



LEHIGH COUNTY AUTHORITY

March 24, 2014

BOARD MEETING AGENDA

1. Call to Order
2. Review of Agenda
 - *Public Participation Sign-In Request*
3. Executive Sessions
4. Approval of Minutes
 - *February 24, 2014 Regular Meeting Minutes*
5. Public Comments
6. Action / Discussion Items

FINANCE AND ADMINISTRATION

- *None*

WATER

- *None*

WASTEWATER

- *Allentown Division – Belt Filter Press Rehabilitation- Design Phase (Approval)*

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

APRIL MEETINGS

Workshop Meeting
Board Meeting

April 14 – 12:00 p.m.
April 28 – 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. **Recently Purchased Investments – Certificates of Deposit (CDs)**

Fund	Bank	Location	Gross Amount	Date of Purchase	Date Due	Net Rate %
LLRI CR	PSDLAF Collateralized CD		400,000.00	2/25/2014	5/6/2014	0.10
Cons Wtr (2)	PSDLAF Collateralized CD		155,000.00	2/25/2014	5/6/2014	0.10
Cons LL2 (314)	PSDLAF Collateralized CD		245,000.00	2/25/2014	5/6/2014	0.10
WW Capac	PSDLAF Collateralized CD		600,000.00	2/25/2014	5/6/2014	0.10
2010 Wtr Cons A	PSDLAF Flex Pool		3,250,000.00	2/25/2014	5/6/2014	0.10
Wtr R&R	PSDLAF Collateralized CD		1,000,000.00	2/25/2014	5/6/2014	0.10
WW Capac	Keybank National Assn	Cleveland, OH	249,000.00	3/5/14	9/8/15	0.30
WW Capac	Ally Bank	Midvale, UT	200,000.00	3/12/14	9/14/15	0.30
WW Capac	Safra National Bank of NY	New York, NY	249,000.00	3/13/14	9/14/15	0.30

Fund Descriptions for Investments:

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

WATER

ACTION ITEMS

1. *None.*

DISCUSSION ITEMS

1. *None.*

INFORMATION ITEMS

1. **Arcadia West Pumping Station Modifications**

The general contractor continues to submit shop drawings for review and approval. His schedule to install the equipment and piping in the station has slipped at least one month due to difficulty in releasing the high service pump shop drawings. The pump controller manufacturer has taken exception to certain specialty features that we are working to address. We have notified the contractor to take measures to expedite his work to make up for lost time. The 24" diameter disinfection piping was installed and must be tested and the tie-in made. Other upcoming work includes completing the well modifications, setting the fuel tank and installing fencing. The next progress meeting is scheduled for March 18th.

2. **LCA Facilities Emergency Power Project**

Except for the LCA Office Operations Center, generators at all sites have been installed and are operable. The electrical contractor is currently working on the installation of the 500Kw generator and scheduling all necessary startups at the Office Operations Center, we expect this work be completed shortly. Delivery of the 100 KW generator for the Gary pump station in Buss Acres purchased by LCA through the Co-Stars program is expected in late March 2014.

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

City of Allentown has granted Conceptual Design approval of this Major Project. Preliminary meetings have taken place with Allentown Streets Department, PennDOT, UGI and other entities to introduce the program. 30% design has been completed and design comments have been received by our engineering consultant from both the LCA project team and the City of Allentown. Currently our engineering consultant is preparing both the plans and specifications for cycle 1 of this project to submit to the City of Allentown for their substantially complete design review and approval. This project will be funded by LCA.

4. **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. A review of the proposals received in January for professional services to evaluate options for the implementation of this changeover indicated that a further refinement of project scope and associated costs is necessary before recommending an award. Revised proposals are due March 21, 2014. This project will be funded by LCA.

5. 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. After 3-months, we finally met with Director of Parks regarding the proposed location of the facility because it is in City Park system. The Director maintains because the City has received grants from DCNR for the park system that he has to abide by their rules governing improvements/buildings that have a non-park function. A meeting will be scheduled in the near term with representatives of DCNR to discuss the issues. It may be necessary to acquire property or an easement that is not located in the park system to locate this facility on.

Alternative treatment options and improvements to the existing facilities are being considered and will be fully evaluated based on cost and feasibility. Backup power supply, more reliable chemical feed pumps, and full-time data recording are all being considered in an effort to reduce the potential for unchlorinated slugs of water in the future. This Project is identified as Un-Completed Work and will be funded by the City.

