOAO & Bradley. This Project is identified as Schedule-7 Work and will be funded by LCA Allentown Division. (No change)

7. **Allentown Division – Water Filtration Plant: Filter Room Ceiling Improvements**
   This project will involve the installation of a new ceiling system at the Water Filtration Plant’s filter room. This system was already installed above the filters themselves approximately 10 years ago. The project is needed for both a combination of aesthetic (highly visible location to guests) and operational issues (to eliminate the possibility of chipped paint to enter the filters). Bids were received on 4/26/16 and Board approval for the construction phase was granted at 5/23/16 Board Meeting. Construction to begin in the middle of June and will be completed by the end of August.

8. **Allentown Division - Miscellaneous Water Filtration Plant / Water Distribution**
   - WFP Stormwater Pump/Control - Upgrades to the existing stormwater pump/control for the WFP and D&C parking lot is needed to equipment age. Design is currently underway with a likely Winter 2016 construction start date.
   - D&C Parking Lot Paving Modifications – This project was necessary to alleviate ponding water. The project was completed in mid-April.
   - WFP 20 Ton A/C and 40 Ton Chiller Replacement – Delivery of the AC unit occurred on 4/25/16 and delivery of the chiller unit occurred on 4/26/16. Installation was completed in the second week of May.
   - WFP Painting Phase II – Work (blasting, pressure washing) began in the filter pipe gallery in mid-April and painting is expected to be complete by the second week of June.

All of these capital projects will be funded by the LCA Allentown Division.

9. **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 site visits and data requests from Arcadis are currently being addressed and the project is scheduled to be finished early in 2017. The project will be funded by the LCA Allentown Division.

10. **Developments**
    Water system construction is occurring in the following developments:
Fields at Indian Creek, Phase 1, 43 private, age-restricted/senior residential units (sfd), with a community clubhouse, UMiT & LMT, water & sewer
Hamilton Crossings, 2 commercial lots with 20 buildings having retail, financial, convenience and restaurant uses, LMT
Liberty at Mill Creek, 2 industrial lots, UMT
Spring Creek Settlement Properties, 14 commercial/industrial lots, LMT
Valley West Estates, Phases 4, 5 & 6, 46 residential lots (sfd), UMT (currently on hold)

Water system plans are being reviewed for the following developments:
   67 Werley Road, 112 apartments & clubhouse, UMT
   Ciocca Subaru, 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, 94 residential lots (sfd), LMT (currently on hold)
   Grant Street Townes, 18 residential lots (sfa), WashT
   Hickory Park Estates, 3 residential lots (sfd), UMT
   Hillview Farms, 31 residential lots (sfd), LMT/SWT
   Indian Creek Industrial Park, 6 commercial lots, UMiT, water and sewer
   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
   Shepherd’s Corner, 1 commercial lot, LMT
   Stone Hill Meadows, 24 residential lots (sfd), LMT
   Trexler Business Center, 1 Commercial Lot with 6 commercial buildings, LMT
   Weilers Road Twins, 82 residential lots (sfa), UMT
   West Hills Business Center, 2 industrial lots, WeisT, water & sewer
   Woodmere Estates, 60 residential units (sfd), UMT
WASTEWATER

ACTION ITEMS

1. **Suburban Division – Heidelberg Heights Sanitary Sewer Lateral Rehabilitation Project** – June 13, 2016

   Construction phase approval is requested for this project involving the rehabilitation of four (4) leaking sewer laterals and 320 linear feet of leaking sewer main line in the Heidelberg Heights development. The rehabilitation method is to entail cured-in-place pipe liner installation, with pre and post construction CCTV inspection. The project is part of a continued effort to reduce groundwater infiltration into the Heidelberg Heights sanitary sewer system and mitigate wet weather hydraulic overload conditions at the Heidelberg Heights wastewater treatment plant.


   This annual project will install a lining system (to eliminate infiltration) in approximately 111 aged brick manholes identified by LCA staff. The City has approved the Conceptual Design Report and the project was advertised on May 17, 2016. Board approval of the construction phase will be requested at the 6/27/16 Board Meeting. The project is identified as Administrative Order work and will be funded by the City.


   This project will permanently secure the frame and cover of approximately 57 aged brick manholes identified by current LCA staff. This work will eliminate inflow from entering these manholes and eliminate the potential for sanitary sewer overflows (SSO’s) from these manholes. The City has approved the Conceptual Design Report and the project was advertised on May 17, 2016. Board approval of the construction phase will be requested at the 6/27/16 Board Meeting. The project is identified as Administrative Order work and will be funded by the City.

DISCUSSION ITEMS

1. **Administrative Order – Discussion of Future Board Presentations**

   Authority staff and project consultants are preparing for public presentation of the status of planning efforts related to addressing sanitary sewer overflows throughout the system tributary to the Kline’s Island Wastewater Treatment Plant in Allentown. Several municipalities in Western Lehigh County have expressed their desire to begin discussions with their communities about cost impacts of planned maintenance schedules and regional projects to address the US EPA Administrative Order. The Authority would also like to present similar information to its Board. Discussion is required to review the format, timing and advertising of such a meeting. Staff is proposing that the Board conduct this meeting at night as its first “Special Purpose Meeting” of 2016 to allow for broader public participation.

