BOARD MEETING AGENDA

1. Call to Order
2. Review of Agenda
   • Public Participation Sign-In Request
3. Executive Sessions
4. Approval of Minutes (To be mailed under separate cover)
   • December 15, 2014 Regular Meeting Minutes
   • January 12, 2015 Workshop Meeting Minutes
   • January 26, 2014 Regular Meeting Minutes
5. Public Comments
6. Action / Discussion Items

FINANCE AND ADMINISTRATION
   • Board Officer Election
     ▪ Report of Nominating Committee
     ▪ Other Nominations
     ▪ Election

WATER
   • Allentown Division – Pre-lease Valve Replacements- Design Phase (Approval)

WASTEWATER
   • Resolution 2-2015-1 - Wynnewood Terrace Pump Station and Force Main Replacement (Approval)

7. System Operations Overview
8. Staff Comments
9. Solicitor’s Comments
10. Other Comments
11. Adjournment

MARCH MEETINGS

| Workshop Meeting | March 9 – 12:00 p.m. |
| Board Meeting    | March 23 – 12:00 p.m. |

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. 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.
FINANCE & ADMINISTRATION

ACTION ITEMS

1. None.

DISCUSSION ITEMS

1. None.

INFORMATION ITEMS

1. **CMMS Upgrade and Expansion Project**
   
Pilot Configuration of the CityWorks application is complete. Pilot phase training for plant personnel was completed the week of November 17th and December 8th. Android and iOS tablets are being evaluated by plant and field personnel. ‘Go Live’ is scheduled for March 9 - 13th 2015.

2. **WEB Map Upgrade Project**

   CDM has delivered the updated web map for LCA testing and evaluation. Refinements suggested during the testing phase are being completed. The map will be rolled out to all employees during February.

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

<table>
<thead>
<tr>
<th>Fund</th>
<th>Bank</th>
<th>Location</th>
<th>Gross Amount</th>
<th>Date of Purchase</th>
<th>Date Due</th>
<th>Net Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>LLRI CR</td>
<td>Union National Bank and Trust</td>
<td>Elgin, IL</td>
<td>99,000.00</td>
<td>1/16/15</td>
<td>1/16/16</td>
<td>0.85</td>
</tr>
</tbody>
</table>

   Fund Descriptions for Investments:
   - 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

1. **Allentown Division – Pre-lease Valve Replacements- Design Phase**
   The project is the replacement of approximately 55 inoperable valves in multiple locations throughout the City that existed prior to the lease settlement. This project is identified as Un-Completed Work and will be funded by the City. Board approval is requested for the design phase of the project. Reference the attached documentation for additional information (green).

DISCUSSION ITEMS

1. None.

INFORMATION ITEMS

1. **Arcadia West Pumping Station Modifications**
   Substantial Completion was declared on January 15. An inspection was conducted on February 9 and a punch list of minor items will be given to the contractors to address. Paving will be scheduled when temperatures warm up. The SCADA system was tested on January 29; minor punch list items must be addressed. DEP inspected the station and has issued an Operating Permit dated January 28.

2. **Pine Lakes of Lynn Township Pump Station Upgrade**
   Currently this pump station is a hydro-pneumatic system that has proven to be problematic over time. This project will convert the hydro-pneumatic operated equipment to a variable frequency drive controlled double pumping system (along with other miscellaneous improvements). A request for Board approval of the design phase is anticipated in March.

3. **Allentown Division- Schantz Spring Chlorination Issue**
   The project is to design and construct a facility or improvements that assure continuous chlorination of the Schantz Spring water supply. Barry Isett Inc. has completed an engineering study of chlorination options and a Conceptual Design is being prepared for City of Allentown review/approval. This Project is identified as Un-Completed Work and will be funded by the City.

4. **Allentown Division – Water Main Replacement Program- Cycle 2**
   The project is the replacement of 2-miles of aged and/or failing Cast Iron water main. Currently Gannett Fleming has submitted substantially complete plans and specifications to LCA and COA that are now actively under review. This Project is identified as Schedule-7 Work and will be funded by LCA.

