



LEHIGH COUNTY AUTHORITY

November 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
 - *September 30, 2014 Regular Meeting Minutes*
 - *October 13, 2014 Workshop Meeting Minutes*
5. Public Comments
6. Action / Discussion Items

FINANCE AND ADMINISTRATION

- *2015 WLI Report on Wastewater User Charges*
- *2015-2024 Capital Plans Approval*

WATER

- *None*

WASTEWATER

- *Wynnewood Terrace Pump Station and Force Main Replacement*
- *Allentown Division – WWTP-Replacement of Motor Control Centers*
- *2015 SCARP Program Management*

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

DECEMBER MEETINGS

Workshop Meeting

December 8 – 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 30, 2014

The Workshop Meeting of the Lehigh County Authority was called to order at 12:20 p.m., on Tuesday, September 30, 2014, Chairman Asa Hughes presiding. Other Members present at the commencement of the meeting were: Tom Muller, Richard Bohner, Emrich Stellar, Ted Lyons, Norma Cusick and Brian Nagle. Authority Staff present were Aurel Arndt, Ed Bielarski, Frank Leist, Dan Standish, Bob Kerchusky, Lance Babbitt and Lisa Miller.

Members of the public, Renae Tesauro, Reynold Schneck, Elsie Schneck, Dave Ackerman, Matt Ackerman, Ann Ackerman, and Patricia Lipovsky, and Paul Muschick, Morning Call Reporter, were also in attendance.

PUBLIC COMMENTS

Ms. Patricia Lipovsky addressed the Board and read a letter regarding the sewage backup on her 312 College Drive property back in May 2014. Her letter asked LCA to take responsibility and pay for the costs for cleanup and property damage.

Ms. Ann Ackerman of 308 College Drive also addressed the Board and read a letter describing what happened to her property regarding the sewage backup.

Mr. Reynold Schneck of 309 College Drive addressed the Board and described what happened to his property in regard to the sewage backup.

Ms. Renae Tesauro, daughter of Elsie and Reynold Schneck, read a statement on behalf of the group attending. She questioned the service records and maintenance of the City and the Authority. Ms. Tesauro stated that educating the public on insurance and homeowners policies may help. In summary, they are asking LCA to take responsibility for its actions, or lack thereof, and assist the homeowners with repairing the damage inflicted upon their homes.

Mr. Arndt updated the Board by informing them of a letter the Authority received from an attorney representing Ms. Lipovsky, notifying of possible litigation. This letter was shared by Authority staff with the insurance company and the insurance company is re-evaluating the circumstances. He stated that the Authority is open to further discussion to bring this to a reasonable solution. When Authority staff hears back from the insurance company, Mr. Arndt indicated that the insurance company's position will be shared with these residents of College Drive.

Mr. Scott McCleod arrived during the discussion and stated that he was here on behalf of his grandmother who resides at 922 N 16th St. She had a sewage incident in the middle of July at this address from a blockage from the Assisted Living facility down the street. A claim was made to the insurance company and it was denied. Mr. Arndt stated that we were not aware of the details of that situation.

Mr. Arndt responded to comments regarding insurance. He added that the Authority's 4th Quarter Newsletter will provide customers, both in the City and Suburban division, with information to raise awareness of coverage options for these types of situations.

Mr. Arndt presented a power point map of the College Drive area and explained maintenance of systems. College Drive was on schedule for June 2014 and was treated in 2010 with a chemical to control root growth.

Mr. Bieber entered the meeting at 12:45 p.m.

REVIEW OF AGENDA

Items for September Board meeting were reviewed.

EXECUTIVE SESSION

Mr. Arndt stated there would be an Executive Session immediately following the Regular Board meeting to discuss a matter of potential litigation and personnel matters.

APPROVAL OF MINUTES

August 11, 2014 Workshop Meeting Minutes

On a motion by Richard Bohner, seconded by Tom Muller, the Board unanimously approved the Minutes of the August 11, 2014 Workshop Meeting (6-0). Mr. Stellar abstained.

September 8, 2014 Workshop Meeting Minutes

On a motion by Richard Bohner, seconded by Brian Nagle, the Board unanimously approved the Minutes of the September 8, 2014 Workshop Meeting (6-0). Ms. Cusick abstained.

ACTION AND DISCUSSION ITEMS

Pension Plan Minimum Municipal Obligation (MMO) for 2015

Mr. Bielarski presented the 2015 Minimum Municipal Obligation (MMO) for the Lehigh County Authority Pension Plan to the Board as required by Act 205. The calculation of the 2015 plan cost, or MMO, required an estimate of the 2014 W-2 wages of the employees covered by the plan. The information required for this calculation is included in the meeting packet memo and form. Discussion followed.

Park Pump Station Improvements – Fuel Tank Replacement (Approval)

Mr. Leist gave an overview of the project. He is asking for approval of the Capital Project Authorization with Amendment No.1 for the construction phase of the project for \$181,500. It includes the Professional Services Amendment for Construction services from Barry Isett & Associates for \$6,000. Also included is the award of the contract to Hafer Equipment for \$157,388. Some discussion followed.

On a motion made by Emrich Stellar, seconded by Richard Bohner, the Board unanimously approved the Capital Project Authorization Amendment No. 1 for \$181,500 (7-0).

On a motion made by Emrich Stellar, seconded by Norma Cusick, the Board unanimously approved the Professional Services Amendment No. 1 for the Construction Phase for \$6,000 (7-0).

On a motion made by Scott Bieber, seconded by Norma Cusick, the Board unanimously approved the contract Award to Hafer Equipment for \$157,388 (7-0)

Allentown Division Sanitary Sewer Manhole Lining (below-ground) (Approval)

Mr. Leist stated that this is an Administrative Order project and therefore under the Concession Agreement provisions, it will be funded by the City. LCA will be reimbursed for all costs of this project. Three (3) bids were received on September 12, 2014. He recommended award of the Construction Contract to Lake County Sewer for \$125,491. Also, he recommended approval of a Professional Services Authorization for Barry Isett & Associates for inspection services for \$22,445. In the Capital Project Authorization, the Miscellaneous cost is \$100,452. It is the intent of the City to establish a total sum of \$290,000. The City will provide authorization to line additional manholes, if necessary, to reach their targeted budget goal. Mr. Leist asked the Board, that contingent upon and subject to City authorization, to include the additional cost in the contract, so that Mr. Arndt can sign the change orders. Some discussion followed.

