

LEHIGH COUNTY AUTHORITY

November 25, 2013

BOARD MEETING AGENDA

1. Call to Order
2. Review of Agenda
 - *Public Participation Sign-In Request*
3. Executive Sessions
4. Approval of Minutes
 - *September 23, 2013 Regular Meeting*
 - *October 14, 2013 Workshop Meeting*
 - *October 28, 2013 Regular Meeting*
 - *November 11, 2013 Workshop Meeting*
5. Public Comments
6. Action / Discussion Items

FINANCE AND ADMINISTRATION

- *None*

WATER

- *None*

WASTEWATER

- *Allentown Division – WTP Dewatering Building Motor Control Centers - Design Phase (Approval)*

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

DECEMBER MEETINGS

Board Meeting

December 9 – 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.

REGULAR MEETING MINUTES
September 23, 2013

The Regular Meeting of the Lehigh County Authority was called to order at 12:25 p.m. on Monday, September 23, 2013, Chairman Asa Hughes presiding. Other Members present at the commencement of the meeting were: Richard Bohner, Tom Muller, Emrich Stellar, Norma Cusick, and Brian Nagle. Authority Staff present were: Aurel Arndt, Bradford Landon, Liesel Adam, Ed Bielarski, Frank Leist, Bob Kerchusky, Dan Standish, Pat Mandes, John Parsons, and Cristin Keppel.

REVIEW OF AGENDA

Mr. Arndt stated there would be one additional information item. He then introduced Daniel Standish, the Authority's new Water Services Manager.

Mr. Standish gave the Board some background on his career prior to starting with the Authority.

PUBLIC COMMENTS

None.

EXECUTIVE SESSION

None.

APPROVAL OF MINUTES

July 22, 2013, Regular Meeting Minutes

On a motion by Mr. Bohner, seconded by Ms. Cusick, the Board unanimously approved the minutes of the July 22, 2013 Regular Meeting (6-0).

August 12, 2013, Workshop Meeting Minutes

On a motion by Mr. Bohner, seconded by Mr. Nagle, the Board unanimously approved the minutes of the August 12, 2013 Workshop Meeting (6-0).

August 26, 2013, Regular Meeting Minutes

On a motion by Mr. Bohner, seconded by Ms. Cusick, the Board unanimously approved the minutes of the August 26, 2013 Regular Meeting (6-0).

ACTION AND DISCUSSION ITEMS

Health Insurance Portability and Accountability Act (HIPAA) Policy (Approval)

Ms. Adam explained that the full policy recommended for approval was attached and was an amendment of the original policy passed by the Board in April 2004. This amended policy was drafted by the Authority's Benefit Administrator, Benecon. She summarized the policy, noting that it is the policy of the Employee Benefits Plan (Plan) to maintain and protect the privacy of the protected health information (PHI) of its plan participants and to give its participants specific rights with respect to their PHI. Ms. Adam explained this policy is intended to promote awareness of the confidential nature of the medical information that is collected, maintained and disseminated by the Plan. This policy and these procedures reflect the commitment of the Employer to protecting the confidentiality of private health information. Ms. Adam stated that Kathy Martin, Human Resources Manager, is now the designated Privacy Officer with this amended policy. She explained this Privacy Policy shall be overseen by the Privacy Official. The Privacy Official shall have authority and responsibility for implementation and operation of this policy. Some discussion and language clarifications occurred.

On a motion from Mr. Muller, seconded by Ms. Cusick, the Board approved the HIPAA Policy (5-1). Mr. Bohner was opposed.

Pension Plan Minimum Municipal Obligation (MMO)

Ms. Adam stated the Pennsylvania Municipal Retirement System (PMRS), in which the Authority is enrolled for employee pension benefits, requires that the Authority calculate its MMO for 2014 and present the information to the Board of Directors prior to submitting it to PMRS in October. The information required for this calculation is included in the attached memo and form. She noted that the calculation does not reflect a full 12 month period because of the transition with the Allentown concession but does reflect the minimum obligation. Some discussion followed.

Allentown Division 2013 Budget

Mr. Bielarski distributed the budget for the remainder of 2013 for the Allentown Division. He summarized the budget and explained the allocation of Division expenses. He noted that moving forward, the Allentown Division will be part of the regular Authority Budget and these costs are to cover capital funding and debt service through the end of 2013. Mr. Bielarski explained the approval of the budget is needed, but he would like the Board to look through the document in more detail and approval will be sought at the next Regular Meeting. Some discussion followed.

Water Rate Schedule – Meter Fee Update (Approval)

Ms. Adam distributed an updated fee schedule and explained that due to the difference in prices for the meters currently being installed at new installations in the City of Allentown, a new meter fee schedule is required to reflect the actual cost of meter installations for such properties. The meter fee schedule will be incorporated into the full *Schedule of Water Rates and Charges* upon Board approval. Ms. Adam stated that these fees are present for suburban customers as well, but components of the meter installations are slightly different due to a City Ordinance that does not allow developers to tap into the line, only system employees. Some discussion followed.

On a motion from Mr. Nagle, seconded by Mr. Muller, the Board unanimously approved the Meter Fee Update for the Allentown Division Customers (6-0).

Summary of Suburban Wastewater Projects

Mr. Leist stated the Board requested a presentation in September giving them an update on each of the Suburban wastewater projects, as they feel they would like to refocus on where things are at in this regard with all the attention on the Allentown transaction during the past many months. He referred to the attached presentation, summarizing the major wastewater projects throughout the system, including the LCA WTP Biogas Energy Improvements, Park Pump Station Renovations, Improvements, and Force Main Project, the Spring Creek Pump Station Improvements, Jordan Creek Wastewater System, the Wynnewood Pump Station and Force Main project, the Wynnewood I/I Investigation and Remediation Project, the Western Weisenberg Wastewater Treatment Plant Replacement, and the Lynn Township Plant Upgrades and Expansion.

Ms. Mandes continued the presentation, providing updates on the SCARP and I/I programs, Western Lehigh Interceptor Rehabilitation, and the Central Lehigh Wastewater Capacity Planning and Expansion. Extensive discussion followed.

SYSTEM OPERATIONS OVERVIEW

Mr. Kerchusky stated that the current status of projects are being evaluated in regard to Capital Planning. He also noted that the first Operating Standards Report to the City Office of Compliance is being started as part of the Concession Agreement. Mr. Kerchusky also stated the dams along the Little Lehigh have been breached through the project with Wildlands Conservancy. He noted that communication has been good in regard to making sure that the water heading to the Water Filtration Plant is not affected. Some discussion followed.