5. **Developments**
   Water system construction is occurring in the following developments:
   Estates at Mill Race, 26 residential lots (sfd), LMT
   Lehigh Hills, Lot 4, 1 commercial building, UMT
Parkland Fields, Phase 3, 37 residential lots (sfd), UMT
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:
- Above & Beyond (personal care facility), 2 commercial lots, UMT
- Diocesan Pastoral Center, 2 commercial lots, 3 additional lots and residual lot for existing cemetery, LMT
- Grandview, 6 commercial units and 204 apartment units, LMT
- 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, UMiIT, water and sewer
- Lehigh Hills, 247 residential lots (sfa/sfd), UMT
- Liberty at Mill Creek, 2 industrial lots, UMT
- Morgan Hills, 40 residential lots (sfd), WeisT, water and sewer
- North Whitehall Commercial Center (Walmart), 5 commercial lots, NWT, water and sewer
- Shepherd's Corner, 1 commercial lot, LMT
- Spring Creek Properties Settlement Subdivision (formerly Spring Creek Properties Subdivision I), 16 commercial and industrial lots, LMT. Phase 1 was approved for Lots 4, 5, 6 and 16.
- Trexler Business Center, Lot 1, 1 commercial building, LMT
- Weilers Road Twins, 82 residential lots (sfa), UMT
- Woodmere Estates, 60 residential units (sfd), UMT
WASTEWATER

ACTION ITEMS

1. **Wynnewood Terrace Pump Station and Force Main Replacement**
   
   Board action to award took place at the January Workshop and the follow-up contract documents have been received and executed. PennVEST settlement of the $1,000,000 loan for this project is scheduled for February 24th. Because the Authority has insisted on restricting the collateral to the pledge of revenues from only its Common Rate Wastewater Collection System, of which the Wynnewood Terrace system is a component, and because PennVEST is taking a subordinate lender position, among the documents that PennVEST is requiring is a rate resolution pledging to the establishment of rates in the Common Rate Wastewater Collection System sufficient to maintain the system and meet the debt service obligations for the system. The attached Resolution 2-2015-1 is recommended for approval **(yellow)**.

DISCUSSION ITEMS

1. None.

INFORMATION ITEMS

1. **Wastewater Treatment Capacity**
   
   A Public Outreach event is being scheduled for early 2015. The 537 Consultant recently met with South Whitehall Township at the Township’s request. They are now interested in answering a questionnaire presented to them at the onset of the 537 planning process. They may be interested in additional allocation. We are waiting for an official request from them and will determine if their request impacts the 537 plan timeline.

2. **Arcadia West WWTP Improvements**
   
   Staffing is working toward closeout of the project. DEP Final Inspection was completed January 29.

3. **Park Pump Station Fuel Tank Replacement**
   
   The installation of a new 8,000 gallon fuel tank began November 10, 2014. Completion is expected by the end of May 2015.

4. **Allentown Division - PPL Combined Heat & Power (CH&P) Facility**
   
   The Combined Heat and Power (CH&P) facility at the Kline’s Island WWTP which was constructed through Addendum No.3 of Energy Services Master Agreement between the City and PPL Energy Plus fired digester gas on all thirty-one days during the month of December. The CH&P produced a total of 504,813kWh of electricity which reduced the plant’s use of commercial power from the grid by 49.7%. To produce the same amount of electricity at a traditional power plant the firing of approximately 403,850 pounds of coal would have been required.

5. **Lynn Township – WWTP Improvements, Phases 1 & 2**
The project will upgrade the WWTP head works. A revised Water Quality Management Part II Permit was issued by DEP on January 14. Gannett Fleming is finalizing the bid package.