On a motion by Emrich Stellar, seconded by Richard Bohner, the Board unanimously approved the Capital Project Authorization Amendment No. 1 for \$268,388 with authorization to add additional costs up to \$290,000, subject to City authorization (7-0)

On a motion by Emrich Stellar, seconded by Tom Muller, the Board unanimously approved the Professional Services Authorization Amendment No. 1 for \$22,445 (7-0)

SYSTEM OPERATIONS OVERVIEW

None.

STAFF COMMENTS

None.

SOLICITOR'S COMMENTS

None.

OTHER COMMENTS

None.

EXECUTIVE SESSION

The Chairman called for an executive session at 1:25 p.m. to discuss a matter of potential litigation. A second matter, regarding a personnel item, was discussed starting at 2:10 p.m. at which time the staff, except for Mr. Arndt, left the meeting and Kathy Martin joined the meeting.

The session ended at 3:14 p.m.

ADJOURNMENT

There being no further business, the Chairman adjourned the meeting at 3:14 p.m.

Richard H. Bohner
Secretary

WORKSHOP MEETING MINUTES

October 13, 2014

The Workshop Meeting of the Lehigh County Authority was called to order at 12:25 p.m., on Monday, October 13, 2014, Chairman Asa Hughes presiding. Other Members present at the commencement of the meeting were: Brian Nagle, Emrich Stellar, Tom Muller, Richard Bohner, Norma Cusick, and Scott Bieber. Authority Staff present were Aurel Arndt, Liesel Adam, Bradford Landon, Ed Bielarski, Frank Leist, Dan Standish, Pat Mandes, John Parsons, and Lisa Miller.

REVIEW OF AGENDA

Items for October Board meeting were reviewed.

Mr. Arndt stated that Item #4 on the Agenda, the Wastewater Capacity/537 Plan Update, will be presented at a future meeting.

Liesel Adam informed the Board that there is another customer that would like to appear before the Board at the October Board Meeting regarding a billing dispute.

EXECUTIVE SESSION

Mr. Arndt stated there would be an Executive Session immediately following the Workshop Agenda items.

ACTION AND DISCUSSION ITEMS

2015-2024 Capital Plan Presentation

An overview of the Proposed 2015-2024 Suburban Division and Allentown Division Capital Plans were presented by Frank Leist, including project highlights. Copies and maps of the Plans were distributed at the meeting. Mr. Bielarski presented the financial justification noting the funding sources and costs. Mr. Arndt said the Plans will be sent to the Lehigh Valley Planning Commission and a number of other organizations, including municipalities, for comments. It will also be presented to the County Commissioners in November. As part of the Lease requirement with the City, a copy of the City Plan will go to the City for review and comment. Some discussion followed.

PUBLIC COMMENTS

Mr. James Shen was present to address the Board regarding an ongoing billing dispute at 389 Liberty Street, Allentown. Ms. Adam provided the Board with a memorandum dated October 7, 2014, detailing the dispute. Mr. Hughes said that the Board will take his request under advisement and an LCA Staff member will get back to him. Mr. Shen agreed to provide pictures of the property to Ms. Adam.

ACTION AND DISCUSSION ITEMS

Sanitary Sewer system Flow Metering for LCA (Approval)

Ms. Mandes gave an overview of the project scope for flow monitoring services. She recommends approval of the Professional Services Authorization to TFE Resources for up to \$200,000 for as-needed flow monitoring services, including the City Signatory wastewater billing verification project. TFE is very familiar with our systems because of prior system work. Some discussion followed.

On a motion made by Emrich Stellar, seconded by Norma Cusick, the Board unanimously approved the Professional Services Authorization (7-0).

SYSTEM OPERATIONS OVERVIEW

None.

STAFF COMMENTS

SOLICITOR'S COMMENTS

None.

OTHER COMMENTS

None.

EXECUTIVE SESSION

The Chairman called for an executive session at 1:50 p.m. to discuss potential litigation. A second matter, regarding personnel matters, was discussed starting at 2:10 p.m. at which time the staff, except for Mr. Arndt, Ms. Adam, and Mr. Bielarski left the meeting. Ms. Adam and Mr. Bielarski left the Executive Session at 2:21 p.m.

The session ended at 3:13 p.m.

ADJOURNMENT

There being no further business, the Chairman adjourned the meeting at 3:13 p.m.

Richard H. Bohner
Secretary

FINANCE & ADMINISTRATION

ACTION ITEMS

1. **2015 WLI Report on Wastewater User Charges**

We expect to present the WLI User Rates to the Board for review and comment.

2. **2015-2024 Capital Plans (Approval)**

Board approval of both the Suburban and Allentown Division Capital Plans is recommended by the Staff. Comments received from Lehigh Valley Planning Commission and the City of Allentown are attached (**green**).

DISCUSSION ITEMS

1. ***None.***

INFORMATION ITEMS

1. **CMMS Upgrade and Expansion Project**

Pilot Configuration of the Cityworks application is complete. Pilot phase is scheduled to begin November 24 and will last approximately 3 months. Training in preparation of beginning the Pilot phase will be held for plant personnel the week of November 17th. Training for distribution and collection personnel is scheduled for the week of December 15.