STAFF COMMENTS

None.

SOLICITOR'S COMMENTS

None.

OTHER COMMENTS

Mr. Hughes noted that the Comprehensive Annual Financial Report was received and he commended the Authority on the report and strong financial position.

ADJOURNMENT

There being no further business, the Chairman adjourned the meeting at 2:27 p.m.

Richard H. Bohner
Secretary

WORKSHOP MEETING MINUTES
October 14, 2013

The Workshop Meeting of the Lehigh County Authority was called to order at 12:18 p.m., on Monday, October 14, 2013, Vice Chairman Tom Muller presiding. Other Members present at the commencement of the meeting were: Richard Bohner, Emrich Stellar, and Norma Cusick. Authority Staff present were: Aurel Arndt, Liesel Adam, Frank Leist, Bradford Landon, Ed Bielarski, Dan Standish, Pat Mandes, and Cristin Keppel.

Mike Spadafora from D'Huy Engineering was also in attendance.

Agenda Review

Mr. Arndt stated there would be two additional action items and one Executive Session regarding personnel.

PMRS Pension Plan Agreement (Approval)

Mr. Arndt reviewed the previously distributed memorandum, noting that the Pennsylvania Municipal Retirement System (PMRS) will be filing an application to the Internal Revenue Service (IRS) for a favorable determination letter to become a tax-qualified pension plan provider. This PMRS process requires all of its contracts to be reviewed and options selected by PMRS members to conform to IRS regulations and PMRS policy. Several options specific to the Authority's plan were presented in a PMRS form with the elections specified for submission back to PMRS to finalize the Authority's contract. He reviewed outlined recommendations for compensation and excess interest. In the past, the Authority has elected to distribute excess interest on an as-needed basis, with each distribution discussed and decided independently of prior decisions. However, since this will no longer be possible, it is recommended that the following elections be made, which mirror past decisions of the Authority Board of Directors: 1. Excess Interest shall be allocated between the Retired Member's Reserve Account, Municipal Account and Member's Account proportionately based on the individual assets credited to each account; 2. The amount (from number 1 above) that is allocated to the Member's Account shall be credited in an equal percentage to each Member based on the assets in each Member's Account; and 3. The amount (from number 1 above) that is allocated to the Retired Member's Reserve Account shall be credited so as to provide an equal percentage benefit increase to each Annuitant and Survivor Annuitant.

On a motion by Mr. Stellar, seconded by Mr. Bohner, the Board unanimously approved the PMRS Pension Plan Agreement (4-0).

Post Issuance Compliance Policy (Approval)

Mr. Landon explained that Donna Kreiser, bond counsel with McNees Wallace & Nurick, who represented the Authority with the recent bond issue for the Allentown Concession transaction, has prepared a Post Issuance Compliance Policy. This policy is recommended by the IRS to assure compliance with financing disclosure and tax requirements and is necessary for the Authority to timely file its IRS 8038 form with the recent financing as an indication that the Authority does in fact have such a policy. Mr. Landon noted the Authority did a simplified versions specifically for the Build America Bonds in 2009 as well, but this recommended policy is more detailed and would apply to all Authority financings; a Resolution to adopt such a policy was recommended. Some discussion followed.

On a motion from Mr. Stellar, seconded by Ms. Cusick, the Board unanimously approved Resolution 10-2013-1 (4-0).

Replacement of Solids Building Roof at Wastewater Treatment Plant (Approval)

Ms. Mandes referred to the attached memorandum and presentation regarding the replacement of the Solids Building roof. She explained that the replacement of the Solids Building roof at the Wastewater Treatment Plant in Upper Macungie Township (WTP) is part of the WTP capital plan for 2013 as a carryover from 2012. The roof is the original roof constructed in 1988 and is the only roof at the WTP that has not been replaced. The roof has been in need of replacement for the past several years and has been delayed due to budget constraints and more pressing issues. She reviewed the problems the leaking roof has

caused and explained the project consists of removal of the roof and replacement with a Garland Modified Bituminous built up roof system. She reviewed the details of the bid summary provided.

Mr. Spadafora, from D'Huy Engineering, explained that this is a unique situation because of the complex structure of the roof. He noted the replacement is much more detailed than most and will take a bit longer to carry out because of the special circumstances. He also noted that they have worked with the roof contractor selected in the past. Extensive discussion followed.

On a motion from Mr. Bohner, seconded by Ms. Cusick, the Board unanimously approved a Professional Services Authorization for D'Huy Engineering for Construction Administration Services (\$12,500) and a Contract Award to Munn Roofing (\$519,400) (4-0).

Allentown Division – Interim Rules and Regulations; §3 for Water Service, and §7 for Sewerage Service (Approval)

Ms. Adam explained that the collections process was about to occur for the Allentown Division. Due to the transition of all Allentown water and sewer customers into the Authority's system on August 8, 2013, with such customer's being accustomed to a different process that was used by the City, it was recommended that an Interim Collections Procedure that would span the first six months of the Authority's operation of the Allentown systems. This system would be similar to what the City customers are used to and would slowly transition into the Authority's practices. Some discussion followed.

On a motion from Mr. Bohner, seconded by Ms. Cusick, the Board unanimously approved Interim Rules and Regulations to modify §3 of the Rules and Regulations for Water Service and §7 of the Rules and Regulations for Sewerage Service, respectively, for the Allentown Division. (4-0).

Employee Off-time Donation Policy (Approval)

Ms. Adam noted that the distributed policy is a result of a request from former City personnel. There was a similar donation policy in the City because the SEIU employees do not have short-term or long-term disability. Because of a current situation, the Authority has drafted the policy applicable to all employees who wish to donate time to an employee in need. Some discussion followed.

On a motion from Ms. Cusick, seconded by Mr. Stellar, the Board unanimously approved the Employee Off-time Donation Policy (4-0).

Executive Session

The Vice Chairman called for an Executive Session at 1:09 p.m. to discuss personnel.

The Session ended at 1:23 p.m.

There being no further business, the Vice Chairman adjourned the meeting at 1:24 p.m.

Richard H. Bohner
Secretary

REGULAR MEETING MINUTES
October 28, 2013

The Regular Meeting of the Lehigh County Authority was called to order at 12:25 p.m. on Monday, October 28, 2013, Chairman Asa Hughes presiding. Other Members present at the commencement of the meeting were: Richard Bohner, Tom Muller, Emrich Stellar, Norma Cusick, Brian Nagle, and Scott Bieber. Authority Staff present were Bradford Landon, Liesel Adam, Frank Leist, Bob Kerchusky, Dan Standish, Cristin Keppel, and Jason Peters.

