LEHIGH COUNTY AUTHORITY
WORKSHOP AGENDA
Monday, November 10, 2014 – 12:00 PM

INITIAL ITEMS (Collectively 5 Minutes)

1. Identify items for October Board Meeting
   - Review Board Discussion items, October 2014 – December 2014

ACTION/DISCUSSION ITEMS

1. Customer Billing Dispute
   A customer from the Authority’s Allentown Division is planning to attend the workshop meeting to address the Board regarding an ongoing bill dispute. Details are provided in the attached memo (yellow).

2. 2015 WLI Report on Wastewater User Charges
   The WLI User Rates will be presented to the Board for review and comment. The Rates will be approved as part of the 2015 budget.

3. Drug & Alcohol Policy (Approval)
   In order to provide a consistent practice for all employees, the adoption of an organization-wide Drug & Alcohol Policy is recommended. The proposed Policy mirrors the terms included in the agreement with the Sheet Metal Workers (SMW) union agreement, and would apply to all non-union and SMW employees (blue).

4. 2014 Audit and Zelenkofske Axelrod extension (Approval)
   A recommendation to approve the Annual Authority Audit Extension from Zelenkofske Axelrod LLC will be presented to the Board for consideration (green).

5. Budget Assumptions
   The 2015 budget assumptions will presented to the Board for review and comment. The comments will be incorporated into the final budget presented in December for approval.

6. City Signatory Flow Meter Evaluation (Approval)
   A recommendation to approve the Arcadis Scope of Work for Evaluation of the City Signatory Flow Meter Station will be presented to the Board for consideration. Refer to the memo and Professional Services Authorization (salmon).

7. Allentown Division – Manhole Collars with Water Tight Frame and Covers (above-ground)
   This project involves, installing new water tight frames & covers and securing them to ~60 aged brick manholes that were identified by previous City staff. This work will eliminate the potential for inflow and infiltration (I/I) entering these manholes and eliminating the potential for sanitary sewer overflows (SSO’s) from these manholes. The project was advertised on October 25, 2014 and bids are due November 6, 2014. This is an Administrative Order Project that will be funded by the City. Board approval for the Construction Phase is requested (ivory).

8. Allentown Division- Pre-lease Valve Replacements
   There were ~52 valves that were inoperable and need of replacement at the time of the Lease settlement, these valve replacements are designated as Un-Completed Work and will be funded the City.
   
   The City has received a grant to pave a section of Hamilton Street and has requested that LCA replace the two pre-lease valves in this area prior to paving. LCA has obtained a price from Doli Construction Corporation the contractor that is currently under contract for the Allentown Division (AD) Cycle 1 water main replacements to replace these valves. The City reviewing the price and will make a decision by
Friday, November 6th. If applicable, Board approval of the Change Order to the AD Cycle-1 water main replacement contract for this work will be requested.

INFORMATION ITEMS

1. None.

OTHER ITEMS

1. None.
# BOARD ACTION/DISCUSSION ITEMS  
**OCTOBER 2014 – NOVEMBER 2014**

<table>
<thead>
<tr>
<th>Priority*</th>
<th>Project/Issue</th>
<th>Type of Action</th>
<th>Timing**</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>AS NEEDED</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>H</strong></td>
<td>Acquisition/Growth Strategy Activities</td>
<td>Status Report</td>
<td>As needed</td>
</tr>
<tr>
<td><strong>L</strong></td>
<td>Jordan Creek Wastewater Plant</td>
<td>Status Report</td>
<td>As needed</td>
</tr>
<tr>
<td><strong>M</strong></td>
<td>Strawberry Acres – AARC - Sewer System</td>
<td>Status Report</td>
<td>As needed</td>
</tr>
<tr>
<td><strong>H</strong></td>
<td>Strategic Plan Update</td>
<td>Status Report</td>
<td>As needed</td>
</tr>
<tr>
<td><strong>WITHIN 45 DAYS</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>H</strong></td>
<td>Allentown Division- Sanitary Sewer Manhole Collars &amp; Water Tight Covers, Construction Phase</td>
<td>Approval</td>
<td>November (W)</td>
</tr>
<tr>
<td><strong>H</strong></td>
<td>Wastewater Capacity Program Update</td>
<td>Status Report</td>
<td>December (W)</td>
</tr>
<tr>
<td><strong>H</strong></td>
<td>Wynnewood Terrace Pump Station &amp; Force Main Replacement- Construction phase</td>
<td>Approval</td>
<td>November (B)</td>
</tr>
<tr>
<td><strong>M</strong></td>
<td>Drug &amp; Alcohol Policy</td>
<td>Approval</td>
<td>November (W)</td>
</tr>
<tr>
<td><strong>M</strong></td>
<td>Hydro-Pneumatic Pump Station Upgrade (Pine Lakes of Lynn), Design Phase</td>
<td>Approval</td>
<td>December (B)</td>
</tr>
<tr>
<td><strong>H</strong></td>
<td>Allentown Division- WWTP Motor Control Centers, Construction Phase</td>
<td>Approval</td>
<td>November (B)</td>
</tr>
<tr>
<td><strong>H</strong></td>
<td>Capital Plan</td>
<td>Approval</td>
<td>November (B)</td>
</tr>
<tr>
<td><strong>WITHIN 75 DAYS</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>H</strong></td>
<td>Allentown Division- Water System Hydraulic Model</td>
<td>Approval</td>
<td>January (W)</td>
</tr>
<tr>
<td><strong>H</strong></td>
<td>Allentown Division- Digester Cover Replacements Design Phase</td>
<td>Approval</td>
<td>January (W/B)</td>
</tr>
</tbody>
</table>