2. **WEB Map Upgrade Project**

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

3. **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	9/23/14	12/16/14	0.1
Cons Wtr (2)	PSDLAF Collateralized CD		155,000.00	9/23/14	12/16/14	0.1
Cons LL2 (314)	PSDLAF Collateralized CD		245,000.00	9/23/14	12/16/14	0.1
WW Capac	PSDLAF Collateralized CD		600,000.00	9/23/14	12/16/14	0.1
2010 Wtr Cons A	PSDLAF Flex Pool		3,000,000.00	9/23/14	12/16/14	0.1
Wtr R&R	PSDLAF Collateralized CD		1,000,000.00	9/23/14	12/16/14	0.1
LLRI CR	Live Oak Banking Company	Wilmington, NC	250,000.00	10/9/14	10/11/16	1.0
LLRI CR	Sallie Mae Bank	Salt Lake City, Ut	250,000.00	10/15/14	10/17/16	1.0

Fund Descriptions for Investments:

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

WATER

ACTION ITEMS

1. *None.*

DISCUSSION ITEMS

1. *None.*

INFORMATION ITEMS

1. **Arcadia West Pumping Station Modifications**

Shutdown #2 was completed to tie the new booster pumps into the system. The high service pump was delivered to the site on 11/14/14. Bypass pumping will then be set up to provide fire protection while the rest of the piping in the station is completed. Installation of the fuel line, chemical feed and instrumentation are ongoing.

2. **Pine Lakes of Lynn Township Pump Station Upgrade**

Currently this pump station is a hydro-pneumatic system that has proven to be problematic over time. This project will convert the hydro-pneumatic operated equipment to a variable frequency drive controlled double pumping system. Other miscellaneous improvements are included in the project scope. A RFP for engineering services was sent to Consultants on August 22, 2014. The RFP's were received on October 31, 2014 and are being evaluated by the Staff.

3. **Allentown Division- Schantz Spring Chlorination Issue**

Alternative options in-lieu-of a CL₂ Booster Station as originally scoped by the City are being 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. Barry Isett Inc. has provided a proposal to determine costs of the alternate plan vs the original booster station. City of Allentown has agreed to the concept and has been authorized to proceed with the evaluation. Barry Isett, Inc is proceeding with the evaluation. A draft of the Engineering Report was submitted on September 9, 2014. Comments have been returned and a finalized version is expected by late November. The report will be presented to the city for their review and approval. This Project is identified as Un-Completed Work and will be funded by the City.

4. **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. Construction has been underway since 3/31/2014. Water pipes, sprinklers, storm drains, etc. were moved first. Steel and other construction materials started arriving on May 19, 2014. Dismantling of the existing roof began on May 19, 2014. Both replacement sodium hypochlorite tanks are set in-place and on-line. Replacement tank #1 was certified for use by PaDEP on 6/5/2014. Replacement tank #2 was certified for use as of 6/27/2014.

Firestone's first warrantee inspection did not pass and several small items needed to be addressed after which another final inspection with Firestone was scheduled. Firestone accepted the warrantee inspection on the second try, and all construction punch list items are now complete. Final payments to the contractor and the consultant are in-progress, and are the only remaining tasks. This Project is identified as Un-Completed Work and will be funded by the City.

5. Allentown Division - Water Main Replacement Program

- *Cycle-1:* Main replacement and paving restoration is complete. Only minor restoration items remain.
- *Cycle-2:* Conceptual Major Project Approval has been received from the City and design is underway. Tentatively, we anticipate the project to be ready for bid in March 2015, with construction starting in late April 2015.

This Project is identified as Schedule-7 Work and will be funded by LCA.

6. Developments

Water system construction is occurring in the following developments:

Lehigh Hills, Lot 4, 1 commercial building, UMT
Valley West Estates, Phases 4, 5 & 6, 46 residential lots (sfd), UMT (currently on hold)
West Park, Lot 8, 1 industrial building, 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
Hickory Park Estates, 3 residential lots (sfd), UMT
Hillview Farms, 31 residential lots (sfd), LMT/SWT
Indian Creek Industrial Park, 6 commercial lots, UMiIT, water and sewer
Lehigh Hills, 247 residential lots (sfa/sfd), UMT
Liberty at Mill Creek, 2 industrial lots, UMT
Morgan Hills, 40 residential lots (sfd), WeisT, water and sewer
North Whitehall Commercial Center (Walmart), 5 commercial lots, NWT, water and sewer
Shepherd's Corner, 1 commercial lot, LMT
Spring Creek Properties Settlement Subdivision (formerly Spring Creek Properties Subdivision I), 16 commercial and industrial lots, LMT
Trexler Business Center, Lot 1, 1 commercial building, LMT
Weilers Road Twins, 82 residential lots (sfa), UMT
Woodmere Estates, 60 residential units (sfd), UMT

WASTEWATER

ACTION ITEMS

1. **Wynnewood Terrace Pump Station and Force Main Replacement**

Bid opening was held October 2. Proposals received were within the engineering estimates. All proposals are being reviewed for Disadvantaged Business Enterprises (DBE) compliance, a PENNVEST requirement. Project amendment approval and award of contracts is recommended.

PENNVEST approved our application for a loan on October 22. We were awarded funding of \$1.0 mil., @ 1.0% for first 5 years and 1.734% for the remaining 15 years. LCA staff is reviewing the funding offer and will accept it when open issues are satisfactorily resolved.

2. **Allentown Division - WWTP-Replacement of Motor Control Centers (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 the age of the existing MCCs, replacement parts are nearly impossible to find. This equipment is critical for the daily operation of the WWTP. Construction bids were received on Oct 20, 2014. Electrical contractor bids are being evaluated, but there were no bids for the General Contractor. Several prospective GCs were personally contacted and a re-bid (GC only) was prepared with a due date of November 4, 2014. Low bidder for the EC was Diefenderfer (\$1,833,000) and low bidder for the GC (upon re-bid) was Blooming Glen (\$142,710). Currently, the projected construction schedule has the MCC fully installed and operational by August 2015. The construction phase of the project is being presented to the board for approval. This Project is identified as Schedule 7 Work and will be funded by LCA (*blue*).

3. **2015 SCARP Program Management (Approval)**

A Professional Services Authorization and Capital Project Amendment is being presented to the Board for consideration for Arcadis (Malcom Pirnie) for work related to the I & I SCARP Program. The work includes Program Management for 2015. Attached is a memo, Professional Services Authorization, Capital Project Amendment, and Arcadis scope of work (*tan*).