Bruno Levine of FLOWatch and David French and Chris Grady of L.R. Kimball were also in attendance.

REVIEW OF AGENDA

Ms. Adam stated the Allentown Division Capital Plan approval will be added under Finance and Administration.

PUBLIC COMMENTS

Mr. French introduced himself and Chris Grady, explaining that L.R. Kimball is an architecture and engineering firm. They are a division of CDI that focuses on water and wastewater infrastructure. He noted they have done work for Lehigh County before and asked that they be considered for future work for the Authority.

Mr. Levine distributed a handout that served as an update on their cloud-based data management system for water and wastewater utilities. He explained in some detail how their services are unique and noted their services help to address data management specifically for operations of systems.

EXECUTIVE SESSION

None.

APPROVAL OF MINUTES

September 9, 2013, Workshop Meeting Minutes

On a motion by Ms. Cusick, seconded by Mr. Muller, the Board unanimously approved the minutes of the September 9, 2013 Workshop Meeting (5-0). Messrs. Bohner and Nagle abstained due to their absence at the subject meeting.

ACTION AND DISCUSSION ITEMS

Allentown Division 2013 Budget (Approval)

Ms. Adam stated that the Allentown Division Budget through the end of 2013 was distributed and explained at the September 23 Board Meeting. She noted that approval is requested of the budget and noted that if there are any further questions, Board members should contact Ed Bielarski.

On a motion from Ms. Cusick, seconded by Mr. Nagle, the Board approved the Allentown Division 2013 Budget (7-0).

Allentown Division Cast Iron Main Replacement Program (Approval)

Mr. Leist referred to the previously distributed memorandum regarding details of the Main Replacement Program noting that through the Operating Standards of the City Concession Agreement, the Authority is required to annually replace two-miles of aged spun and/or pit cast-iron water mains following a certain criteria as described in the Agreement, except in the first year where only one-mile is required to be replaced. He explained the Authority intends to retain the services of an engineering consulting firm to provide design related services and a Pipe Prioritization Assessment Program for Cycles 1-3 of the Allentown Division Main Replacement Program. Optional construction related engineering services he added, were not requested at that time and will be requested annually as needed, on a cycle by cycle

basis when the Construction Phase is presented to the Board for approval. Mr. Leist outlined the bid process via the memorandum and noted that Gannett Fleming Inc. was selected for this project. He noted that Gannett Fleming designed the Authority's Hydraulic Model and the Authority has been pleased with their work in the past. Extensive discussion followed.

On a motion from Mr. Bieber, seconded by Mr. Muller, the Board unanimously approved the Capital Project Authorization for the Main Replacement Program in the amount of \$887,952 (7-0).

On a motion from Mr. Bohner, seconded by Mr. Muller, the Board unanimously approved the Professional Services Authorization (included in the Capital Project Authorization above) for Gannett Fleming Inc. in the amount of \$467,952 (7-0).

Allentown Division – Wastewater Plant – Replacement of Perth System Compressor (Approval)

Mr. Kerchusky referred to the previously distributed memorandum explaining that a Perth mixing system, which runs on stored methane gas, is used to assure proper mixing and heating of sludge in the anaerobic digester, which is critical for maximizing biological degradation of the incoming raw sludge. He explained that the aged Yeomen's compressor, which is a component of the Perth system, on Digester No. 2 is no longer manufactured and repair parts are scarce and, if available, they are very expensive. Previous maintenance records indicate expensive major yearly overhauls on the current Yeomen's compressor with just the normal wear and tear items such as bearings, vanes & gaskets being in excess of \$4,200. As such it is recommended that the old style compressor be replaced with a Siemen's Claw compressor retrofit package. Some discussion followed.

On a motion from Mr. Bohner, seconded by Mr. Beiber, the Board unanimously approved the contract award to G.P. Jager & Associates in the amount of \$43,400 for a Siemen's Claw compressor retrofit package (7-0).

SYSTEM OPERATIONS OVERVIEW

None.

STAFF COMMENTS

None.

SOLICITOR'S COMMENTS

None.

OTHER COMMENTS

Mr. Nagle asked if more City of Allentown system information could be added to the Water and Wastewater information sections in the Board notes in the future.

ADJOURNMENT

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

Richard H. Bohner
Secretary

WORKSHOP MEETING MINUTES
November 11, 2013

The Workshop Meeting of the Lehigh County Authority was called to order at 12:29 p.m., on Monday, November 11, 2013, Chairman Asa Hughes presiding. Other Members present at the commencement of the meeting were: Richard Bohner, Emrich Stellar, Tom Muller, Scott Bieber, and Norma Cusick. Authority Staff present were: Aurel Arndt, Frank Leist, Bradford Landon, Ed Bielarski, Dan Standish, Pat Mandes, Bob Kerchusky, and Cristin Keppel.

Fred Lutz and Bill Bohner of ARRO Group and Ralph Eschborn of AECOM were also in attendance.

Agenda Review

Mr. Arndt stated there would be two additional action items and one Executive Session regarding personnel.

Highland Court Sinkhole (Approval)

Mr. Standish informed the Board that work is currently being done on a sinkhole located in the 1200 block of Highland Court in the Clearview Manor Development in Lower Macungie Township. He indicated that a customer called the Authority about low pressure early on Sunday, November 10, 2013. The leak was found by 8:15 and excavation efforts began; at that time with the beginning of excavation, the hole opened up immediately. He said temporary lines have been established to provide basic water service for the six affected homes, but with lower water pressure. Upon further excavation by Joao & Bradley Construction Company, the emergency contractor, the hole is now about 25 feet wide and 20 feet deep. Mr. Standish explained that Mark Harmon of the ARRO Group is currently at the site determining if the plan of action to repair the leak and fill the hole is sound. Mr. Standish provided the Board with some pictures of the site. He requested the Board declare an Emergency for the situation in order for the Authority to spend funds to repair the sinkhole, noting that funding for such situations is already earmarked in the budget. Some discussion followed.

On a motion from Mr. Stellar, seconded by Mr. Muller, the Board unanimously approved an Emergency Declaration for the Highland Court Sinkhole in order to provide funds for repairs (6-0).

2014 Budget Assumptions

Mr. Bielarski gave an overview of the attached budget assumptions. He noted that incorporating the City System into the Authority budget process has created some challenges and the assumptions reflect basic departmental needs throughout the Authority. He briefly explained the current estimates for each category: Staffing, Benefits, Fleet Management, Education and Training, Human Resources, Information Technology, Knowledge Management, Customer Care, and Public Relations. Some discussion and clarifications of specific items followed. Mr. Bielarski stated the full 2014 Budget will be presented to the Board for approval in December.