* H – High  
M – Medium  
L – Low  
** (W) – Workshop  
(B) – Board  
(W/B) - Either
MEMORANDUM

Date: November 4, 2014

To: LCA Board of Directors
From: Liesel Adam, Chief Administrative Officer
Re: Customer Bill Dispute
Barabara Haver-Mentzer, 40 S. Howard St., Allentown

On March 15, 2014, Lehigh County Authority issued a water and sewer bill to Ms. Haver-Mentzer for the period of 11/21/2013 to 3/3/2014. The bill was in the amount of $1,897.89, due to very high metered water usage in the amount of 349,124 gallons for the billing period noted above. Normal usage for this property would range from about 5,000 to 7,000 gallons per quarter, for an average bill of about $72 per quarter.

On March 31, 2014, LCA sent a letter to the property owner informing them of a suspected leak at their property that resulted in this high bill.

On April 14, 2014, the customer contacted LCA and LCA technicians visited the property. They found that the water leak was already repaired, and the customer reported the leakage was occurring at the meter coupling. The LCA technician reported that the meter is located in an exterior coal bin with no insulation protecting the meter from freezing. The technician also reported that there were no drains or other connections to the sewer system in the vicinity, so the leaked water would not have drained to the sewer system.

As a result of these finding, LCA processed an adjustment for the customer to remove excess sewer flow charges in the amount of $767.49 and also waived $193.66 in late payment charges in order to provide some relief for the customer.

On June 15, 2014, LCA issued another water and sewer bill to Ms. Haver-Mentzer for the period of 3/3/2014 to 6/2/2014. The bill was in the amount of $1,283.89 and included an additional 398,618 gallons of water that passed through the water meter during the period prior to the leak repair on April 14, 2014. This bill amount included a sewer flow charge discount in the amount of $873.77 to reflect LCA’s earlier finding that the leaked water would not have entered the sanitary sewer system.

LCA subsequently also waived an additional $162.32 in late payment charges and agreed to extend the due date for payment through November 2014 in order to avoid terminating service to the property while the bill is being paid. However, the customer has not made any payments toward this large outstanding balance and penalties have continued to accrue. The current balance on the account is $2,578.90

Causation - Following numerous phone calls and written correspondence with the customer, it is clear the customer believes the leak was caused by a faulty installation of the water meter. This installation occurred by a contractor of the City of Allentown on July 23, 2013.

In LCA’s correspondence with Mr. Haver-Mentzer, the following information has been shared:

1. LCA was not responsible for the meter installation that occurred in July 2013, because LCA’s responsibility for the system began on August 8, 2013. Therefore, proper recourse for this issue would be through the City of Allentown.
2. The customer experienced no leakage or other issues with the meter installation for a period of at least six months after the installation occurred. Considering the location of the meter in an uninsulated coal bin, and the harsh winter conditions experienced during this time period, LCA believes the leakage was caused by freezing and thawing of the plumbing.

Ms. Haver-Mentzer reports that she has contacted the City of Allentown and other entities for support and consideration of the high water bill, but has not received relief. She is therefore asking for LCA’s Board of Directors to consider her bill dispute. A letter submitted by the customer is attached.

Relief Request

LCA has already provided credits in the amount of $1,641.26 for sewer flow charges for leaked water that did not enter the sewer system, and $355.98 in waivers of late payment charges.

The remaining unpaid charges on the customer’s account include:

<table>
<thead>
<tr>
<th>Bill Date</th>
<th>Disputed Amount</th>
<th>Normal Charges</th>
<th>Penalties</th>
</tr>
</thead>
<tbody>
<tr>
<td>3/15/14</td>
<td>$ 1,060.72</td>
<td>$ 69.68</td>
<td>$ 50.88</td>
</tr>
<tr>
<td>6/15/14</td>
<td>$ 1,214.21</td>
<td>$ 69.68</td>
<td>$ 38.52</td>
</tr>
<tr>
<td>9/15/14</td>
<td>$ 71.63</td>
<td>$ 3.58</td>
<td></td>
</tr>
</tbody>
</table>

This disputed amount totaling $2,274.93 reflects the excess water charges generated as a result of the water leak. Some portion of the penalties may also be considered under dispute, as they are calculated on a percentage basis of outstanding charges.