DISCUSSION ITEMS

1. *None.*

INFORMATION ITEMS

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

- LCA hosted a public meeting at the Lehigh County Government Center on November 12th. The City, most City Signatories, and the LCA Signatories participated in the event. A technical presentation was provided by the LCA

consulting engineer, followed by a question and answer period. The meeting was well attended and covered by the media.

- An official extension request including a Plan of Action was submitted to EPA on November 14th. The request was on behalf of all LCA Signatories and 5 out of the 7 City Signatories.

2. Wastewater Treatment Capacity

At the December Workshop Meeting, the 537 Team will present an update to the Board regarding the 537 Plan Study currently underway. The previous update concentrated on the option to discharge to the Jordan Creek. This presentation will focus on the land application alternative and will touch on the 537 planning, DRBC effluent requirements, and conveyance modeling.

A Pubic Outreach event is being scheduled for early 2015.

3. Arcadia West WWTP Improvements

Staffing is working toward closeout of the project. Projected total expenses should be less than the \$3,501,100.00 in the approved budget.

4. Park Pump Station Fuel Tank Replacement

Award of contracts is complete and a pre-Construction meeting was held on October 29, 2014. Construction and installation of this new 8,000 gallon fuel tank should began November 10. Completion is expected by the end of May 2015.

5. 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. Two Punch List items and final payments to the contractor and consultant are the only remaining tasks which are anticipated to be finished in November. This Project is identified as Administrative Order / Un-Completed Work and will be funded by the City.

6. Allentown Division - PPL Combined Heat & Power (CH&P) Facility

The Combined Heat and Power (CH&P) facility at the Kline's Island WWTP which was constructed through Addendum No.3 of Energy Services Master Agreement between the City and PPL Energy Plus fired digester gas on all thirty days during the month of September. The CH&P produced a total of 421,301kWh of electricity which reduced the plant's use of commercial power from the grid by 44.2%. To produce the same amount of electricity at a traditional power plant the firing of approximately 459,218 pounds of coal would have been required.

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

A PennVEST consultation meeting was held on 10/14/14. PennVEST was not inclined to fund the current project as laid out in the WQM Part II permit application that was submitted in August. That project addresses safety and capacity issues at the headworks without providing a more comprehensive solution to address conditions in the rest of the aging plant. We will be evaluating whether the plant should be upgraded to the full 0.16 MGD capacity at this time given PennVEST's stance and township adoption of a 55+ active adult community overlay district.

8. Allentown Division – Sanitary Sewer Manhole Lining (below-ground)

This project will install a lining system in approximately 50 aged brick manholes identified by previous City staff and current LCA staff. This lining system will eliminate infiltration and will provide additional structural reinforcement to the manholes. The project is identified as Administrative Order Work and will be funded by the City. Notice to Proceed was October 6, 2014 with a 60 calendar day contract. Original scope of work included 52 manholes to line. Per the City approval, the scope of work was expanded to include 65 total manholes - all 65 manholes have been lined to date by the main contractor. Subcontractor will finish applying lining to the chimney section prior to December 2014.

9. 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 project has been completed on September 30, 2014 (90 calendar contract plus one week extension). An additional time extension for one contingent bid item (point repairs) was granted on September 30, 2014. This contingent bid item will be completed prior to the end of 2014. This project is identified as Administrative Order / Un-Completed Work and will be funded by the City.

10. Allentown Division – Belt Filter Presses

The wastewater treatment plant has three belt filter presses that are used to dewater both wastewater sludge and water plant chemical sludge. This project includes the installation of a remanufactured belt press for existing BFP #1, and also includes the rehabilitation in-place of existing BFP #2 and #3. Units #1 and #2 will also get new control cabinets. Contracts were finalized with M.F. Ronca (GC) and High Peak Electrical (EC). (This Project is identified as Schedule 7 Work and will be funded by LCA). #3 BFP electrical rehabilitation work began on 10/29/14 and the mechanical rehabilitation work began as scheduled on 11/4/14. Work is in progress with an anticipated restart of #3 BFP scheduled for 11/20/14.

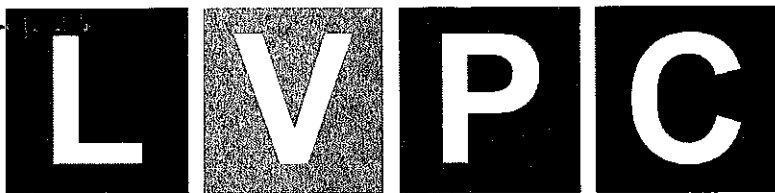
11. Allentown Division – Manhole Collars with Water Tight Frame and Covers (above-ground)

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 construction contract was awarded to Joao & Bradley and construction is scheduled to begin on November 24, 2014 with an anticipated completion date of January 22, 2015. The project is identified as Administrative Order and will be funded by the City.

12. Allentown Division – WWTP: Digester Cover Replacements

This project involves the cover replacement of both the Primary Digester No. 1 and the Secondary Digester. These digester covers are nearing the end of their expected life and must be replaced before failure. Other miscellaneous improvements are included in the

project scope. A RFP for engineering services was sent to Consultants on October 10, 2014. The RFP's were received on November 14, 2014 and are being evaluated by the Staff.



Lehigh Valley Planning Commission

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KENT H. HERMAN, ESQ.
Chair

LIESEL DREISBACH
Vice Chair

STEPHEN REPASCH
Treasurer

BECKY A. BRADLEY, AICP
Executive Director

October 31, 2014

Mr. Aurel Arndt, CEO
Lehigh County Authority
P.O. Box 3348
Allentown, Pennsylvania 18106-0348

Re: LCA Preliminary Capital Plan - Suburban and Allentown Divisions 2015-2024

Dear Mr. Arndt:

The Lehigh Valley Planning Commission (LVPC), at its regular monthly meeting on October 30, 2014, reviewed the above-referenced plans and would like to offer the following comments. The comments, as shown on the attached page, are provided for water and wastewater projects appearing for the first time in the Capital Plans and significantly modified projects from previous Capital Plans. The Suburban Division Capital Plan includes three new projects and one significantly modified project. The Allentown Division Capital Plan includes 12 new projects.