2014 – 2023 Preliminary Capital Plan (Plan) (Approval)

Mr. Leist explained that this Plan is for the Suburban Division, noting that the Board previously approved a 5-year Capital Plan for the City Division in August. He stated that Doug Young was brought in to do the financial portions of the Plan and all of the costs are justified. The Plan includes \$151 million in projects over the next ten years; however, there are no new projects in this Plan. He briefly reviewed some of the larger, ongoing projects for Administration, Water and Wastewater. Some discussion followed.

On a motion from Mr. Muller, seconded by Mr. Bohner, the Board unanimously approved the 2014 – 2023 Suburban Division Capital Plan (6-0).

Mark Harmon entered the meeting at 1:04 p.m.

Liesel Adam entered the meeting at 1:10 p.m.

LCA/City of Allentown Act 537 Plan Update

Ms. Mandes explained that it has been one year since the kick off the Act 537 Plan Study to evaluate future wastewater discharge options for the Western Lehigh Interceptor (WLI) service area. She noted that Mark Harmon, Fred Lutz, and Bill Bohner of the ARRO Group and Ralph Eschborn of AECOM will present a detailed update (via attached presentation) on the work performed over the last year and explain the next steps of the project.

Mr. Harmon provided an update on the Jordan Creek Discharge Alternative if the Treatment Plant in Upper Macungie Township (WTP) becomes full treatment, and provided a detailed memorandum to Board and Staff members regarding the activities performed over the past year of the study.

Mr. Eschborn then discussed conveyance issues throughout the system and reviewed the other three discharge alternatives: (1) Upgrading LCA's WTP to discharge to the Lehigh River, (2) Upgrading Kline's Island WTP, and (3) Upgrading LCA's WTP to discharge to Land Application. He presented new findings regarding land application and noted that the new information for that alternative is being researched further.

Mr. Lutz updated the Board on the stakeholder process. He stated that the larger meetings subsided once the Concession Lease process began; however, he has continued to meet with stakeholders on an individual basis to keep them informed of the options.

Mr. Bohner then spoke about the schedule and other work that needs to be done on the project.

After extensive discussion and questions from Board members, it was noted that work will continue on the project and ARRO, AECOM, the Authority, and City officials will begin to narrow the focus on the best option available for additional capacity in order to provide a draft Act 537 Plan by spring of 2014.

Mr. Muller left the meeting at 2:14 p.m.

Mr. Stellar left the meeting at 2:23 p.m.

Western Lehigh Interceptor (WLI) User Fee Report (Approval)

Ms. Mandes distributed the options that will be presented to the WLI Advisory Committee. She explained that typically, the Board provides preliminary approval conditional upon approval from the WLI Signatories; however, this year there are a few options that need to be presented to the Committee. After some discussion of the options, Ms. Mandes stated that she will be seeking approval for either scenarios two, three or four, with an increase in rates under any of those options of no more than 5% and would request that the Board take such action now, instead of waiting until after the WLI Advisory Committee, in order to be timely.

On a motion from Mr. Bieber, seconded by Ms. Cusick, the Board unanimously preliminarily approved adoption of the WLI User Fee update pending approval and scenario selection by the WLI Advisory Committee (4-0).

Capital Recovery Fee Financing Agreement (Approval)

Mr. Arndt asked for the Board's assent to a one-time arrangement allowing a property owner to pay for some additional wastewater allocation it needs to complete a motel replacement project that is for a smaller amount than the 50,000 gpd threshold of the Authority's *Wastewater Treatment Capacity Allocation Financing Policy*. The fee will be financed over three months.

On a motion from Mr. Bieber, seconded by Ms. Cusick, the Board unanimously approved the Capital Recovery Fee Financing Agreement for Jay Jayla LLC (4-0).

Executive Session

The Chairman called for an Executive Session at 2:57 p.m. to discuss personnel.

The Session ended at 3:04 p.m.

There being no further business, the Chairman adjourned the meeting at 3:05 p.m.

Richard H. Bohner
Secretary

FINANCE & ADMINISTRATION

ACTION ITEMS

1. *None.*

DISCUSSION ITEMS

1. *None.*

INFORMATION ITEMS

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

Fund	Bank	Location	Gross Amount	Date of Purchase	Date Due	Net Rate %
Cons Wtr (2)	GE Capital Retail Bank (GE Money)	Salt Lake City, Ut	149,000.00	10/17/13	10/19/15	0.650
LLRI CR	Live Oak Banking Company	Wilmington, NC	250,000.00	10/9/13	10/9/14	0.400
Cons Wtr (2)	Modern Bank National Association	New York, NY	240,000.00	11/4/2013	11/4/2014	0.500

Fund Descriptions for Investments:

LLRI CR	Little Lehigh Relief Interceptor Capital Reserves
Cons Wtr (2)	Consolidated Water (2)

2. **Joint Funding Agreement – City of Allentown**

As part of the Concession Agreement, the Authority assumed responsibility for a contract with the U.S. Geological Survey (USGS) regarding a program to provide operation and maintenance of one gaging station on the Little Lehigh Creek and one-half of the operating cost of the gaging stations on the Jordan Creek at Allentown and Monocacy Creek at Bethlehem through September 30, 2014. The Authority and USGS executed this agreement on November 15, 2013 in the amount of \$34,400.

WATER

ACTION ITEMS

1. *None.*

DISCUSSION ITEMS

1. *None.*

INFORMATION ITEMS

1. **Phase 2 Interconnection with Allentown**

We were informed by South Whitehall Township that the contractor did not remove in-flow inserts from sanitary sewer manholes prior to installation of paving riser rings when overlaying W. Walnut Street and Mertz Lane last fall. Livengood Excavators has informed the township that they will cut out the old inserts and install new inserts later this year. Livengood Excavators will address restoration at Schantz Road next spring. **No Current Activity**

2. **Arcadia West Pumping Station Modifications**

Contract documents have been executed with Eastern Environmental Contractors, Inc., the General Contractor, and High Peak Electrical, Inc., the Electrical Contractor. A preconstruction conference was held on October 16. Notices to Proceed were issued on October 28th with Substantial Completion on May 25, 2014. The contractors are in the process of submitting their schedules and shop drawings for review.