It should also be noted that Ms. Haver-Mentzer does not reside at the property in question. Therefore, she was not in the property during the time period when the leak was occurring and did not observe the leak prior to LCA issuing the initial high bill in March 2014.

Should you require any additional details about this bill dispute, please contact Liesel Adam at lieseladam@lehighcountyauthority.org. Thank you.
David Mentzer and Barbara Haver-Mentzer
138 West Sycamore St
Allentown, PA 18102
610-351-1282 Home
484-553-7811 Barbara’s cellphone
barbarahaver@yahoo.com

October 7, 2014

Lehigh County Authority
Board of Directors
PO Box 3348
Allentown, PA 18106

Dear Sir or Madam,

My husband and I own a single family house at 40 S. Howard St in Allentown that we rent to an older couple who have been our tenants for over 4 years.

A new water meter was installed by SCOPE, a company out of Florida that was subcontracted by The City of Allentown, on July 23, 2013. When we received our water bill for the quarterly period of 11/21/13 to 3/3/14, the water usage was extreme resulting in a $1901.30 charge. Since we were not aware of the leak until we opened the bill in April 2014, the high usage continues into the next billing period as well. The normal water usage for this property is rarely over $80 per quarter.

I drove to 40 S Howard immediately after opening the April invoice on a Friday night to try to stop whatever leak was occurring. I called our neighbor (Tyquan Bradley), who is a plumber, and asked him to go with me to help. The basement of 40 S. Howard was flooded above our ankles and water was spraying out of the bottom connection from the meter to the house water pipe. Tyquan observed that the leak was due to the fact that the large nut on the connection and the set bolt to hold it in place were both loose. I called Lehigh County Water Authority to send someone out to fix the leak, but Tyquan was able to easily tighten the nut and set bolt properly which stopped the leak entirely. When the Water Authority technician arrived, we showed him where the leak had occurred and what was done to stop it. In addition, we asked him to take note of the fact that the leak was not due to any broken pipes and that it had been completely stopped by properly tightening the fitting.

The Lehigh County Water Authority adjusted the bill to credit us for the fact that the water had not gone down a drain but instead seeped out through cracks and the unpaved parts of the cellar floor. However, we feel strongly that we should not be held responsible for the water usage charges that were clearly a result of improper installation of the new meter.
The argument from The Water Authority has been that the leak occurred almost 6 months from the time the meter was installed and they further assert that the severe winter caused freezing conditions in the basement area that the meter is located.

While we can understand this argument from the Authority’s point of view; there was never any sign of freezing in the basement and the previous meters have been located in the same place in our 100+ year old house through many severe winters without incident. In addition, we can guarantee that no one tampered with the meter after the July 23 installation. David and I cannot explain the reason it took the loose nut 6 months to begin spewing water. We can think of several logical reasons, but it would only be speculation without benefit of a master plumber’s experience.

Since April, David and I have been in contact with Liesel Adam; Chief Administrative Officer, SCOPE, Mayor Pawlowski, Brian in Compliance, and most recently Leonard Lightner; Risk Manager. Mr. Lightner is currently looking into our problem, but has advised David and me to go ahead with the appeal process thru the Lehigh County Authority.

We would like to schedule a hearing to appeal the water usage charges currently amounting to $2414.29. This amount reflects the adjustment for sewer and waived penalties. We appreciate the Water Authority’s adjustments on our behalf, but still feel strongly that the extreme cost incurred as a result of improper meter installation should not be the responsibility of the property owner or the tenants living there.

Sincerely,

David Mentzer and Barbara Haver-Mentzer
LEHIGH COUNTY AUTHORITY
DRUG & ALCOHOL POLICY

Appendix D
APPENDIX D

LEHIGH COUNTY AUTHORITY DRUG & ALCOHOL POLICY

Effective: 10 November 2014

POLICY:

The Lehigh County Authority (“LCA”) is firmly committed to the health and safety of employees and considers the influence of alcohol and drugs in the workplace to be detrimental to employees, co-workers and the public. To maintain a drug-free workplace, LCA has established a drug-free awareness program. Whenever necessary, employees are encouraged to seek drug or alcohol counseling and rehabilitation information through LCA’s Employee Assistance Program (EAP).

This policy applies to all LCA employees and adherence to LCA’s policy on drugs and alcohol is a condition of employment.

As an employee of LCA, it is unlawful to manufacture, distribute, dispense, or possess an illegal controlled substance at LCA. The unlawful possession, distribution or use of an illegal controlled substance in the workplace will result in disciplinary action up to and including termination.

As a condition of employment, any employee convicted of any criminal drug statute is required to notify his or her direct supervisor at the Authority no later than twenty-four (24) hours after such conviction. If the employee is working on a project receiving federal grant money, in accordance with the federal Drug Free Workplace Act, the Authority must report the violation to the federal grant program no later than ten (10) days after such conviction.