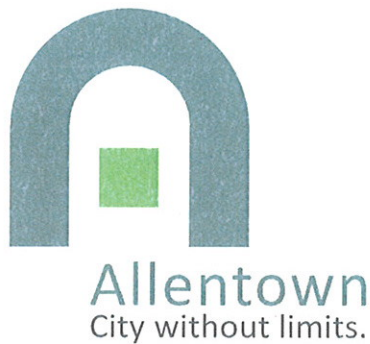
Please call me if you have any questions.

Sincerely,

Susan L. Rockwell
Senior Environmental Planner

cc: Lehigh County Commissioners

Environment Committee		LVPC PROJECT REVIEW SUMMARY SHEET		Date: October 2014
TITLE	MUNICIPALITY	BRIEF STATEMENT	LVPC COMMENT	
1. LCA Capital Plan – Suburban and Allentown Divisions 2015-2024	-----	<p>Suburban Division New Projects:</p> <ul style="list-style-type: none">• Water Supply Optimization Study• Residential Water Meter Replacement Project• Interceptor Access/Easement Acquisitions <p>Significantly Modified Projects:</p> <ul style="list-style-type: none">• Sand Springs Wastewater System Improvements <p>Allentown Division New Projects:</p> <ul style="list-style-type: none">• Water Plant – Supervisory Control & Data Acquisition (SCADA) Upgrades• Pre-Lease Valve Replacements• Mobile Equipment (Water/Wastewater)• Transmission Main Evaluation/Rehabilitation• General Water System Replacements and Improvements• Badger Meter Replacements• Fixed Base Meter Reading System• Emergency Power – Water/Wastewater Facilities• Wastewater Treatment Plant Interim Blending Pumping Station• Facility Roof Replacements (Water/Wastewater)• Riparian Manhole Inspections• Wastewater Treatment Plant – Wet Weather Hydraulic & Treatment Capacity Improvements	Improvements to provide more efficient, safe and reliable sewer and water service are consistent with the county comprehensive plan.	



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November 7, 2014

Frank Leist
Chief Capital Works Officer
Lehigh County Authority
P.O. Box 3348
1053 Spruce Street
Allentown, PA 18106-0348

RE: Allentown Division, Proposed 2015-2019 Capital Plan

Dear Mr. Leist,

Pursuant to Article 4 of the Concession and Lease Agreement, the City of Allentown is responding to your letter of October 23rd, re: Proposed 10-Year Capital Plan Allentown Division.

As noted in your cover letter, while the Lease Agreement requires submittal of a Five-Year Capital Plan (Capex), your submittal is for a 10-Year Capex. This is acceptable for review purposes as we understand that LCA's capital planning is based on a 10-year outlook and preliminary planning efforts are facilitated by the development of a singular document. However, in accordance with the Lease Agreement, please eliminate years six through ten and submit a Five-Year Capex to the City as the final approved Capex for 2015. With the exception of Uncompleted Work and Schedule 7 projects, which were agreed to in the Lease Agreement, the City will only be providing approvals for those capital projects which will commence in 2015 or are continuations of projects undertaken in 2014. In future submissions, please identify those projects defined as Major Capital Improvements.

The projects listed below do not qualify as Major Capital Improvements and will have no financial impact on the City or City rate payers; therefore they require no review or approval by the City:

CON-A-1	Computer System Hardware & Software Upgrades
CON-A-2	Geographic Information System Upgrades and Application Development
CON-A-3	Information Technology Master Plan Update and Implementation
AD-W-1	New & Replacement Meter Installations (non AMR & Badger projects)
AD-W-2	Distribution Mains - Development and Service Connections
AD-W-3	Distribution Mains - Upsizing
AD-W-4	Other Equipment
AD-W-5	WFP General Improvements
AD-W-6	WFP SCADA Upgrades
AD-W-9	Various Water System Related Studies
AD-W-10	Water System Hydraulic Model
AD-W-17	Mobile Equipment

Non-Major Capital Improvements projects (cont.):

AD-W-18	Transmission Main Evaluation, Replacements & Rehabilitation
AD-W-19	General Water System Replacements/Improvements
AD-W-20	Badger Meter Replacements
AD-W-21	Fixed Base Meter Reading System
AD-W-22	Emergency Power - Water & Wastewater Facilities
AD-S-1	Collection System - Development and Service Connections
AD-S-2	Other Equipment
AD-S-3	WWTP General Improvements
AD-S-17	Mobile Equipment
AD-S-18	Facility Roof Replacements (Water & Wastewater Facilities)

2015-2019 Major Capital Improvements, EPA AO, Uncompleted Work, or Schedule 7 projects:

AD-W-7 Water Main Replacements

Approved. This is required per the Lease Agreement, Schedule 7 and the Operating Standards of Practice A 6.19.2 - Evaluation and Replacement Requirements.

AD-W-11 Schantz Spring Main Replacement and Leak Rehabilitation

Approved. This is required per the Lease Agreement, Schedule 7.

AD-W-12 28th St Elevated Steel Tank Reservoir Rehabilitation

Approved. This is required per the Lease Agreement, Uncompleted Work. Note: Approval of the project is limited to the deficiencies noted in the 2010 PaDEP inspection report. Any work performed beyond the noted deficiencies are the responsibility of LCA.

AD-W-13 Schantz Spring Chlorine Booster Station

Tentative Approval. This is required per the Lease Agreement, Uncompleted Work. Note: Provide revised budget to reflect current project plan.

AD-W-15 Itron/AMR Meter Project

Approved. This is required per the Lease Agreement, Uncompleted Work. Note: After the data depository is completed, this project should be removed from the Capex as the only associated costs will be for the replacement of meters as detailed in the associated MOU.

AD-W-16 Pre-lease Valves Replacements

Approved. This is required per the Uncompleted Work MOU, Schedule A – Inoperable Valves. The City, in 2014, is cooperatively working with LCA on a program to replace the valves on Hamilton St. Per the agreement with Frank Leist, the total expenditures for this project in 2015 shall not exceed the differential in cost between the budgeted \$370,000 and the cost of the Hamilton Street Valve (4977 & 5027) project.