3. **Upper Milford Central Division Radon Mitigation Study**

Board authorized this project in June and our consultant Cowan Associates (CA) is currently evaluating the existing wells in the Upper Milford Central Division (a/k/a Buss Acres). A Draft report was received in late December and a Draft Final report was received in early April. The final report is currently being reviewed by LCA staff. The report findings will be presented to the Board in 2014. **No Current Activity**

4. **LCA Facilities Emergency Power Project**

The Board authorized the construction phase of this project at the April 8, 2013, Work Shop meeting. Notices of Award were issued on April 9, 2013 to Barry J. Hoffman Co., Inc. – Electrical Construction and Lisbon – General Construction. All required documentation from the contractors has been received and Notices to Proceed (NTP) were issued on May 20, 2013. A pre-construction meeting was held on June 11, 2013. All site work, except final grading and seeding is completed at all of the facilities except the LCA main office. All generators have been installed onsite and are now operable except for LCA main office. The electrical contractor is currently working on the installation of both the automatic transfer switch and PLC control logic at the LCA main Office which is the last facility for construction to take place at. All the LCA main office construction work should be completed very shortly in the days to come. In a related matter, the delivery of the 500 KW generator for the Office Operations Center purchased by LCA through the Co-Stars program has been delayed until February 2014. When ordered the lead time was 8-10 weeks which would have put delivery in early October. Efforts to expedite this delivery working with the supplier and factory have not produced any results.

5. **Allentown Division- Water Main Replacement Program**

The Board authorized the design, bid, and pipe prioritization assessment program of the project at the October 28, 2013 Board Meeting. A Professional Service Authorization was awarded to Gannett Fleming, Inc. Currently preliminary meetings with City of Allentown Engineering Department, City of Allentown Streets Department, and PennDot have taken place to introduce the program and to ascertain some very important scheduling and design information that will help aid in the selection of water mains to be replaced. This project will be funded by LCA.

6. **Allentown Division- Coagulation Chemical Conversion**

In 2010 DEP approved the City to change the primary coagulant from Aluminum Sulfate (Alum) to Polyaluminum Chloride (PACL). This change has not been implemented due to change over in City personnel and the leasing of the City water system. LCA is in the process of reviewing the studies completed by the City and what is required to complete the conversion. This project will be funded by LCA

7. **Allentown Division- Schantz Spring Cl2 Booster Station**

Construction of a chlorine feed station at a midway point of the transmission main from Schantz Spring to the Water Filtration Plant to increase the reliability of the source. For the past few months we have been waiting for a response from the Director of Parks regarding the proposed location of the station. In addition, an alternative to the station is being discussed internally. This Project is identified as Un-Completed Work and will be funded by the City.

8. **Allentown Division- WFP Chemical Building Roof Replacement**

The Project includes modifications to the roof of WFP chemical storage area (i.e. installation of hatches), removal and replacement of (2) 8,000 gallon chemical storage tanks; and replacement of the 20-year old rubber membrane roof system. The project has been bid by the City and a contract has been awarded. Work is expected to start early spring. This project is identified as Un-Completed Work and will be funded by the City.

9. **Developments**

Water system construction is occurring at the following developments:

- Parkland Fields, Phase 1B, 25 residential lots (sfd), UMT
- Valley West Estates, Phases 4, 5 & 6, 46 residential lots (sfd), UMT.
- West Hills Business Center, 8 industrial lots, WeisT, water and sewer

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
- Grant Street Townes, 18 residential lots (sfa), WashT
- Hamilton Crossings, 2 commercial lots with 20 buildings having retail, financial, convenience and restaurant uses, LMT
- 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
- Route 100 Bypass & Cetronia Road Proposed Commercial Development, 1 commercial lot with 4 buildings having auto, convenience, financial and day care uses, UMT
- Shepherd's Corner, 1 commercial lot, LMT

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Spring Creek Properties Settlement Subdivision (formerly Spring Creek Properties
Subdivision I), 16 commercial and industrial lots, LMT
Trexler Business Center, Lot 1, 1 commercial building, LMT
Weilers Road Twins, 82 residential lots (sfa), UMT
Woodmere Estates, 60 residential units (sfd), UMT
Woodmont at Upper Macungie (formerly Rabenold Farms II), 288 apartment units and
clubhouse, (Portion north of I-78), UMT

WASTEWATER

ACTION ITEMS

1. **Allentown Division – WWTP Dewatering Building Motor Control Centers - Design Phase** (Approval)

This Project will replace five aged motor control centers that provide power on a 24/7 basis to various parts of the WWTP. The motor control centers are located in areas where they are exposed to corrosive wastewater gas and have deteriorated considerably. Because of their ages, replacement parts are nearly impossible to find. This equipment is critical for the daily operation of the WWTP. The project is a “required Project” as identified on Schedule 7 of the Lease Agreement and will be funded by LCA. Responses to an RFP for design Phase services were received on November 15, 2013. Board approval of the Design Phase is requested. Reference attached documentation (**gold**).

DISCUSSION ITEMS

1. **None.**

INFORMATION ITEMS

1. **Infiltration and Inflow (I&I) Program Update**

The following is work planned for 2013:

- Submission of reports to EPA and DEP.
- CCTV work in areas identified as have high leakage to determine the extent of the leakage. Malcolm Pirnie will review the CCTV video and determine a Basis of Rehab.
- Keystone Consulting Engineers (KCE) is generating the population projections for the LCA service area to be used in the Level of Service modeling.
- Completion of the Level of Service Modeling for future growth.
- Rehab effectiveness metering in Phase 1 pipe lining project areas to determine the reduction in peak flows as a result of the rehab work.
- Phase 2 of Signatory pipe lining projects as determined by KCE.
- Rehab effectiveness metering in Phase 2 pipe lining project areas.
- Alternative Modeling and feasibility analysis to evaluate the various alternatives to achieve the preliminary objectives. The alternatives will include various combinations of I & I elimination, storage and capacity increases.
- Long term flow meters will continue on a limited basis. Two rain gauges and meters remain in the system.
- Preliminary Program Objectives Evaluation Report will be submitted to DEP by the end of 2013. This document will define the current system performance and assess what it will take to achieve the system preliminary objectives. The report will include a discussion of the investigation and evaluation work completed including flow evaluation, SSES prioritization, modeling, current and future level of service, current and future system sizing requirements, and will propose the Level of Control for system operation.

- The development of the Capital Improvements Plan is scheduled to begin by the end of the year. This will identify the rehab needs, replacement needs, expansion requirements, costs of improvements and schedule for implementation to achieve the program objectives. **No Current Activity.**

2. **Wastewater Treatment Capacity**

The Memo of Understanding (MOU) regarding working together on a joint Act 537 Plan with the City was never executed with the City. We have revised the MOU and will be again submitting it to the City so that they can have representation on the project.

