



**LCA Main Office:**  
1053 Spruce Road  
Wescosville, PA 18106  
610-398-2503

**Agendas & Minutes Posted:**  
[www.lehighcountyauthority.org](http://www.lehighcountyauthority.org)

## LEHIGH COUNTY AUTHORITY

Published: February 5, 2024

### BOARD MEETING AGENDA – February 12, 2024 – 12:00 p.m.

**In-Person or Virtual Meeting Attendance Options Available:** Meetings of the LCA Board of Directors will be held at LCA's Main Office as well as online using the Zoom Meetings application, which includes a telephone option. Public participation is welcomed both in-person or virtually. Instructions for joining the meeting online or by phone are posted on the LCA website in the morning on the day of the meeting, prior to the start of each meeting. You may also issue comment to LCA via email to [LCABoard@lehighcountyauthority.org](mailto:LCABoard@lehighcountyauthority.org) in advance of any meeting or view the meeting at a later time by visiting the LCA website. Please visit <https://www.lehighcountyauthority.org/about/lca-board-meeting-videos/> for specific instructions to join the meeting if you are attending virtually. If attending in-person at LCA's Main Office, please follow all safety and sanitation protocols posted.

#### 1. Call to Order

- **NOTICE OF MEETING RECORDINGS**

Meetings of Lehigh County Authority's Board of Directors that are held at LCA's Main Office at 1053 Spruce Road, Wescosville, PA, may be recorded for viewing online at [lehighcountauthority.org](http://lehighcountauthority.org). Recordings of LCA meetings are for public convenience and internal use only and are not considered as minutes for the meeting being recorded, nor are they part of public record. Recordings may be retained or destroyed at LCA's discretion.

- *Public Participation Sign-In Request*

#### 2. Review of Agenda / Executive Sessions

- Additions to Agenda (vote required if action will be taken)

#### 3. Approval of Minutes

- *January 22, 2024 Board Meeting minutes*

#### 4. Public Comments

#### 5. Action / Discussion Items:

#### **FINANCE AND ADMINISTRATION**

- *Authorization for Additional Legal Action Regarding PFAS Litigation*

#### **WATER**

#### **WASTEWATER**

- *Legal Services: Development of New Intermunicipal Agreement(s) (Approval) (**ivory**) (digital Board packet, pages 7-40)*
- *KISS Relief Interceptor Pre-Design Study (Approval) (**gray**) (digital Board packet, pages 41-61)*
- *Arcadia WWTP Screening System Project (Approval) (**green**) (digital Board packet, pages 62-65)*
- *Kline's Island WWTP: Secondary Digester Cleaning (Approval) (**blue**) (digital Board packet, pages 66-71)*

#### 6. Monthly Project Updates / Information Items (1<sup>st</sup> Board meeting per month) (digital Board packet, pages 72-82) – **February 2024 report attached**

#### 7. Monthly Financial Review (2<sup>nd</sup> Board meeting per month)

8. Monthly System Operations Overview (2<sup>nd</sup> Board meeting per month)
9. Staff Comments
10. Solicitor's Comments
11. Public Comments / Other Comments
12. Board Member Comments
13. Executive Sessions
14. Adjournment

| UPCOMING BOARD MEETINGS |                |                |
|-------------------------|----------------|----------------|
| February 26, 2024       | March 11, 2024 | March 25, 2024 |

#### 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. During the Public Comment portions of 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**

### **January 22, 2024**

The Regular Meeting of the Lehigh County Authority Board of Directors was called to order at 12:00 p.m. on Monday, January 22, 2024, Chairman Brian Nagle presiding. The meeting was hybrid via in-person and video and audio advanced communication technology ("ACT"), using the Zoom internet application, including telephone option. Each Board member and other attendees of the meeting were able to hear each other attendee and be heard by each other attendee. The public could also participate in the meeting in-person or via ACT, using the Zoom internet application, including telephone option. A Roll Call of Board members present was taken. Brian Nagle, Amir Famili, Linda Rosenfeld, Norma Cusick, Kevin Baker, Jeff Morgan, and Sean Ziller were present for Roll Call, and remained for the duration of the meeting. Ted Lyons entered the meeting at 12:02 p.m.

Attorney Kevin Reid, the Authority's Solicitor, was present along with Authority Staff, Liesel Gross, Ed Klein, Chris Moughan, Andrew Moore, AJ Capuzzi, Phil DePoe, Chuck Volk, and Lisa Miller.

Chairman Nagle announced that the Board received their electronic and hard copies of the Board packet in advance. He then asked if anyone did not receive their copy of the packet. A copy of the packet is also available online.

### **REVIEW OF AGENDA**

Liesel Gross announced that there are no changes to the agenda; however, she noted that the monthly financial report for December 2023 will be provided at a meeting in February. Also, an Executive Session is planned after the regular meeting to discuss a personnel matter.

### **APPROVAL OF MINUTES**

#### **January 8, 2024 Meeting Minutes**

On a motion by Linda Rosenfeld, seconded by Sean Ziller, the Board approved the minutes from the January 8, 2024 meeting as presented (7-0). Brian Nagle abstained.

### **PUBLIC COMMENTS**

None.