AD-W-18 Transmission Mains Evaluation, Replacement, and Rehabilitation

Not Approved. This is not a Major Capital Improvement. The Standards of Practice require LCA to conduct leak detection and system repairs. The maintenance of the system to deliver an ample supply of drinking water with adequate pressure and conformance to all regulatory requirements is a responsibility of LCA.

AD-S-4 Sanitary Sewer Main Replacements and/or Rehabilitation

Not Approved. This is not a Major Capital Improvement nor is it an Administrative Order project. Sanitary sewer lines which are found to be defective are addressed in SOP Sec 5.2.2.d which requires that LCA , "Repair or replace sanitary sewer lines that are damaged or collapsed."

2015-2019 Major Capital Improvements, EPA AO, Uncompleted Work, or Schedule 7 projects (cont.):

AD-S-5 WWTP- Replacement of Motor Control Centers

Approved. This is required per the Lease Agreement, Schedule 7.

AD-S-6 WWTP- Belt Filter Press Rebuilds and Replacement

Approved. This is required per the Lease Agreement, Schedule 7.

AD- S-7 WWTP-Digester Cover Replacements

Approved. This is required per the Lease Agreement, Schedule 7.

AD- S-11 WWTP- SCADA Upgrades

Approved. This is required per the Lease Agreement, Uncompleted Work. Note: Explain the significant increase in costs from those presented in the 2014 Capex of \$850,000 to \$1,2100,000.

AD- S-12 WWTP- Security Upgrades

Approved. This is required per the Lease Agreement, Uncompleted Work.

AD-S-13 WR&A Phase II Corrective Action Plan- Tasks 1-6 & C-1, 2, & 3

Approved. This is required per the Lease Agreement, Administrative Order. The City is finalizing the contract with WR&A and will advise LCA of the details for inclusion in the Capex.

AD-S-14 Sanitary Sewer Manhole Lining

Approved. This is required per the Lease Agreement, Administrative Order. This is a continuation of the approved capital project in 2014.

AD-S-15 Sanitary Sewer Manhole Collars & Water Tight Covers

Approved. This is required per the Lease Agreement, Administrative Order. This is a continuation of the approved capital project in 2014. Note: Per your cover letter, revise the yearly budgets for 2015, 2016, & 2017.

AD-S-16 WWTP Interim Blending Pumping System

Tentative Approval. This may be required per the Lease Agreement, Administrative Order and is tentatively approved pending acceptance by PaDEP for this project as presented in the response to the proposed NPDES permit renewal. If the project moves forward and more detailed engineering evaluation indicates the project costs will trigger PLSA requirements clause in the Lease Agreement, LCA would be responsible for conformance.

AD-S-18 Facility Roof Replacements (*Water & Wastewater Facilities*)

Not Approved. This is not a Major Capital Improvement and is therefore not approved for funding by the City or City rate payers. Lease Agreement Sec 3.1.b indicates that LCA agreed to accept the systems and facilities on as "AS IS" basis at the time of Closing. As noted in the project description, the roof conditions were existing at the time of Closing and are therefore LCA's responsibility. Also, LCA's attempt to aggregate smaller projects into larger projects to qualify as a Major Capital Improvement is unacceptable; aggregation only applies to pipeline replacements per the Lease Agreement.

AD-S-19 Riparian Manhole Inspections

Not Approved. This is not a Major Capital Improvement nor is it an Administrative Order project. Standards of Practice Sec 5.2.2 requires that LCA "provides a systematic approach for inspecting, televising, cleaning, and flushing every manhole....." If during LCA's required inspections a manhole is determined to be a candidate for inclusion in Capital projects AD-S-14 or AD-S-15, that manhole will be appropriately considered by the LCA-COA team who is selecting which candidate manholes will be included in the projects during the forthcoming year.

2015-2019 Major Capital Improvements, EPA AO, Uncompleted Work, or Schedule 7 projects (cont.):

AD-S-20 WWTP - 85MGD - Wet Weather Hydraulic & Treatment Capacity Improvements

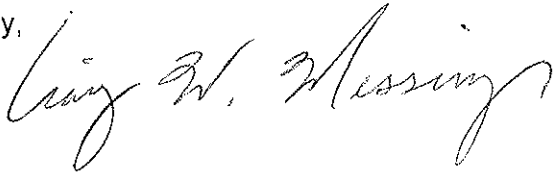
Not Approved. No specific Administrative Order project(s) will be considered until WR&A's report and recommendations are received in November 2015. Additionally, no work is planned to occur in the next five years; so, therefore, this project should not appear in the Five-Year Capex.

After reviewing the City's comments and statements, we are anticipating a response from LCA and possibly the scheduling of a meeting to resolve issues and concerns as might be necessary so that the Capex can be approved in a timely manner for the benefit of both parties.

Although our review and interest is in the Capex, please also send us LCA's finalized Allentown Division 10-Year Capital Plan when approved by the LCA Board.

If you have any questions or require additional information, please do not hesitate to contact the Office of Compliance.

Sincerely,

A handwritten signature in black ink, reading "Craig W. Messinger". The signature is fluid and cursive, with the first name "Craig" being the most prominent.

Craig Messinger
Interim Director of Public Works

CC: Aurel Arndt, Ed Bielarski, Dan Koplish, Office of Compliance

MEMORANDUM

Date: November 10, 2014

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

MOTIONS / APPROVALS REQUESTED:

No.	Item	Amount
1	Capital Project Authorization – Construction Phase	\$2,254,137
2 ⁽¹⁾	Electrical Contract Award- Diefenderfer	\$1,833,000
3 ⁽¹⁾	General Contract Award- Blooming Glen	\$142,710
4 ⁽¹⁾	Professional Services Authorization – CDM Smith Inc.	\$37,410

(1) Included in the Capital Project Authorization.

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.

FINANCIAL:

This Project is identified on Schedule 7 of Concession Lease Agreement as a Required Capital Improvement that will be funded by LCA. With an estimated project cost totaling \$2,482,000, the project meets the definition of a Major Capital Improvement Project.

PROJECT STATUS:

Previously the Board approved the design phase of this project. We are currently seeking Board approval for the construction phase.