A Communications Plan was developed by the consultant with input from LCA and the City. A stakeholder's group has been formed and the kick-off meeting was held in mid-January at the Lehigh County Administration Building. The Stakeholders Advisory Committee (SAC) consists of either Municipal Managers or Municipal Officials from each of the City and LCA Signatories. It is expected that there will be 5 meetings with the SAC during the Study to keep the Committee up to date on Plan with the expectation that the adoption of the plan with the various Signatories will be completed in a short period of time.

Talks continue with DEP on the effluent standards applicable to a discharge to the Jordan Creek. A meeting was held with DEP in late May to discuss the Jordan Creek discharge. DEP indicated water quality standards will be applicable to the plant effluent. We had requested Reuse Standards which are less stringent but DEP will require the secondary drinking water standards. We have since received a letter from DEP with the specific requirements for performing a study of the Jordan Creek that must be completed prior to the issuance of final effluent standards. We have recently completed Total Dissolved Solids (TDS) testing and have compared them to TDS data from several years ago. The trend is an increase in the TDS in the plant effluent. This could potentially mean that an upgraded Pretreatment Plant would require TDS removal such as Reverse Osmosis.

A meeting was held with the DRBC to discuss updating the prospective effluent limits for the various alternatives. The model will be refined and the grandfathered loads for Phosphorus and Ammonia will be updated based on the actual Kline's Island data. A model run will be completed in the near future.

LCA purchased 100,000 gallons of allocation from Salisbury Township at \$6.00 per gallon.

The WWTP data evaluation was completed by the consultant and the process/mass flow diagrams were presented to review the team.

A presentation will be made at the November Workshop to update the Board and staff on the 537 Planning. It will include the latest information on the Jordan Creek investigation, DRBC Special Protection Waters (SPW) requirements and conveyance issues.

3. **Northern Lehigh Wastewater System**

The project is composed of the following:

Wastewater Treatment Plant (on a 5-acre tract at KidsPeace)

In March, LCA representatives met with North Whitehall Township (NTW) Supervisor, Steve Pany; Solicitor, Lisa Young; and Township Manager, Jeff Bartlett to discuss the Act 537 Plan. In summary, for the westside of Rt. 309 (the 1-5 year service area) LCA has agreed to limit the size of the Wastewater Treatment Plant (WTP) to 200,000 GPD which in essence reflects the need for this area. Any expansion beyond 200,000 GPD would require NWT approval.

September 18, 2012, after six months of hearings, the Supervisors granted approval of the Conditional Use for the proposed WTP with nine conditions. We have received the written decision from the Township and have accepted all conditions. In late November

2012 the opposition, the Friends of the Jordan, appealed the Township decision to Lehigh County Court of Common Pleas. Legal Briefs were filed by the Voice of the Jordan (Voice), NWT and LCA. Argument took place on Wednesday May 29, 2013 with Judge Edward Reibman presiding. On June 5, 2013 the Court ordered "that the decision of the NWT Board of Supervisors dated October 23, 2012 is hereby reaffirmed". However, on July 29, 2013 the Voice filed an appeal of the previous Court ruling to Commonwealth Court. Arguments are scheduled in Harrisburg on December 11, 2013 at 9:30 a.m.

The total cost of the WTP including soft costs and KidsPeace acquisition costs is estimated at \$4.69 million.

Offsite Conveyance Facilities (OSCF)

Wal-Mart has stopped design of the necessary conveyance facilities, which includes gravity sewers, a pump station and force main to deliver the wastewater from their proposed development and other future wastewater customers to the wastewater treatment facilities until a cost sharing agreement is reached with LCA. Wal-Mart has proposed that LCA assume the responsibility of designing, permitting and constructing the OSCF, which is a change from the previous plan where Wal-Mart had the responsibility. Ongoing cost-sharing negotiations are still on hold. **No current activity.**

The construction cost of the conveyance facilities is estimated at \$1.354 million.

Kids Peace Agreement

A revised amendment to the Agreement has been sent to KidsPeace. It primarily focuses the financial impact on the Jordan Creek Wastewater system because of KidsPeace's sale of the 101 Acre parcel to Lehigh Carbon-Community College (LCCC). The 101 Acre parcel was an integral economic component for LCA in the 2006 Agreement. Kids Peace has filed for Chapter 11 Bankruptcy we are investigating how this may impact our Agreement. **No Current Activity**

Act 537 Plan (Plan) Revision

NWT continues to work on developing an alternate a solution for the wastewater treatment needs for a revised 1-5 year service area which would include a WTP located on the eastside of Route 309 that would discharge to the Coplay Creek. LCA has agreed to provide support and expertise. Recent discussions with NWT indicate that the Pennsylvania Department of Environmental Resources (PADEP) has agreed to allow data from the on-site sewer system evaluations and water testing conducted for the current Plan to be used for any Plan revisions. NWT has requested and will receive shortly preliminary wastewater effluent discharge standards from DEP and has met with the Delaware River Basin Commission (DRBC) has verified that water quality modeling will be required for effluent discharge on the Coplay Creek. A conceptual short term service area collector system layout has also been developed. NWT continues discussions to secure a site for the proposed WTP and to secure commitments to connect from property owner along the proposed route. A meeting is scheduled on November 21, 2013 to the current status of the NWT efforts.

4. Arcadia West WWTP Improvements

Construction activity continues at the site with about 95% of the work completed by the end of October. During November, vendor startup efforts will begin, with full facility start up by the end of the month. The total project is on schedule with a cost estimate of \$3,502,300.

5. Wynnewood Terrace Pump Station & Force Main Replacement

Design work is complete and regulatory submission for approvals was made on November 8. Plans and specifications, @ 90%, are being reviewed by staff for a below grade self-contained pump station with submersible pumps and a new 6" force main.

6. Park Pump Station Improvements

Fuel Tank Replacement – Staff has received and is reviewing the final specifications and plans for replacement of the fuel tank at the Park Pump Station. We expect to place the work to bid by early next year.

7. LCA WTP- Truck Waste Receiving Station

Truck Waste Receiving Station (TWRS):

The Board awarded the General and Electrical construction contracts at the January workshop meeting. The contractors have returned the construction Agreements for our execution. Notices to Proceed (NTP) to the respective contractors were issued on February 26, 2013 and a pre-construction meeting was held on March 7, 2013. Construction is underway and on schedule. Start-up of the facility took place on October 17, 2013. There are some minor punch list items. We expect operation of the station to start mid January 2014.