Employees who need to use prescription or non-prescription legal drugs while at work must report this requirement to his or her supervisor if the use might impair his or her ability to perform the job safety and effectively. It is the employee’s responsibility to determine from his or her physician(s) if the medication can impair work performance or pose such a risk. Depending on the circumstances, employees may be reassigned, barred from performing certain tasks, or prohibited from working if they are determined to be unable to perform their jobs safety and properly while taking such drugs.

PRE-EMPLOYMENT TESTING:

All applicants, regardless of position, are subject to testing for drugs and alcohol as part of the hiring process.

REASONABLE SUSPICION TESTING

Employees shall not consume or use alcohol or controlled substances while off duty to the extent that evidence of such use is apparent when reporting for duty, or to the extent that the employee’s ability to perform his/her duty is impaired. Employees who are taking medication that affects their job performance must alert their immediate supervisor.
All LCA employees shall be subject to urinalysis testing for the presence of a controlled substance or illegal drug and breath or blood alcohol testing for the presence of alcohol where there is reasonable suspicion that the employee is engaged in the prohibited use of drugs or alcohol. The term “reasonable suspicion” as used in this policy means that there is the existence of a reasonable belief that the employee is engaged in the prohibited use of drugs or alcohol on the basis of specific, contemporaneous, physical, behavioral, or performance indicators of probable drug or alcohol use. Circumstances or conditions which may support such a belief include, but are not limited to the following:

- Odor of alcohol
- Glassy eyes
- Changes in speech pattern
- Staggering gait or poor coordination
- Unusual behavior, mood variations or deteriorating performance
- Physical or verbal altercations
- Possession of drugs or alcoholic beverages
- Erratic operation of motor vehicle or equipment
- Drug or alcohol related arrests on or off the job
- Exhibition of other abnormal mental or physical conditions or behavior
- Exhibiting conduct which jeopardizes the safety of the workplace, employees, property or the public

The employee’s direct supervisor and any union representatives, as applicable per existing Collective Bargaining Agreements, shall be notified when an employee is to be tested for reasonable suspicion, and permitted to witness the employee and/or testing process when feasible.

Two supervisors, one who has been trained in the detection of symptoms of drug and/or alcohol use, shall substantiate the decision to perform a reasonable suspicion test on an employee. The concurrence between the two supervisors may be by telephone, e-mail or text. The supervisor shall submit a written report to the LCA Human Resources Manager or his/her designee within twenty-four (24) hours detailing the circumstances which formed the basis to warrant testing. This report shall be forwarded to union representatives as applicable per existing Collective Bargaining Agreements.

POST-ACCIDENT TESTING:

Following any vehicular or non-vehicular accident, all LCA employees shall be tested through urinalysis and blood alcohol tests for the presence of controlled substances, illegal drugs or alcohol when the following occurs:

- The loss of human life; or
- The employee receives a citation under state or local law for a moving traffic violation arising from the accident; or
- Bodily injury to any person who, as a result of the injury, immediately receives medical treatment away from the scene of the accident; or
- One or more motor vehicles incurring disabling damage as a result of the accident, requiring the motor vehicle to be transported away from the scene by a tow truck or other motor vehicle; or
• If there is more than $1,500 in property damage resulting from the accident.

Testing is required for each employee whose performance contributed to the accident or whose performance cannot be completely discounted as a contributing factor to the accident. Testing for alcohol shall be performed as soon as practical, but no more than eight (8) hours following an accident. Testing for drugs shall be performed as soon as practical, but not more than thirty-two (32) hours following an accident. The employee is prohibited from consuming alcohol until the alcohol test is performed or for an eight hour period following the accident, whichever is less.

TESTING

1. Test procedures, devices, lab operations, medical reviews and recordkeeping shall be performed in accordance with the federal Department of Transportation (CDL) regulation guidelines.

2. The Drug and Alcohol Policy shall require only urine testing for drugs. Alcohol tests may use breath and/or blood.

3. Employees may obtain a second test of the same sample at their own expense.

POSITIVE DRUG OR ALCOHOL TESTS

In the event of an initial positive drug test, a confirmatory urinalysis test will be conducted using the more reliable clinical testing procedure available (Gas Chromatography/Mass Spectrometry, or CS/MS Test). In the event the confirmatory test is positive or an alcohol test and confirmatory test is positive, the employee shall be subject to the following:

Applicants: Applicants who refuse to take the drug/alcohol test or who have a confirmed positive test result shall not be hired.

Probationary Employees – Probationary employees who refuse to take the drug/alcohol test or who have a confirmed positive test result will be terminated for the first offense.