6. 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. Submittals are currently in the approval stage. The replacement chemical feed tanks have been ordered. Construction is expected to begin approximately 4/1/14. This Project is identified as Un-Completed Work and will be funded by the City.

7. Developments

Water system construction is occurring in the following developments:

- Laurel Field, Phase 4A, 29 residential lots (sfa), UMT
- Valley West Estates, Phases 4, 5 & 6, 46 residential lots (sfd), UMT

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, UMilT, 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
- Spring Creek Properties Settlement Subdivision (formerly Spring Creek Properties Subdivision I), 16 commercial and industrial lots, LMT

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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 – Belt Filter Press Rehabilitation- Design Phase** (Approval)

The Allentown Wastewater Plant has three belt presses that are used to dewater biological sludge in addition to chemical sludge from the water plant. All three presses are beyond their expected lifetimes. One press will be replaced by a remanufactured unit and the other two presses will be rehabilitated in-place. The remanufactured press has been ordered. Board approval for the Design Phase of this project is requested. Reference the attached Memorandum, Capital Project Authorization Amendment No. 1, and Professional Services Authorization (**green**).

DISCUSSION ITEMS

1. **None.**

INFORMATION ITEMS

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

The following is work planned for 2014:

- Submission of reports to EPA and DEP.
- 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.
- WLI Manhole Inspections'
- Test and Seal project for branches of the WLI that were CCTVed in 2011 – 2012.
- Long term flow meters will continue on a limited basis. Two rain gauges and meters remain in the system.
- 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.
- Preliminary Program Objectives Evaluation Report will be submitted to DEP by the end of 2014. 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.*

- The LCA Engineering team met with the City Engineering team to discuss combining the LCA and City hydraulic models. It was agreed that the best technical approach to evaluating the entire City system is to work together on combining the models and performing the alternatives analysis together.
- The City and LCA hydraulic models have been combined by Arcadis. A meeting has been scheduled to discuss the combined model and to determine if additional flow monitoring is required to calibrate the models.

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. The MOU was revised as a result of the Concession. The City revised the MOU and returned to LCA. We are in the process of continued negotiations.

A Stakeholder's Advisory Committee (SAC) Meeting will be scheduled for early 2014.

DEP has indicated that a Jordan Creek study must be submitted to DEP prior to the issuance of final effluent standards. If we want to avoid the study, then water quality standards would be imposed for effluent limitations. There is no work currently being done on the Jordan Creek discharge option.

A meeting was held with the DRBC to discuss updating the prospective effluent limits for the various alternatives. The model was refined and the grandfathered loads for Phosphorus and Ammonia have been updated based on the actual Kline's Island data. The new effluent limits have been developed and provided by the DRBC and are currently being reviewed by the LCA and City Engineering Team.

Effluent sampling is being performed on the Pretreatment Plant effluent to determine the make-up of the total dissolved solids (TDS). The high TDS in the effluent will require a reverse osmosis process to treat the TDS to acceptable levels.

A meeting has been scheduled with the DEP to discuss the land application option and to discuss the DRBC effluent limits that are expected to be provided within the week.

The City has provided future population projections to be utilized in the hydraulic model.

3. Northern Lehigh Wastewater System

The project is composed of the following:

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

The North Whitehall Township (NWT) Board of Supervisors granted approval of the Conditional Use for the proposed WWTP. In late November 2012 the opposition, the Voice of the Jordan (Voice), appealed the NWT decision to Lehigh County Court of Common Pleas. On June 5, 2013 the Court ordered "that the decision of the NWT Board of Supervisors dated October 23, 2012 is hereby reaffirmed". On July 29, 2013 the Voice filed an appeal of the previous Court ruling to Commonwealth Court. Arguments in Harrisburg took place on December 11, 2013, a decision rendered by the Court on January 9, 2014 affirmed the lower Courts decision and Township approval. The Voice has filed a Petition with the Pennsylvania Supreme Court to hear the case. We are evaluating the timing of any legal action to request that the Court require the Voice to post a bond. **No Current Activity**