MOTOR CONTROL CENTERS –CONSTRUCTION PHASE

The construction phase includes activities that are necessary to install the reinforcement modifications to the building in addition to all of the electrical work that is required to connect the new breakers to all of the currently existing loads. In all, five (5) existing motor control centers (3A, 3B, 10, 11 and 16) will be replaced by a single walk-in MCC. The General contractor will modify the existing building and will be responsible to lift the new walk-in unit onto its proposed location on the dewatering building walkway. The Electrical contractor will be responsible for the disconnection/reconnection of all existing loads currently served by the five (5) MCCs previously mentioned.

BIDDING SUMMARY:

The project requires General Construction (GC) and Electrical Construction Contracts. The project was advertised for bid on September 18, 2014. A mandatory pre-bid meeting was held on September 25, 2014. Bids were received on October 16, 2014. Since there were no bidders for the

General Construction Contract, a re-bid was advertised (for GC only) with a due date of November 4, 2014. All bid results are summarized below:

Electrical Construction

<u>Bidder</u>	<u>Amount</u>
Diefenderfer	\$1,833,000
Pagoda Electrical	\$1,984,000
Garden Spot Electric	\$2,117,000
MBR Construction	\$2,119,500
Albarell	\$2,213,575
Joyce Electric	\$2,575,000
Philips Brothers	\$2,863,536

General Construction

<u>Bidder</u>	<u>Amount</u>
Blooming Glen	\$142,710
Worth and Company	\$148,900
Mar-Paul Company	\$220,000

References have been checked on the low bidders, Blooming Glen Contractors (General), and Diefenderfer Electrical (Electrical). No issues have been identified. Based upon the review of the bids, we recommend award of the General Construction contract to Blooming Glen Contractors and the award of the Electric Construction contract to Diefenderfer Electrical, subject to the receipt of the necessary Performance Bonds, Insurance and other required documentation.

PROFESSIONAL SERVICES

CDM Smith Inc has been our design consultant on this project and will provide construction engineering and on-site inspection services for the construction phase of the motor control center installations. Their work will include:

1. Schedule and chair a preconstruction meeting
2. Review shop drawings and respond to RFIs.

3. Provide work review visits and assist with contract administration.
4. Assess work for substantial completion and open items
5. Compile as-built drawings.

Reference attached Professional Services Authorization Amendment #2.

PROJECT SCHEDULE: Presently, the construction phase of this project is anticipated to be completed by the end of July, 2015.

FUTURE AUTHORIZATIONS-

No future authorizations are anticipated.

CAPITAL PROJECT AUTHORIZATION

PROJECT NO.:	AD-S-5	BUDGET FUND:	Allentown Div\Wastewater\Capital
PROJECT TITLE:	Allentown Wastewater Treatment Plant Motor Control Center Upgrades- Construction Phase	PROJECT TYPE:	<input checked="" type="checkbox"/> Construction <input type="checkbox"/> Engineering Study <input type="checkbox"/> Equipment Purchase <input checked="" type="checkbox"/> Amendment No. 2
THIS AUTHORIZATION:	\$2,254,137		
TO DATE (W/ ABOVE)	\$2,482,000		

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.

Authorization Status:

Previous Authorizations	
Design Phase	\$227,863
Requested This Authorization	
Construction Phase	
Staff	\$46,000
Professional Services	\$37,410
Construction Contracts	
General	\$142,710
Electrical	\$1,833,000
Miscellaneous	\$13,000
Contingency	\$182,017
Total This Authorization	\$2,254,137

Future Authorizations	
None	
Total Estimated Project	\$2,482,000

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
Amendment No. 2

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

Date: November 10, 2014

Requested By: John Parsons

Approvals

Department Head: _____

Chief Executive

Officer: _____

Allentown Wastewater Treatment Plant, Motor Control Center Upgrades

Previous Authorization- Design Phase: \$172,863

This Authorization – Construction Phase **\$37,410**

CDM Smith, Inc will perform construction phase and related services for the installation of one (1) fully-enclosed motor control center that will serve the digester control and dewatering buildings. Project site is the Allentown Wastewater Treatment Plant of the Allentown Division.

Professional Services ⁽¹⁾
1. Prepare bid tabulations and Recommendations to Award
2. Review shop drawings and respond to RFIs.
3. Provide work review visits and assist with contract administration
4. Assess work for substantial completion and open items
5. Compile as-built drawings

(1) For Construction Phase Only.

Cost Estimate (not to be exceeded without further authorization): \$210,273

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 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:_____



Lehigh County Authority

1053 Spruce Street * P.O. Box 3348 *
(610)398-2503 * FAX (610)398-8413 * Email: serv

MEMORANDUM

Date: November 18, 2014

To: Board of Directors & Management Staff
From: Pat Mandes
Re: 2015 Program Management

Approvals Requested

Approvals Requested	Brief Description	Amount
Capital Project Authorization Amendment (20) Professional Services Authorization (20)	Consulting Services Arcadis	\$50,000

Background

In 2008, the Department of Environmental Protection (DEP) required LCA and the Signatories to generate a Corrective Action Plan for the areas identified as having significant infiltration and inflow (I&I) conditions. In addition, EPA has issued a Compliance Order to the City of Allentown, LCA and all municipalities tributary to the City WWTP to eliminate all SSOs within a five year period (2014).

The LCA 2009-2017 Signatory I&I Investigation & Remediation Project Capital Plan was developed so that LCA could take the lead in working with the Signatories to address the overload and SSO issues. A Sewer Capacity Assurance & Rehabilitation Program (SCARP) Outline was drafted by Malcolm Pirnie that provides a formalized and planned method of evaluating the LCA and Signatory systems, prioritizing and conducting sewer rehabilitation by all the LCA Signatory Partners.

Project Scope

2015 Program Management – There are program management tasks required throughout the year that are not defined in a particular approved task. The work will include on-call services, EPA semi-annual report, attending meetings with DEP and EPA, attending meetings with the I & I committee or I & I Engineer's Subcommittee, and other coordination or assistance as needed. The total "Not to Exceed" cost is \$50,000 for 2015.