Non-Probationary Employees – Non-Probationary Employees who have a confirmed positive test result shall be handled as follows:

1. First Offense: The first offense shall result in a thirty (30) day suspension without pay. The employee shall be evaluated by a substance abuse professional (SAP). The employee must complete any treatment recommended by the SAP, take a return-to-duty test which must have a negative result, and be subject to a follow-up testing protocol for up to one year. If the return-to-duty test has a positive result, the employee shall be required to pay for the test, and the positive test result will be treated as a Second Offense. An employee shall be permitted to use accumulated paid leave for periods of treatment, if such treatment exceeds the thirty (30) day suspension.
2. **Second Offense:** Testing positive within three (3) years of the first positive test shall be grounds for termination. Employees who test positive three (3) or more years after the first positive test shall undergo a second rehabilitation program and return-to-duty test as set forth in paragraph (1) above, and shall be subject to unannounced follow-up drug and alcohol testing for at least twenty-four (24) months and a maximum of thirty-six (36) months.

3. This Section shall apply to CDL and Non-CDL Situations.

**TREATMENT PROGRAMS**

In addition to completing any in-patient treatment programs specified by the SAP, LCA shall recognize Alcoholics Anonymous and Narcotics Anonymous as bona fide outpatient treatment programs provided the SAP recommends it and the employee presents documentation that he/she attended at least (20) AA or NA meetings. Any other outpatient programs recommended by the SAP will be reviewed by the Human Resources Manager to determine appropriate documentation of successful completion.

**REFUSAL TO UNDERGO DRUG AND ALCOHOL TESTING**

Refusal to be tested shall result in a thirty (30) day suspension for a First Offense. A Second Offense within three (3) years will result in termination.

**MISCELLANEOUS**

Where an employee has engaged in conduct that is committed in conjunction with a drug or alcohol offense, which would otherwise subject the employee to discharge, the Employer may refuse to permit or accept participation in a rehabilitation program as an alternative for discipline, and retains the right to discipline the employee, up to and including termination of employment. If the employer discharges an employee for prohibited conduct, such discipline or discharge is grievable and arbitrable under the grievance and arbitration procedures of any collective bargaining unit agreement.

**DRUG DETECTION LEVELS**

The drug detection levels established below are subject to change based on Federal law for CDL drivers.

**Drug Detection Levels**
Initial screening: Detection sensitivities - ALL REPORTS ARE IN NG/ML

<table>
<thead>
<tr>
<th>DRUG</th>
<th>Non-CDL Testing: Applicants, Reasonable Suspicion &amp; Post-Accident</th>
<th>CDL (DOT) Testing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amphetamines</td>
<td>1000</td>
<td>1000</td>
</tr>
<tr>
<td>Barbiturates</td>
<td>300</td>
<td></td>
</tr>
<tr>
<td>Benzodiazepine</td>
<td>300</td>
<td></td>
</tr>
<tr>
<td>THC (marijuana metabolite)</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>DRUG</td>
<td>Non-CDL Testing: Applicants, Reasonable Suspicion &amp; Post-Accident</td>
<td>CDL (DOT) Testing</td>
</tr>
<tr>
<td>--------------------</td>
<td>-------------------------------------------------------------------</td>
<td>-------------------</td>
</tr>
<tr>
<td>Amphetamines</td>
<td>500</td>
<td>500</td>
</tr>
<tr>
<td>Methamphetamine</td>
<td>500</td>
<td>500</td>
</tr>
<tr>
<td>Barbiturates</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>Benzodiazepine</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>THC (marijuana metabolite)</td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td>Cocaine</td>
<td>150</td>
<td>150</td>
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<tr>
<td>Methadone</td>
<td>200</td>
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<tr>
<td>Opiates – Total</td>
<td>300</td>
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</tr>
<tr>
<td>Codeine</td>
<td>2000</td>
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<tr>
<td>Morphine</td>
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<tr>
<td>Phencyclidine</td>
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<td>25</td>
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<tr>
<td>Propoxyphene</td>
<td>300</td>
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<tr>
<td>Methaqualone</td>
<td>100</td>
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</tr>
</tbody>
</table>

**Confirmation by GC/MS: Detection sensitivities**

**ALCOHOL TESTING**

**Threshold**

.02 Alcohol Concentration *

* Alcohol Concentration refers to the concentration of alcohol in a person’s blood or breath. When expressed as a percentage, it means grams of alcohol per 100 milliliters of blood or grams of alcohol per 210 liters of breath.

Date: 10 November 2014
October 31, 2014

Mr. Edward Bielarski  
Financial Director  
Lehigh County Authority  
P.O. Box 3348  
Allentown, PA 18106-0348

RE: Annual Authority Audit Extension

Dear Mr. Bielarski:

Zelenkofske Axelrod LLC is writing this letter in the form of a contract to extend our audit services to Lehigh County Authority ("Authority") for the year ending December 31, 2014.