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

Wal-Mart

Wal-Mart has put the proposed store on-hold indefinitely. Wal-Mart was a key financial contributor to the offsite 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 proposed wastewater treatment facilities at the Kids Peace site. Cost-sharing negotiations are on hold. **No Current Activity.**

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 met with NWT on November 21, 2013 to discuss the status of their efforts. NWT has requested that LCA work their engineer to obtain the information necessary to secure conceptual pricing for the WTP and to develop high level capital and operating cost estimates. **No Current Activity.**

4. **Arcadia West WWTP Improvements**

Construction is complete at the site. Full startup date was January 10, 2014. Demolition of the old facilities should be completed in March. Commissioning of the plant has stretched out to about 60 days and continues to be challenging. Staff is working with the manufacturer to investigate and identify what is impacting the nitrifying bacteria growth, besides the bitterly cold temperatures.

5. **Wynnewood Terrace Pump Station & Force Main Replacement**

Design work is complete and DEP has granted the permit. Staff is initiating an application to PENNVEST for construction funding. A planning consultation, with regulatory agencies, is scheduled for March 18. In addition, a NPDES construction storm water will be required which we expect to receive in three to four months.

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 in late spring. **No Current Activity.**

7. **LCA WTP- Truck Waste Receiving Station**

Truck Waste Receiving Station (TWRS):

Construction is complete. Start-up of the facility took place on October 17, 2013. There are some minor punch list items. We expect full station operation by the end of March 2014 after the electric monitoring that is required for the PPL E Power program is complete. **No current activity**

Digester Mixer Replacements:

The General contractor has completed the installation of mixers in the first digester and the digester is now operational. Although delayed by the extremely cold weather mixer installation in the 2nd digester is complete. Transfer of the contents and cleaning of the 3rd and final digester is scheduled to take place in early April. Assuming no major difficulty in cleaning the 3rd digester we expect the project will be completed in the 3rd quarter of 2014.

PPL E-Power Customizable Energy Program:

PPL has accepted the E-power applications for energy savings rebates and verification methodologies for both the Digester Mixer Replacements and Truck Waste Receiving Station (TWRS). Monitoring of the electric usage of the remaining old mixers has been completed. Monitoring devices on the High Purity Oxygen system have been installed with monitoring extending to the end of March 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 Glen 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. Submittals are currently in the approval process.

9. 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 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 design of the electrical upgrade has been awarded to CDM and kickoff meeting for project was held 2-12-14. Design is currently in-progress.

10. Allentown Division- WWTP-Other Work

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. In November, the electrical duct banks were completed and the pad for the generator was poured. During the month of December Millennium Builders and Albarell Electric continued to make significant progress on the construction of the new Combined Heat and Power (CH&P) facility at the Kline's Island WWTP. PPL believes that the facility will ready to begin testing the week of March 18, 2014.

No.1 Intermediate Settling Tank Wire Failure

The wiring powering No.1 Intermediate Settling Tank clarifier drive mechanism failed on December 25, 2013, cause of the failure appears to be poor workmanship during the 1999 plant upgrade of the treatment plant. Temporary power has been supplied to the equipment through the use of 480 V insulated power cord. The plant staff is working with Crowder Jr to restore permanent power, control, and alarm wiring to this equipment. Pushbutton start/stop station has been received; installation of new switch and wiring will be completed when weather is more favorable for working on an outdoor elevated tank. The plant staff began pulling new wire through the conduit on the tank's catwalk.

11. Lynn Township – WWTP Improvements, Phases 1 & 2

A meeting was held on February 12, 2014 with DEP to review permitting issues that will need to be addressed. Gannett Fleming will revise the Water Quality Management (WQM) Part II package per DEP's request, including a description of current and future improvements, latest

flow data to substantiate the reduced peaking factors for the eventual biological expansion, I&I reduction efforts by LCA since the acquisition, updated modules of the equipment that is being included as part of the current project, and updated drawings and technical specifications for the current project. They will also verify current operations with plant staff. LCA attended the Lynn Township Board of Supervisors meeting on February 27th and provided a system status report that addressed both operating and capital areas.