7. **Allentown Division – Sanitary Sewer Manhole Lining, Cycle -2**

This annual project will install a lining system (to eliminate infiltration) in approximately 85 aged brick manholes identified by LCA staff. The project is identified as Administrative Order Work and will be funded by the City. The design phase has been administratively approved.

8. **Allentown Division – Sanitary Sewer Evaluation Study (SSES)**

This project involved field investigatory work to identify sources of inflow and infiltration (I/I) in the City’s sanitary sewer system. The work included closed circuit television (CCTV) inspection of approximately 102,000 linear feet of sanitary sewer mains (ranging in size from 8 to 36 inches in diameter), the inspection of approximately 550 manholes, sewer piping point repairs, smoke testing, and heavy cleaning. All field work has been completed. A final memorandum reporting on the project’s findings was submitted to the City and LCA in late January. This project is identified as Administrative Order / Un-Completed Work and was funded by the City.

9. **Allentown Division – WWTP Belt Filter Presses (BFP)**

This project includes the installation of one remanufactured belt press and the in-place rehabilitation of the other two presses along with two new control cabinets. (This Project is identified as a Schedule 7 project and will be funded by LCA).

The project is substantially complete with all Belt Presses in service and only minor electrical and mechanical punch list items remaining open.

10. **Allentown Division – Manhole Collars with Water Tight Frame and Covers – Cycle -2**

This three year project will permanently secure the frame and cover of 105 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 project is identified as Administrative Order will be funded by the City. The design phase has been administratively approved.

11. **Allentown Division - WWTP-Replacement of Motor Control Centers**

This Project will replace five aged motor control centers that provide power on a 24/7 basis to various parts of the WWTP. The Construction Phase of the project has been approved by the Board. Notice to Proceed has been sent to both contractors and a pre-construction meeting is scheduled for 2/13/15. This Project is identified as Schedule 7 project and will be funded by LCA.

12. **Allentown Division – Roof Rehabilitation and Replacements**

The Project consists of replacing 26 facility roofs that were identified in need of immediate replacement in the Roof Evaluation report performed by D’Huy Engineering. The design of these replacements are currently underway. The project has been presented to the City for review/approval as a Major Capital Project. The project will be funded by LCA.

13. **SCADA System Installation – Kline’s Island Wastewater Treatment Plant**

Installation of a new SCADA system at the Kline’s Island Wastewater Treatment Plant was approved at the January Board workshop. Staff is in the process of completing
Agreements with the Contractor. The project will begin once all documents are executed in February. This project is identified as Un-Completed Work and will be funded by the City.

14. **Allentown Division – WWTP: 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). This Project is identified as Schedule 7 project and will be funded by LCA. The Design Phase has been approved and a kick-off meeting was held on February 6, 2015.
MEMORANDUM

Date: February 16, 2015

To: Authority Board
From: Jason Peters, Frank Leist
Subject: Allentown Division
Pre-Lease Valve Replacement Project - Design Phase

MOTIONS / APPROVALS REQUESTED:

<table>
<thead>
<tr>
<th>No.</th>
<th>Item</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Capital Project Authorization – Design Phase</td>
<td>$83,546</td>
</tr>
<tr>
<td>2</td>
<td>Professional Services Authorization – Barry Isett &amp; Associates, Inc.</td>
<td>$23,546</td>
</tr>
</tbody>
</table>

(1) Included in the Capital Project Authorization.
(2) Does not include Construction phase related engineering services.

PROJECT OVERVIEW:
This project will consist of the replacement of approximately 55 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 and flexibility in the water system when planned or unplanned outages occur increasing the reliability of water service for our customers. It is envisioned that all valve replacements will be covered by a single construction contract.

FINANCIAL:
The project is identified as Un-Completed Work and will be funded by the COA.