INFORMATION ITEMS

1. **Wastewater Treatment Capacity**
The PaDEP has suggested that a 537 Plan for the additional 4 MGD of capacity be submitted to them at the time when the 4 MGD is needed or after the SCARP improvements are made. They anticipate that if the 537 Plan is submitted in the near term, the Department will require a revised Plan prior to any capital improvements. The 537 planning process has currently been side-lined until such time as the wastewater capacity is limited or a 537 plan update is needed for an Administrative Order project must be submitted. A 537 Planning summary report is being drafted by our consultant and will be distributed to the Board. (No change).

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

   The project will upgrade the WWTP head works. The revised specifications are being reviewed.

3. **Allentown Division – WWTP: Replacement of Motor Control Centers**

   This Project replaced five aged motor control centers that provide power on a 24/7 basis to various parts of the WWTP. The project was approved by the City as a Major Capital Improvement (MCI). Except for some minor punchlist items the project is complete. This Project is identified in the Lease as Schedule 7 (required) project and was funded by the LCA Allentown Division.

4. **Allentown Division – Roof Rehabilitation and Replacements: Phase 1**

   The Project consisted of replacing 26 facility roofs that were identified as in need of immediate replacement in the Roof Evaluation report performed by D’Huy Engineering. The project was presented to the City for review/approval as a Major Capital Improvement (MCI), but the city rejected it as such. Except for some minor punchlist items the project is complete. The project was funded by the LCA Allentown Division.

5. **Allentown Division- SCADA System Installation – Wastewater Treatment Plant:**

   The contractor began the integration of the new MCC at PLC7 on May 19th. The work is expected to take approximately 2 weeks. The project is being funded by the City.

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

   - Main Pump Station Suction Piping – LCA staff is in the process of acquiring quotes from contractors to repair this piping. This project involves either the lining or replacement of the suction piping for Pump #1 at the Main Pumping Station. Holes have developed in the suction piping and without this repair, the ability to operate this pump properly may be compromised in the future.
   - Main Pump Station Locker Room Renovation – Construction has been completed.
   - Chlorine Building Permanent Generator – Construction has been completed.
   - Trickling Filter Odor Control Tower Repairs – Construction started in mid-April and is expected to be complete by July of 2016.
   - Locker Room Phase II Renovation – A design memorandum study was completed in the May of 2016. The locker room design is expected to begin in the Fall of 2016.
• Disinfection Alternative Study – A RFP is being developed to solicit Engineering Firms to study disinfection alternatives at the WWTP. Board Approval of the selected Engineer is expected in the Fall of 2016.

• Substation No. 2 Replacement – A study is currently underway to investigate the need to replace Substation No. 2 at the WWTP.

All of these capital projects will be funded by the LCA Allentown Division.

7. **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 submitted to the City and has been approved. Board approval of the construction phase was received at the 2/8/16 Board Meeting. The Secondary Digester is expected to be replaced by October 2016 and the Primary No. 1 Digester is expected to be replaced by October 2017. This Project is identified in the Lease as Schedule 7 (required) project and will be funded by the LCA Allentown Division.

8. **Consolidated Systems - SharePoint:**

GHD presented the 4 applications, (1 & 2) Team sites – Plant services, customer service; (3) Workflow – Board/Staff notes, New employee orientation; (4) KPI/Dashboard – Employee safety, Bond coverage on April 11, 2016 for comment. Training for key employees is being scheduled.

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 is being developed to help the Signatories with discussions with their Boards and the public.

A meeting is being scheduled with EPA and DEP for the Partners and the City to present the draft Capital Improvements Plan, Basis of Design, a tentative schedule and an update on the work and being performed.

LCA participated in a meeting between the City and the City Signatories to present the City’s Phase 2 Study and to present a concept for allocation of costs associated with the City’s AO CIP.

The test and seal project for a portion of the Western Lehigh Interceptor was awarded and the project will get underway this summer.

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

This project involves the following upgrades to the existing pumping station: Evaluate the feasibility of installing 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. The project has been identified as a Major Capital Improvement (MCI). Request for Proposals for engineering services have been received and are under review. This project will be funded by the LCA Suburban Division.

11. **Suburban Division – Western Weisenberg Wastewater Treatment Plant Improvements**
This project includes the improvements necessary to rectify the cold weather nitrification issue at the WWTP. The Board approved the construction phase of the project at the May 9, 2016 meeting. Notices of Intent to Award were sent to the general and electrical contractors; upon receipt of the required documentation from the contractors the Notices to Proceed will be issued. We expect to schedule a pre-construction meeting for mid-June. This project will be funded by the LCA Suburban Western Weisenberg Division.