12. Allentown Division – Sanitary Sewer Evaluation Study (SSES)

This project involves field investigatory work to identify sources of inflow and infiltration (I/I) in the City's sanitary sewer system located in the Primary and Secondary basins as identified in the WR&A report. The work will include 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 work will include the inspection of approximately 550 manholes and sewer piping point repairs, joint repairs, smoke testing, and heavy cleaning. The design phase of this project has been authorized administratively. The project is scheduled to be advertised for bid in the second half of March 2014 with an anticipated project completion date by the end of October 2014. This project is identified as Administrative Order / Un-Completed Work and will be funded by the City.

13. Allentown Division – Manhole Collars with Water Tight Frame and Covers

This project involves, where applicable, installing a 5-foot diameter, three to four foot deep concrete collar around 100 aged brick manholes identified by previous City staff. This technique will be used to secure a new water tight frame and cover onto the manhole. Where vehicular accesses to the manholes are problematic, alternative solutions will be investigated to secure new water tight frame and covers. This work will eliminate the potential for inflow and infiltration (I/I) entering these manholes, this eliminating the potential for sanitary sewer overflows (SSO's) from these manholes. The City has directed LCA to bring the project to a bid ready stage, but not to bid unless authorized to do so by the City. A RFP has been issued for engineering consulting services and the project is anticipated to be bid ready by the end of May 2014. The project is identified as Administrative Order and will be funded by the City.

14. Allentown Division – Sanitary Sewer Manhole Lining

This project will install a lining system in 50 aged brick manholes identified by previous City staff. This lining system will eliminate infiltration and will provide additional structural reinforcement to the manholes. The City has directed LCA to bring the project to a bid ready stage, but not to bid unless authorized to do so by the City. A RFP has been issued for engineering consulting services and proposals have been received. The project is anticipated to be bid ready by the end of April 2014. The project is identified as Administrative Order Work and will be funded by the City.

MEMORANDUM

Date: March 11, 2014

To: Authority Board
From: John Parsons, Frank Leist
Subject: Allentown Wastewater Treatment Plant
Belt Filter Press Reconditioning and Replacement – Design Phase

MOTIONS / APPROVALS REQUESTED:

No.	Item	Amount
1	Capital Project Authorization – Design Phase	\$86,080
2 ^{(1), (2)}	Professional Services Authorization – D’Huy Engineering	\$21,080

(1) Included in the Capital Project Authorization.

(2) Does not include Construction Phase related engineering services.

PROJECT OVERVIEW:

The Project includes the replacement or reconditioning of the three wastewater plant belt filter presses (BFP’s) which have all reached the end of their useful lives. Having been installed approximately 30 years ago, all three BFP’s have become highly corroded due to the nature of the local environment. The existing frame on BFP #1 is beyond repair and a fully factory remanufactured replacement unit is necessary. The condition of BFP’s 2 & 3 will allow for reconditioning on-site.

The corrosive environment has also taken its toll on the belt press control cabinets and instrumentation. Two of the three existing control panels are beyond repair and are included for replacement as part of this project.

The installation of the remanufactured unit and the reconditioning in place of the remaining units and control panels will be publically bid.

The remanufactured BFP #1 unit and all of the components to recondition #2/#3 are only available through Ashbrook Simon-Hartley.

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 ~\$1.775 million, the Project meets the definition of a Major Capital Improvement Project. If approved by the City, the costs can be recaptured outside of the contractual rate caps. In addition, a Labor Stabilization Agreement may be required.

PROJECT STATUS:

Previously the Board approved the procurement of the factory remanufactured BFP No. #1. Board approval is requested for the Design Phase

THIS APPROVAL –DESIGN PHASE

This authorization is for the design of all the construction activities that will be required to install the remanufactured unit (BFP #1), and also for the in-place retrofits (BFP #2 and #3) A remanufactured unit purchased from Ashbrook will have exactly the same footprint as the current unit that is to be removed. Two new chutes are being included in the proposed construction and some small-scale modifications to the existing catwalks will be required. Electrical specifications for the connections of power to all three belt presses, plus the connection of the new control panels to belt presses #1 and #2 will be included in the design.

CONSULTANT SELECTION PROCESS:

Four engineering firms, D'Huy, CDM, T&M Associates and GHD 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. All four firms have experience in belt press replacement projects at large critical facilities

Proposals were received from each and the results are summarized below:

Consultant	Cost ⁽¹⁾	Man-hours
D'Huy	\$30,200	320
T&M Associates	\$34,150	350
GHD	\$64,126	516
CDM	\$149,682	1108

(1) Total Proposal Cost

Based upon our review of all aspects of proposals submitted by the four firms, we recommend award of the Design Phase services to D'Huy Engineering, Inc. Their proposal is on scope and represents what we believe is the best overall value for the Authority. D'Huy Engineering will perform the services outlined in their proposal dated March 11, 2014.