PROJECT STATUS:
Pending Board approval of the Design Phases

THIS APPROVAL–DESIGN & BID PHASE
Lehigh County Authority (LCA) intends to retain the services of an engineering consulting firm to provide, design and bid related services for the Allentown Division Pre-Lease Valve Replacement Project (Project). Optional construction related engineering services, is not requested at this time and will be requested when the Construction Phase is presented to the Board for approval. The following table summarizes the professional services to be performed:

<table>
<thead>
<tr>
<th>Professional Services</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Coordinate with the City and other outside agencies and utilities.</td>
</tr>
<tr>
<td>2. Prepare plans and specifications for valves that are to be replaced.</td>
</tr>
<tr>
<td>3. Prepare and obtain regulatory and municipal permits as required.</td>
</tr>
<tr>
<td>4. Provide bidding services.</td>
</tr>
<tr>
<td>5. Provide construction engineering services. (optional future authorization)</td>
</tr>
<tr>
<td>6. Provide construction management services. (optional future authorization)</td>
</tr>
<tr>
<td>7. Provide construction inspection services. (optional future authorization)</td>
</tr>
</tbody>
</table>

CONSULTANT SELECTION PROCESS:
In January, two local engineering consulting firms were asked to provide both a cost and technical proposal. LCA requested that the firms develop a detailed scope of work and provide prices for the valve replacement design, bid, and optional construction services.

The results of the proposals for design/bid services are shown in Table 1 below:

<table>
<thead>
<tr>
<th>Firm</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barry Isett &amp; Associates</td>
<td>$23,546</td>
</tr>
<tr>
<td>Keystone Consulting</td>
<td>$45,000</td>
</tr>
</tbody>
</table>

Based upon our review of all aspects of both the Technical and Cost Proposals submitted by the two firms, we recommend award of the Design Phase to Barry Isett & Associates. Barry Isett & Associates will perform the services outlined in their proposal dated January 16, 2015.

**BARRY ISETT & ASSOCIATES COMPANY INFORMATION:**
Barry Isett & Associates has provided their professional services for the 24” Allentown Waterline interconnection project, 2014 AD- MH Lining and MH Chimney Projects and numerous other projects for the Authority.

**PROJECT SCHEDULE:**
A proposed project schedule was developed and it is anticipated that LCA will receive construction bids by late August 2015 with construction starting in September 2015. Final completion is anticipated in June 2016.

**FUTURE AUTHORIZATIONS:**
Construction Phase
CAPITAL PROJECT AUTHORIZATION

PROJECT NO.: AD-W-15-2  BUDGET FUND: Allentown Div\Water\Capital

PROJECT TITLE: Allentown Division – Pre-Lease Valve Replacement Project- Design Phase

THIS AUTHORIZATION: $83,546

DESCRIPTION AND BENEFITS:

This project will consist of the replacement of approximately 55 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 and flexibility in the water system when planned or unplanned outages occur increasing the reliability of water service for our customers.

Please reference the cover Memo for additional information.

Authorization Status:

<table>
<thead>
<tr>
<th>REQUESTED THIS AUTHORIZATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design Phase</td>
</tr>
<tr>
<td>Staff (1)</td>
</tr>
<tr>
<td>Engineering Consultant</td>
</tr>
<tr>
<td>Design Phase Services</td>
</tr>
<tr>
<td>Miscellaneous (2)</td>
</tr>
<tr>
<td>Contingencies</td>
</tr>
<tr>
<td>Total This Authorization</td>
</tr>
</tbody>
</table>

Future Authorization

| Construction Phase          | $1,026,454 |

Total Estimated Project       $1,110,000

(1) Staff time includes Capital Works and Distribution and Collections efforts related to the design phase of this project.

(2) Includes subsurface investigations such as geo-tech work, soft digs, ground penetrating radar if required; also permit fees and other miscellaneous costs.