Our audit of Lehigh County Authority’s financial statements as of December 31 each year will be in accordance with generally accepted auditing standards as included in Statements on Auditing Standards published by the American Institute of Certified Public Accountants. GAO standards for audits of Governmental Organizations, Programs, Activities and Functions 1994 Revised Edition, GAO Guidelines for Financial and Compliance Audits of Federally Assisted Programs, the Single Audit Act Amendments of 1996, the revised Office of Management and Budget Circular A-133 (June 1997) and Audit of States Local Governments and Non-Profit Organizations.

The annual fees for these services will be as follows:

<table>
<thead>
<tr>
<th>Year</th>
<th>Financial and Single Audit</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>$42,500</td>
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</table>

The 2014 includes the audit of the City of Allentown Water and Sewer Utility System that increased the scope of the audit due to the acquisition.

If additional time is necessary (e.g., due to changes in professional standards, changes in laws and regulations, establishment of new funds, new federal or state programs, new bond issues, implementation of new GASB’s etc.), we will discuss it with you and arrive at a new fee estimate before we incur the additional costs.
If Lehigh County Authority accepts this contract to provide audit services for the year ending December 31, 2014 please indicate by signing the acknowledgment on the next page, and we will formalize the terms of our agreement in an engagement letter.

Thank you for the opportunity to present this contract to Lehigh County Authority, and we look forward to continuing our relationship with Lehigh County Authority.

If you have any questions, please call Patrick Kirk at (717) 561-9200 extension 5003.

Sincerely,

Zelenkofske Axelrod LLC

ZELENKOFSKY AXELROD LLC
ACKNOWLEDGMENT

Lehigh County Authority is in agreement with and accepts the above contract.

______________________________  ________________________
Signature                           Date

______________________________  ________________________
Signature                           Date

______________________________  ________________________
Signature                           Date

______________________________  ________________________
Signature                           Date
MEMORANDUM

Date: November 7, 2014

To: Board of Directors & Management Staff

From: Pat Mandes

Re: City Division Signatory Wastewater Flow Meters

Approvals Requested

<table>
<thead>
<tr>
<th>Approvals Requested</th>
<th>Brief Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professional Services Authorization (20)</td>
<td>Consulting Services - Arcadis</td>
<td>$33,000</td>
</tr>
</tbody>
</table>

Background

There are seven Signatory communities that discharge wastewater into the Kline’s Island Wastewater Plant (KIWTP). The wastewater is measured by Signatory owned flow meters and the data collected is utilized for:

- Billing the Signatories for wastewater processing;
- Current and unused allocation;
- To determine peak flows during wet weather events which indicate the severity of the I & I.

The City billable flow is determined by subtracting the total of the City Signatory flows from the total KIWTP influent flow.

It is important that all Signatory flow data truly represent the actual flow being processed by the City. Each Signatory must pay their fair share of the costs of KIWTP. Under-represented Signatory flows result in higher billable flows for the City since the City flows are measured by subtraction as noted above. Under-represented flows could result in being over the allowable allocation. Accurate peaks flows are important to determine how a Signatory is contributing to the peak wet weather issues and KIWTP bypasses, and will be used to assess whether a Signatory has satisfied their EPA Administrative Order.

Under the City Signatory agreements, each Signatory is responsible for installing, maintaining, and reading their flow meters. Calibration records must be submitted to the City annually. The City Compliance Office, created to provide oversight of the Concession Agreement with LCA, has inquired about the Signatory meter accuracy. It is in the best interest of LCA as operator of the City sewer system to ensure that the Signatory meters are reading accurately.

Project Scope

To ensure that the Signatory meters are reading accurately, Arcadis will assess 33 Signatory billing meter stations to make recommendations for improving meter accuracy through changes in meter locations, meter technology, data sampling rates and reporting practices. The work will include:

- Data review;
- Inspection of meter stations;
- Temporary metering data review (metering by TFE Resources - previously approved by Board);
- Recommendation report and workshop
PROFESSIONAL SERVICES AUTHORIZATION

Professional: Arcadis
Requested By: Pat Mandes
Date: 11/08/14
Approvals
Department Head: 
General Manager: 

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

Assess 33 Signatory billing meter stations to make recommendations for improving meter accuracy through changes in meter locations, meter technology, data sampling rates and reporting practices. The work will include:

- Data review including peak flow data;
- Inspection of meter stations;
- Temporary metering data review (metering provided by TFE Resources);
- Recommendation report and workshop

The scope of work is described in more detail in the proposal dated October 28, 2014.

Cost Estimate (not to be exceeded without further authorization): This authorization is not to exceed $33,000, based on hourly rates.

Time Table and Completion Deadline:
Six weeks following receipt of the temporary meter data and billing meter data.

Authorization Completion:
(For Authority Use Only)
Approval: ________________________________  Actual Cost: ______  Date: ______
Ms. Pat Mandes  
Wastewater Services Director  
Lehigh County Authority  
P.O. Box 3348  
Allentown, PA  18106

Subject:  
Scope and Budget for Evaluation of Allentown Billing Meter Stations

Dear Ms. Mandes:

ARCADIS is pleased to provide Lehigh County Authority (LCA) with this scope and budget for review, assessment and recommendations for improvements to the Allentown billing meter stations.