Ms. Pat Mandes
Wastewater Services Director
Lehigh County Authority
P.O. Box 3348
Allentown, PA 18106

ARCADIS U.S., Inc.
640 Freedom Business Center
Suite 310
King of Prussia
Pennsylvania 19406
Tel 610.768.5813
Fax 610.768.5817
www.arcadis-us.com

Subject:

Sewer Capacity Assurance and Rehabilitation Program
Scope and Budget for SCARP Program Management through 2015

Dear Ms. Mandes:

Date:

September 18, 2014

ARCADIS is pleased to offer this scope and budget for program management services related to the Sewer Capacity Assurance and Rehabilitation Program (SCARP).

Contact:

Tony Dill

PROPOSED SCOPE OF SERVICES

Phone:

484.688.0380

As we have done since the start of the program, ARCADIS will provide coordination and on-call services to LCA and the Western Lehigh SCARP Partnership (Partnership) to facilitate implementation of the SCARP. These program management services will be for tasks not defined in other project specific authorizations. Historically these services have included:

Email:

Anthony.Dill@arcadis-us.com

- Meetings and responses to USEPA regarding the Order of Compliance
- Meetings with Engineering Subcommittee and the I&I committee
- Status meetings with LCA for the overall program
- Technical evaluations and data reviews
- Other on-call services as requested

Our ref:

00247

We anticipate that the services required through 2015 will be similar to those listed above.

DELIVERABLES AND SCHEDULE

Deliverables and schedule for delivery will be determined on an assignment by assignment basis.

BUDGET

As this is undefined work, we recommend allocating \$50,000 for this work through the end of 2015. ARCADIS will conduct this work on a time and materials basis in accordance with the most current rate schedule. We will track the costs associated

with this work and report them to LCA monthly throughout the program. We will not exceed the authorized budget without written professional services authorization from LCA.

If you have any questions please do not hesitate to call me at 484-688-0380 or 610-761-3253 (mobile). We look forward to continuing to assist LCA with this important program.

Sincerely,

ARCADIS U.S., Inc.

A handwritten signature in blue ink that reads "Tony Dill". The signature is fluid and cursive, with the first name "Tony" and the last name "Dill" clearly distinguishable.

Tony Dill, P.E.
Program Manager

C: Jim Shelton, ARCADIS
Tanya McCoy-Caretti, ARCADIS

**CAPITAL PROJECT AUTHORIZATION
AMENDMENT NUMBER 20**

PROJECT No.:	<u>S-08-5</u>	BUDGET FUND:	<u>WLI Sewer Capital</u>
PROJECT TITLE:	<u>Signatory I & I Investigation/Remediation Program</u>	PROJECT TYPE:	
TOTAL PROJECT THIS AUTHORIZATION	Prior: \$3,816,831 Current: \$50,000	<input type="checkbox"/> Construction <input type="checkbox"/> Engineering Study <input type="checkbox"/> Equipment Purchase <input checked="" type="checkbox"/> Amendment	

DESCRIPTION AND BENEFITS:

Full Project Overview:

Based on the EPA Compliance Order and the PADEP Chapter 94 requirements, LCA and the LCA Signatories are required to reduce infiltration and inflow from the system and eliminate SSOs from the LCA and Signatory sewer systems within a five year period (2014). The SCARP Program has been developed to investigate the sources of I & I and to remediate areas identified as having excessive I & I. The SCARP Program consists of engineering tasks necessary to define and quantify the problems, to evaluate methods of redress and to determine the corrective actions required to meet the regulatory requirements.

2015 Program Management:

The work will include on-call services, preparation of the EPA semi-annual report and annual DEP report, attending meetings with DEP and EPA, the Partner I & I committee, Partner Engineer's Subcommittee and the City I & I Committee, technical evaluations as needed, tracking the program progress schedule and other coordination or services as needed.

Program Management for previous years:

2009 - \$30,000
2010 - \$20,000
2011 - \$25,000
2012 - \$50,000
2013 - \$50,000
2014 - \$50,000

Previously Approved		This Amendment	Total Approval
Flow Monitoring ADS (thru 2014)	\$1,775,031		\$ 1,775,031
Flow Monitoring TFE			
Engineering Consulting	\$1,731,800	\$50,000	\$1,781,800
Rehabilitation			
Staff	\$300,000		\$300,000
Contingencies	\$10,000		\$10,000
Totals	\$ 3,816,831	\$ 50,000	\$ 3,866,831

REVIEW AND APPROVALS:

<u>Pat Mandes</u> Project Manager	<u>11/05/14</u> Date	 General Manager	 Date
 Capital Works Manager	 Date	 Chairman	 Date



Lehigh County Authority

1053 Spruce Street * P.O. Box 3348 * Allentown, PA 18106-0348
(610)398-2503 * FAX (610)398-8413

PROFESSIONAL SERVICES AUTHORIZATION

AMENDMENT NUMBER 20

Professional:

Arcadis

Jim Shelton

640 Freedom Business Center

King of Prussia, PA 19406

Date: 11/05/14

Requested By: Pat Mandes

Approvals

Department Head:

General Manager:

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

This is an amendment to the current Arcadis authorization for the WLI Infiltration and Inflow Project: The work covered by this amendment includes Program Management for 2015.

Program Management includes work that is not defined by other approved tasks. The work will include on-call services, EPA semi-annual report, annual DEP report, attending meetings with DEP and EPA, the LCA I & I committee and the City I & I Committee, technical evaluations as needed and other coordination or services as needed. The total "Not to Exceed" cost is \$50,000 for the period ending December 2015.

The scope of work is described in more detail in the proposal dated September 18, 2014.

Cost Estimate (not to be exceeded without further authorization): This amendment is not to exceed \$50,000 for Program Management. With this amendment the total authorization for the I&I Program consulting will be \$1,705,000.

Time Table and Completion Deadline:

January 2015 through December 2015.

(For Authority Use Only)

Authorization Completion:

Approval: _____ **Actual Cost:** _____ **Date:** _____

Capital Project S-08-05, Signatory I & I Investigation/Remediation Program