REVIEW AND APPROVALS:

Project Manager            Date            Chief Executive Officer        Date

Chief Capital Works Officer Date            Chairman            Date
PROFESSIONAL SERVICES AUTHORIZATION

<table>
<thead>
<tr>
<th>Professional:</th>
<th>BARRY ISETT &amp; ASSOCIATES</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>85 S. Route 100</td>
</tr>
<tr>
<td></td>
<td>Allentown, PA 18106</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date:</th>
<th>February 16, 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Requested By:</td>
<td>Jason Peters</td>
</tr>
</tbody>
</table>

**Approvals**

<table>
<thead>
<tr>
<th>Department Head:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Chief Executive Officer:</td>
<td></td>
</tr>
</tbody>
</table>

Allentown Division – Pre-Lease Valve Replacements

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

<table>
<thead>
<tr>
<th>Professional Services</th>
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<tbody>
<tr>
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<td>3. Prepare and obtain regulatory and municipal permits as required.</td>
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<tr>
<td>4. Provide bidding services.</td>
</tr>
</tbody>
</table>

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

**Design Phase:**
**Cost Estimate (not to be exceeded without further authorization):** $23,546

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

Authorization Completion:

(For Authority Use Only)

Approval: ___________________________  Actual Cost: ___________________________  Date: ___________________________
PROFESSIONAL SERVICES AUTHORIZATION
INDEMNIFICATION
Allentown Division
Pre-Lease Valve Replacement Project

(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 February 16, 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: _____________________________
A Resolution of Lehigh County Authority (the “Authority”) Pledging the Maintenance of Rates with its Common Rate Wastewater Collection System (the “System”) to Meet its Financial Obligations for the System, Including its Obligation to the Pennsylvania Infrastructure Investment Authority (“PennVEST”) in the Maximum Principal Amount of One Million Dollars ($1,000,000) for the Purpose of Providing Funds to Finance the Wastewater Collection System Improvements for Wynnewood Terrace Development, North Whitehall Township (the “Project”)

WHEREAS, the Authority was created and is existing under the laws of the Commonwealth of Pennsylvania; and

WHEREAS, the Authority has determined that it is necessary and in its best interests to construct the Project that will be part of the System, which System presently consists of these sub-systems - the Upper Milford Wastewater Collection System, the Heidelberg Heights Wastewater Collection System, the Sand Spring Wastewater Collection System, the Wynnewood Terrace Wastewater Collection System, the Weisenberg Township Wastewater Collection System (which does not include the Western Weisenberg Wastewater Collection System); and

WHEREAS, in order to help finance the cost of the Project, the Authority intends to obtain a loan in the maximum principal amount of $1,000,000 from PennVEST to be evidenced by a debt obligation (the "Debt Obligation") secured by a pledge of the full faith and credit and the gross receipts and revenues of the System to the extent presently unencumbered (the “Project Collateral”), recognizing that these System pledged revenues are already subject to an existing lien securing the 20 December 2011 Lehigh County Authority Sewer Revenue Bond, Series A of 2011 to QNB Bank, Quakertown, Pennsylvania in the issuance amount of $2,236,100; and
WHEREAS, PennVEST has required, as part of settlement on the Debt Obligation, an Authority resolution in regard to establishment of rates sufficient to cover all indebtedness for the System;

NOW THEREFORE, the Authority hereby resolves to continue its practice of having rates cover “cost of service, including having sufficient System rates in place, or providing for the implementation of such rates within three months of the scheduled amortization date on the Debt Obligation as defined at settlement, to cover all operational and maintenance costs, the debt service on this Debt Obligation and the debt service on all other outstanding debt related to the System.

On motion of ________________, seconded by ____________________, this Resolution was adopted the 23rd day of February 2015.

I, Richard H. Bohner, Secretary of the Authority, do hereby certify that the foregoing is a true, correct and complete copy of a resolution which was duly adopted by the Authority at a public meeting of the Authority held on 23rd February 2015, after notice thereof had been duly given as required by law, at which meeting a quorum was present and voting and which resolution No. 2-2015-1 is now in full force and effect.

In Witness Whereof, I have hereunto set my signature as such official and have had affixed the seal of the Lehigh County Authority this 23rd day of February 2015.

(SEAL) Richard H. Bohner, Secretary