Digester Mixer Replacements:

Notice to Proceed for the Construction Phase of the project was issued to both the General and Electrical contractors on October 8, 2012. Electrical construction work is approximately 80% complete, as most of it could be accomplished without draining the digesters. The General contractor has completed the installation of mixers in the first digester and the digester is now operational. The 2nd digester is now drained and cleaned to facilitate mixer installation. We expect the contractor to mixer installation on the digester in early 2014

As a note; the mixers will be installed one digester at a time, as it is necessary to always have two digesters operating. Assuming no major difficulty in draining the remaining digesters we expect the project will be completed in the 2st quarter of 2014, however additional issues with draining the digesters may extend the completion date.

PPL E-Power Customizable Energy Program:

Applications have been submitted for energy savings rebates and verification methodologies for both the Digester Mixer Replacements and Truck Waste Receiving Station (TWRS). PPL has finally responded and is requiring that temporary sub-meters. Monitoring of the electric usage of the remaining old mixers has been completed. Installation of monitoring devices for should be complete by mid-December 2013 with monitoring extending to the end of January 2014. **No Current Activity**

8. Allentown Division- WWTP-New Bar Rack at Headworks

The Project includes the replacement of the existing screen equipment with new coarse bar screens to minimize potential for jamming or mechanical malfunctions experienced by the existing screening equipment, resulting in discharges from Outfall 003 during high flow events. The project has been bid by the City and a contract in the amount of \$737,000 has been awarded to Blooming Glenn Contractors. Given the long lead time for the equipment we expect the bulk of the work to start in June 2014 This Project is identified as Administrative Order / Un-Completed Work and will be funded by the City.

PPL Combined Heat & Power (CH&P) Facility:

In October the City of Allentown issued PPL Renewable Energy the building and electrical permits required for the construction of the new Combined Heat and Power (CH&P) facility at the Kline's Island WWTP. Since then Millennium Builders and Albarell Electric have mobilized and begun the construction of the infrastructure required to install the digester gas powered generator. To date the excavation for electrical duct banks and grounding wires has been

completed. The project is projected to produce 50% of the electricity required to operate the wastewater plant from digester gas produced in the anaerobic digestion process. The terms of the contract assigned to LCA through the concession call for PPL to construct and maintain CH&P facility at no cost to LCA. LCA will provide the digester gas required to fuel the facility and will purchase the power produced at a discounted rate.

Effluent Flushing Water System Leak:

The Effluent Flushing Water (EFW) system for the Dewatering Building at KIWWTP was isolated on 10-28-13 due to a leaking underground cast iron pipe. LCA Allentown Division D&C staff dug up the suspected area of the leak and determined that the pipe was leaking in an inaccessible location under the pad for Thickening Tank (TT) Odor Control Unit (OCU) reaction chamber, situated in between No.1 and No.2 TTs. Temporary service for the Digester Control Building and the Dewatering Building was provided by connecting a fire hose to the EFW hydrant located between No.1 and No.2 Primary Anaerobic Digesters. The EFW line located under the OCU reaction chamber was subsequently cut, capped, and abandoned on 10-31-13. Work to provide a permanent EFW connection in the digester control building has commenced; completion of the permanent connection is tentatively scheduled for the week of November 18, 2013.

Odor Control Unit Fan Replacement:

On 10-02-13 fans 3A and 3B located at No.13 Odor Control Unit (OCU) were removed from service and the bypass opened to provide for ventilation of No.3 PMTF through No.1 PMTF's OCU. Both fans had surpassed their expected service life and fan 3B had developed a significant bearing problem. The mechanical renovations plan developed for fiscal year 2013 was subsequently implemented, providing for conversion from the two fan configuration utilized on No.1 and No.3 Plastic Media Trickling Filters (PMTFs) to the one fan configuration utilized on No.2 and No.4 (PMTFs). The same malodorous air throughput (25,000 CMF) and pressure drop across the PMTFs is achieved with the one fan arrangement as with two fans in series. The advantages of the one fan configuration are reduced power consumption and reduced maintenance costs resulting from the elimination of two fans. The connecting ducting was reconfigured by Bradley Specialties who are experts in this type of fiberglass work. The new fan was installed; the ducting work completed, and the fan became operational on 11/14/13. In addition to making the connections to the new fan, Bradley Specialties restored the protective coating on the interior of the upper reaction chamber for No.3 PMTF.

MEMORANDUM

Date: November 20, 2013

To: Authority Board
From: John Parsons, Frank Leist
Subject: Allentown Wastewater Treatment Plant
Motor Control Center Replacements- Design Phase

MOTIONS / APPROVALS REQUESTED:

No.	Item	Amount
1	Capital Project Authorization – Design Phase	\$195,363
2	Professional Services Authorization – CDM-Smith, Inc. (1), (2)	\$144,363

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

PROJECT OVERVIEW:

The Allentown Wastewater Treatment Plant (WWTP) was built in 1926. The capacity of the plant was upgraded to 28.5 MGD in 1968 and again upgraded to 40.0 MGD in 1973.

The sludge dewatering building currently has five (5) motor control centers (MCCs). MCCs 3A and 10 are in the sludge pumping room. MCCs 3B and 11 are in the Belt Filter Press area. MCC 16 is in the Polymer Solution Preparation Room. MCCs 3A and 3B were installed in 1965. MCC 10 and 11 were installed in 1973.

All five MCCs have reached the end of their useful life and are all highly corroded due to the corrosive nature of the local environment. LCA desires to relocate the five (5) existing MCCs outside to a Power Zone House, anticipated to be a pre-engineered structure that is identical in nature to the one used to replace MCCs 1 and 1A. The only exception to the existing MCC is that the proposed unit will be stainless steel due the locally corrosive atmosphere. The proposed MCC may not be identical in size to the existing MCC based on the design.

The proposed MCC shall be designed with sufficient size to allow for future expansion in that area of the WWTP. Among other things, there is the possibility of the construction of a third primary digester and also for the construction of an Equalization Tank to be used as a storage basin during high flow storm events.

A Preliminary Design Report has been included with the documents provided to prospective respondents. LCA wishes to proceed with Option 2 – New MCC in Stainless Steel SS304 Walk-In Enclosure. Additionally, LCA wishes to use the roof area between the digesters and the belt press building as the selected location. The roof over the boilers to the west of the belt press area is the secondary location. Third choice for the location will be on the ground immediately east of the belt press building, with the exact location to be determined if the need for one arises.

FINANCIAL:

This Project is identified on Schedule 7 of Concession Lease Agreement as a Required Capital Improvement that will be funded by LCA. With a conceptual estimated cost of ~\$2.48 million the Project meets the definition of a Major Project; and if approved by the City the costs can be recaptured outside of the contractual rate caps. In addition, a Labor Stabilization Agreement will be required.