OBJECTIVES

The primary goal of this work is to assess 33 billing meter stations to make recommendations for improving meter accuracy through changes in meter location, meter technology, data sampling rates, and reporting practices. ARCADIS will partner with FloData, retained independently by LCA, to conduct this work.

SCOPE OF WORK

Task 1 – Data Review

ARCADIS will review available samples of billing meter reports and up to two months of recent flow data from for up to 33 billing meter stations. FloData will review meter certification records.

Task 2 – Inspect Meter Stations

ARCADIS will visit the 33 billing meter stations to evaluate the location, equipment and flow conditions. It is our expectation that these visits will be made with the personnel responsible for certifying the billing meter stations. We will conduct these visits as part of a team with staff from FloData.

Task 3 – Temporary Metering Data Review

Temporary flow meters will be installed by others under contract to LCA for flow monitoring activities in the locations previously used LCA. This temporary metering study will provide independent flow data for further quality assurance (QA) purposes. It is our assumption for scoping and budgeting purposes that all 33 meter stations will
require this additional QA metering. No independent evaluation of location will be attempted, and it is expected that the meters will be installed concurrent with Tasks 1 and 2. It is our expectation that the metering will be conducted for 4 weeks and will capture at least one, though preferably two, half-inch or larger rainfall storms. Upon completion of the flow metering, ARCADIS will analyze the data and compare the temporary meter data to the billing meter data collected during the same time period and performing hydrograph analysis on both datasets, including comparison of peak flows.

**Task 4 – Recommendations Report and Workshop**

ARCADIS will work with FloData to prepare a report summarizing findings from the preceding tasks. Included will be recommendations for improvements to the billing meter stations, considering such options as location, meter technology, data sampling rates, and reporting practices. A key recommendation will be considering what changes can be made to these meter sites to facilitate Administrative Order compliance monitoring, especially regarding the collection of accurate flow recordings during significant wet weather events. The recommendations will be prioritized based on the degree of impact to the metering quality and relative cost of implementation. ARCADIS will co-present these findings in a workshop meeting with FloData at LCA.

**SCHEDULE**

Existing data review, meter station inspections, and recommendations for temporary flow metering will be completed within 6 weeks following receipt of both temporary meter data and billing meter data for the corresponding period.

**BUDGET ESTIMATE**

<table>
<thead>
<tr>
<th>Task</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Task 1 – Existing Data Review</td>
<td>$9,000</td>
</tr>
<tr>
<td>Task 2 – Inspect Meter Stations</td>
<td>$7,000</td>
</tr>
<tr>
<td>Task 3 – Temporary Metering Data Review</td>
<td>$9,000</td>
</tr>
<tr>
<td>Task 4 – Recommendations Report and Workshop</td>
<td>$8,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$33,000</strong></td>
</tr>
</tbody>
</table>

We propose to complete these services on a time and materials basis in accordance with the Agreement between LCA and Malcolm Pirnie, Inc., dated June 17, 1997,
and the current Summary of Standard Charges for Lehigh County Authority. We will not exceed this budget without prior authorization from LCA. Payment for services will be based upon the actual labor and expenses incurred.

Please contact me with your authorization to proceed if this scope and budget are acceptable to you. If you have any questions please do not hesitate to call me at 484-688-0367.

Sincerely,

ARCADIS U.S., Inc.

James W. Shelton, PE
Vice President

C: Tony Dill, ARCADIS
   Tanya McCoy-Caretti, ARCADIS
MEMORANDUM

Date: November 10, 2014

To: Aurel M. Arndt, C.E.O.
From: Phil DePoe, Frank Leist
Subject: Allentown Division

Manhole Chimneys (i.e. Methodologies of Affixing Frame and Covers to Brick Sanitary Sewer Manholes) – Construction Phase

MOTIONS / APPROVALS REQUESTED:

<table>
<thead>
<tr>
<th>No.</th>
<th>Item</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Capital Project Authorization Amendment No. 1 – Construction Phase</td>
<td>$146,254</td>
</tr>
<tr>
<td>2</td>
<td>Professional Services Authorization Amendment No. 1 – Construction Phase: Barry Isett &amp; Associates (*)</td>
<td>$18,056</td>
</tr>
<tr>
<td>3</td>
<td>Contract Awards – Construction: XX (*)</td>
<td>$99,050</td>
</tr>
</tbody>
</table>

(*) Included in the Capital Project Authorization.

PROJECT OVERVIEW:
This project will install a frame and cover anchoring system for approximately 57 aged brick manholes identified by previous City staff. The selected anchoring systems are intended to eliminate sewage overflows during high flow events. In addition, all manholes for this project will receive new bolt down frames if not installed.