D'HUY ENGINEERING -COMPANY INFORMATION

D'HUY ENGINEERING INFORMATION

D'Huy Engineering typically works on structural projects throughout the Lehigh Valley, eastern Pennsylvania and nationally. Two D'Huy Engineering employees have direct experience with the existing belt presses at the Allentown Wastewater Plant. Jamie Lynch, PE, was part of a consulting team that designed the installation of belt press #3. Joe Slivka was the Residuals Supervisor for a number of years while employed by the City of Allentown and he dealt with the belt presses on a daily basis. D'Huy staff has intimate knowledge of the Allentown dewatering facility. Currently, D'Huy Engineering also working as the consultant for the City Division water plant roof modification project and the roof replacement at the LCA Suburban Division WWTP.

PROJECT SCHEDULE: Presently, the design phase of this project is anticipated to be awarded in the first quarter 2014, and both rebuilds and the replacement are to be completed by the end of 2014.

FUTURE AUTHORIZATIONS-

1. Equipment Procurement – OEM Parts for rebuild materials for belt presses #2 and #3
2. Construction Phase.

CAPITAL PROJECT AUTHORIZATION

PROJECT NO.:	AD-S-14-1	BUDGET FUND:	Allentown Div\Wastewater\Capital
PROJECT TITLE:	Allentown Wastewater Treatment Plant Belt Filter Press Upgrades- Design Phase	PROJECT TYPE:	<input checked="" type="checkbox"/> Construction <input type="checkbox"/> Engineering Study <input type="checkbox"/> Equipment Purchase <input checked="" type="checkbox"/> Amendment No. 1
THIS AUTHORIZATION:	\$ 86,080		
TO DATE (W/ ABOVE)	\$526,860		

DESCRIPTION AND BENEFITS:

The Project includes the replacement or reconditioning of the three wastewater plant belt filter presses (BFP's) which have all reached the end of their useful lives. Having been installed approximately 30 years ago, all three BFP's have become highly corroded due to the nature of the local environment. The existing frame on BFP #1 is beyond repair and a fully factory remanufactured replacement unit is necessary. The condition of BFP's 2 & 3 will allow for reconditioning on-site.

The corrosive environment has also taken its toll on the belt press control cabinets and instrumentation. Two of the three existing control panels are beyond repair and are included for replacement as part of this project.

The installation of the remanufactured unit and the reconditioning in place of the remaining units and control panels will be publically bid.

The remanufactured BFP #1 unit and all of the components to recondition #2/#3 are only available through Ashbrook Simon-Hartley.

Authorization Status:

<i>Previous Authorizations</i>	
<i>BFP #1 Procurement</i>	<i>\$440,780</i>

Requested This Authorization	
<i>Design Phase</i>	
Staff	\$40,000
Engineering Consultant	21,080
Miscellaneous	5,000
Contingency	20,000
Total This Authorization	\$86,080

<i>Future Authorizations</i>	
<i>OEM Parts for BFP #'s 2 & 3 and Construction Phase</i>	<i>\$1,248,140</i>
Total Estimated Project	\$1,775,000

REVIEW AND APPROVALS:

Project Manager	Date	Chief Executive Officer	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: D'HUY ENGINEERING, INC.
One East Broad Street, Suite 310
Bethlehem, PA 18018

Date: March 11, 2014
Requested By: John Parsons

Approvals

Department Head: _____
Chief Executive Officer: _____

Allentown Wastewater Treatment Plant, Belt Filter Press Upgrades- Design Phase

D'Huy Engineering, Inc. will perform the design and bid related services for the design of the installation of the a refurbished belt filter press and two (2) on site belt press rehabilitations for the Allentown Wastewater Treatment Plant of the Allentown Division.

Professional Services ⁽¹⁾
1. Determine construction criteria for press #1 replacement
2. Determine construction criteria for press #2/#3 remediation
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): \$21,080

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
Belt Filter Press Upgrades**

(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 _____ 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: _____