PROJECT STATUS:

Pending Board approval of the Design Phase.

THIS APPROVAL-DESIGN PHASE

Lehigh County Authority (LCA) intends to retain the services of an engineering consulting firm to provide, design related services. Approval for construction related engineering services, covered separately in the proposal will be requested with the Construction Phase. The following table summarizes the professional services to be performed:

Professional Services ⁽¹⁾
1. Conduct site evaluation for Preliminary Design
2. Perform Structural Analysis on building at proposed location
3. Prepare Final Design Plans
4. Prepare Construction Bid Documents
5. Provide Bidding Services

1. For Design Phase Only.

CONSULTANT SELECTION PROCESS:

Three engineering firms, CDM-Smith, ARCADIS and AECOM all with experience in MCC replacement projects at large critical facilities were invited to attend a mandatory site visit where they were able to tour the facility, access the conditions and ask questions related to the design work.

On October 15, 2013, a detailed Request for Proposals (RFP) was issued to these firms. Proposals were received on November 15, 2013 the results of which follow:

Consultant	Cost ⁽¹⁾	Man-hours
CDM-Smith	\$181,744	1,426
AECOM	\$184,997	1,322
ARCADIS.	\$199,270	1,397

(1) Total Proposal Cost

Based upon our review of all aspects of both the Technical and Cost Proposals submitted by the three firms, we recommend award of the Design Phase services to CDM-Smith, Inc. Their proposal is on scope and represents what we believe is the best overall value for the Authority. CDM-Smith will perform the services outlined in their proposal dated November 15, 2013.

CDM SMITH INC -COMPANY INFORMATION & REFERENCE CHECK:

For more than 60 years, CDM Smith has provided innovative solutions combined with responsive, professional services to clients worldwide that include progressive planning,

environmental evaluation, engineering, design, consulting, program management and construction management. With annual revenues of more than \$1.2 billion, and more than 5,000 professionals in over 125 offices worldwide, CDM Smith maintains the size, stability, and resources to take on a wide variety of projects successfully.

CDM Smith has worked for the City of Allentown on a number of projects, including the water plant upgrade in the mid-1990s. As part of the \$20 million upgrade, new chemical treatment facilities and sedimentation basins were designed, sludge collection was added, and various pieces of equipment from the original plant were abandoned. In addition CDM-Smith worked for LCA as the lead in the GIS system development, the design of the Iron Run Pump Station & Force Main and the Spring Creek Pump Station Force Main Extension.

PROJECT SCHEDULE: At this juncture the construction portion of this project is anticipated to be bid in April 2014 with completion of the work in February 2015.

FUTURE AUTHORIZATIONS- CONSTRUCTION PHASE

After the construction contract(s) bids are received, a Capital Project Authorization (CPA) Amendment will be presented to the Board for approval of the Construction Phase; and will include construction contract award(s), professional services amendment for construction related services, staff costs and other related components.

CAPITAL PROJECT AUTHORIZATION

PROJECT NO.:	AD-S-13-1	BUDGET FUND:	Allentown Div\Wastewater\Capital
PROJECT TITLE:	Allentown Wastewater Treatment Plant Motor Control Center Replacements- Design Phase	PROJECT TYPE:	<input checked="" type="checkbox"/> Construction <input type="checkbox"/> Engineering Study <input type="checkbox"/> Equipment Purchase <input type="checkbox"/> Amendment
THIS AUTHORIZATION:	\$195,363		

DESCRIPTION AND BENEFITS:

The Project includes the replacement of five motor control centers (MCCs) which have reached the end of their useful life and are all highly corroded due to the corrosive nature of the local environment. LCA desires to relocate the five (5) existing MCCs outside to a Power Zone House, anticipated to be a pre-engineered structure that is identical in nature to the one used to replace MCCs 1 and 1A. The only exception to the existing MCC is that the proposed unit will be stainless steel due the locally corrosive atmosphere. The proposed MCC may not be identical in size to the existing MCC based on the design.

The proposed MCC shall be designed with sufficient size to allow for future expansion in that area of the WWTP. Among other things, there is the possibility of the construction of a third primary digester and also for the construction of an Equalization Tank to be used as a storage basin during high flow storm events.

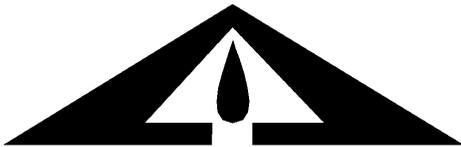
Please reference the cover Memo for additional information.

Authorization Status:

REQUESTED THIS AUTHORIZATION	
Design Phase	
Staff	\$ 26,000
Engineering Consultant	144,363
Miscellaneous	5,000
Contingencies	20,000
Total This Authorization	\$ 195,363
Future Authorization	
Construction Phase	\$2,286,637
Total Estimated Project	\$2,482,000

REVIEW AND APPROVALS:

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



Lehigh County Authority

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

PROFESSIONAL SERVICES AUTHORIZATION

Professional: CDM SMITH INC.
Two Penn Plaza Center
1500 JFK Boulevard, Suite 624
Philadelphia, PA 19102

Date: November 25, 2013
Requested By: John Parsons
Approvals
Department Head: _____
General Manager: _____

Allentown Wastewater Treatment Plant, Motor Control Center Replacements- Design Phase

CDM Smith Inc. will perform the design and bid related services for the design of a new motor control center for the Allentown Wastewater Treatment Plant of the Allentown Division.

Professional Services ⁽¹⁾
1. Conduct site evaluation for Preliminary Design
2. Perform Structural Analysis on building at proposed location
3. Prepare Final Design Plans
4. Prepare Construction Bid Documents
5. Provide Bidding Services

(1) For Design Phase Only.

Please reference the cover Memo for additional information.

Design Phase:

Cost Estimate (not to be exceeded without further authorization): \$144,363

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:** _____

**PROFESSIONAL SERVICES AUTHORIZATION
INDEMNIFICATION
Allentown Wastewater Treatment Plant**

Motor Control Center 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 November 25, 2013 attached; and

Agree to indemnify and hold harmless the Authority, its employees, agents, officials, successors and assigns (hereinafter all jointly referred to as "Authority"), from any and all loss and liability for claims, demands, suits or causes of action at law or in equity for damages and injuries (including death of every kind and nature) to persons (including employees of the Professional) and property arising out of error, omission or negligent act of Professional, or any person under contract to it, in rendering professional services under this authorization. The indemnification shall include, but not be limited to, payment of all attorney fees and all incidental litigation expenses of the Authority, whether or not the Authority is held liable. 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: _____