FINANCIAL:
The project is identified as Administrative Order Work and will be funded by the City.

PROJECT STATUS:
In accordance with the Lease Agreement, the City is responsible for determining what Administrative Order (AO) work is to take place, and LCA is responsible to execute said work. The design phase of this project was previously authorized by LCA.

The project was advertised for bid on October 25, 2014. A pre-bid meeting was held on October 29, 2014. Bids were received on November 6, 2014.

THIS APPROVAL: CONSTRUCTION PHASE

BIDDING SUMMARY: CONSTRUCTION CONTRACT:
This project requires a General Construction Contract. The bidding results, which reflect the Base Bid, are as follows:

<table>
<thead>
<tr>
<th>Contractor</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Joao &amp; Bradley</td>
<td>$99,050</td>
</tr>
<tr>
<td>Pioneer Construction</td>
<td>$99,666</td>
</tr>
</tbody>
</table>
References checks for the low bidder, Joao & Bradley, have identified no issues. Therefore, we recommend awarding the General Construction to Joao & Bradley subject to receipt of the necessary Performance Bonds, Insurance and other required documentation.

**PROFESSIONAL SERVICES:**
Barry Isett and Associated will provide construction administration phase services and inspection phase services.

**PROJECT SCHEDULE:**
Assuming approval of the Construction Phase at the November 10, 2014 Board Meeting, Notice to Proceed will be issued mid-November 2014 with an estimated completion date of mid-January.

**FUTURE AUTHORIZATIONS:**
None anticipated.
CAPITAL PROJECT AUTHORIZATION

PROJECT NO.: AD-S-14-4  BUDGET FUND: Allentown Div/Wastewater/Capital

PROJECT TITLE: Allentown Division Manhole Chimneys - Construction Phase

THIS AUTHORIZATION: $146,254
TO DATE (W/ABOVE): $190,000

PROJECT TYPE:
☒ Construction
☐ Engineering Study
☐ Equipment Purchase
☐ Amendment No. 1

DESCRIPTION AND BENEFITS:
This project will install a frame and cover anchoring system for approximately 57 aged brick manholes identified by previous City staff. Previous City staff installed five diameter/four feet deep concrete collars to anchor the frame and cover to approximately 30 manholes. The selected anchoring systems are intended to eliminate sewage overflows during high flow events. In addition, all manholes for this project will receive new bolt down frames if not installed. The design phase of this project was previously authorized. The project is identified as Administrative Order Work and will be funded by the City. The project is anticipated to be complete by January 2015. Please reference the cover Memo for additional information.

Authorization Status:

<table>
<thead>
<tr>
<th>Previous Authorizations</th>
<th>$43,746</th>
</tr>
</thead>
<tbody>
<tr>
<td>REQUESTED THIS AUTHORIZATION</td>
<td></td>
</tr>
<tr>
<td>Construction Phase</td>
<td></td>
</tr>
<tr>
<td>Staff</td>
<td>$10,000</td>
</tr>
<tr>
<td>Professional Services</td>
<td>18,056</td>
</tr>
<tr>
<td>General Construction Contract</td>
<td>99,050</td>
</tr>
<tr>
<td>Miscellaneous (1)</td>
<td>9,148</td>
</tr>
<tr>
<td>Contingencies</td>
<td>10,000</td>
</tr>
<tr>
<td><strong>Total This Authorization</strong></td>
<td><strong>$146,254</strong></td>
</tr>
</tbody>
</table>

(1) This project will be funded by the City - the intent is to utilize a total sum of $190,000. The City will provide authorization to line additional manholes if necessary to reach their targeted budget goal. Miscellaneous reflects monies allocated to add additional manholes to the General Construction Contract as directed by the City.

Review and Approvals:

<table>
<thead>
<tr>
<th>Project Manager</th>
<th>Date</th>
<th>Chief Executive Officer</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chief Capital Works Officer</td>
<td>Date</td>
<td>Chairman</td>
<td>Date</td>
</tr>
</tbody>
</table>
Allentown Division – Manhole Chimneys (i.e. Methodologies of Affixing Frame and Covers to Brick Sanitary Sewer Manholes) – Construction Phase

Barry Isett & Associates (BIA) will perform the construction administration and inspection phase services for MH Frame and Cover Project (affixing frame and covers for approximately 57 brick sanitary sewer manholes in the City of Allentown).

<table>
<thead>
<tr>
<th>Professional Services (1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Provide construction administration phase services</td>
</tr>
<tr>
<td>2. Provide inspection phase services.</td>
</tr>
</tbody>
</table>

(1) For Construction Phase Only.

Please reference the cover Memo for additional information.

Previous Authorization – Design Phase:
Cost Estimate (not to be exceeded without further authorization): $18,746

This Authorization – Construction Phase:
Cost Estimate (not to be exceeded without further authorization): $18,056

Cost Estimate (not to be exceeded without further authorization): $36,802

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