#### **Resolution No. 1-2024-2: Allentown Water & Sewer Lease Bond Refinancing**

Liesel Gross introduced Chris Gibbons of Concord Public Financial and Tim Horstmann of McNees, Wallace & Nurick, LLC to assist with the presentation and assist with any questions. Ed Klein gave a presentation that provided an overview and goals of the bond refinancing. The refinancing will provide interest savings, extend the maturity of the refunding debt to a more manageable level, and also provide \$55 million for capital projects. The savings realized for the refinancing is approximately \$2.6 million.

There was some Board discussion regarding federal rates and the impact it will have on the refinancing if those rates change.

Mr. Gibbons noted that the Authority will have an additional \$200 million of borrowing capacity for the future if needed. Liesel Gross commented that as the regional Act 537 Plan is being finalized, it is good to know that the additional borrowing capacity is available.

There was a brief discussion regarding arbitrage and how it works.

Solicitor Kevin Reid reviewed the Resolution, explaining that the Board is being asked to authorize the bond financing within certain parameters related to interest rates and debt service savings, to authorize the preparation of certain required documents for the financing, and to appoint officers who will be authorized to execute the documents associated with the financing.

On a motion by Norma Cusick, seconded by Amir Famili, the Board adopted Resolution No. 1-2024-2 (8-0)

A roll call vote was taken, with the following votes cast:

Brian Nagle – yes  
Amir Famili – yes  
Ted Lyons – yes  
Linda Rosenfeld – yes  
Norma Cusick – yes  
Kevin Baker – yes  
Jeff Morgan – yes  
Sean Ziller – yes

#### **Water Filtration Plant: Emergency Power Design**

Amy Rohrbach described the need to increase power reliability at the Water Filtration Plant (WFP) to avoid a power failure. Power to the WFP is currently fed by two electrical power feeds from the same PPL substation called the Central Allentown Substation. An Emergency Power Feasibility Study was conducted by Keystone Engineering in 2023 and recommended several options. The most cost-effective option is to add a PPL service line from the Mack Substation located south of the WFP. Once the new line is established, one of the redundant lines from the Central Allentown Substation will be removed.

There was some discussion regarding the redundancy of power to the WFP, the overall cost estimate of the project, and the cost of other alternatives that had been evaluated. Amy Rohrbach explained the feasibility study completed in 2023 also evaluated the option to install on-site back-up power generators at the WFP, and this option was discarded due to the high price and long lead times to receive equipment.

On a motion by Sean Ziller, seconded by Linda Rosenfeld, the Board approved the Capital Project Authorization for Design and Bidding Phase Services in the amount of \$67,212.00, which includes a Professional Services Authorization to Keystone Engineering Group in the amount of \$57,212.00 (8-0).

#### **Kline's Island WWTP – Septage Receiving and Vacuum Truck Unloading Modifications**

Amy Rohrbach described the current septage unloading station, which is located at the bottom of the access roadway ramp at the entrance of the Wastewater Treatment Plant. This location causes traffic obstruction issues as well as cleanup duties during any spills, which occur occasionally as a result of the current station design and condition. The proposed project will optimize and modernize the site, improve site safety and traffic flow, and allow for more efficient handling of the septage received. She reviewed the bids that were received, which included both a base bid and an alternate bid to include additional paving services. The same bidder provided the lowest bid for the base bid and the alternate, and the Authority recommends including the alternate paving work into the project.

Amir Famili asked if the Authority is generating revenue from the waste hauler program that would support the financial justification for the project. Andrew Moore stated that the revenue is

approximately \$70,000 to \$80,000 per year. He added that the current unloading location is very inconvenient for the staff and poses safety concerns as well due to the location of the station within the traffic flow pattern at the facility. He noted that the Authority maintenance crew uses the station very frequently as a location to unload materials collected from the sewer vacuum truck operation.

There was additional discussion regarding the location of the new station, to ensure no conflicts with future projects at the facility.

There was some discussion about the broad range of bids received. Amy Rohrbach explained that she did review the project in detail with the low bidder and is satisfied that the bid is complete.

On a motion by Norma Cusick, seconded by Jeff Morgan, the Board approved the Capital Project Authorization for the Construction Phase in the amount of \$442,027.00, which includes the Professional Services Authorization for Construction Engineering and Administration Services to D'Huy Engineering Inc. in the amount of \$54,700.00 and the General Construction Contract Award to PSI Pumping Solutions, Inc. in the amount of \$362,327.00 (8-0).

### **MONTHLY SYSTEM OPERATIONS OVERVIEW**

Andrew Moore reviewed the December 2023 report and reported on the three safety incidents in December. Water production has slightly decreased, and wastewater has significantly increased due to the 8.6 inches of rain received. There was one Notice of Violation for non-payment of the Chapter 302 Water and Wastewater Operator Certification Service Fee. Mr. Moore explained that he is working on getting this rescinded because the permit is for a new pump station that is not yet installed. A complete description of bypasses and sanitary sewer overflows for the month of December was provided and reviewed. Most of the incidents were due to the wet weather. There was some Board discussion regarding the December 2023 safety incidents. Chairman Nagle stated he appreciates the extra details now included in the monthly report.

### **STAFF COMMENTS**

Liesel Gross acknowledged Andrew Moore and his team and Chris Moughan and his team for keeping the systems up and running during the challenging weather patterns over the past couple of months. She also acknowledged that Kevin German will be retiring next month after almost 45 years of dedicated service to the Authority.

### **SOLICITOR'S COMMENTS**

None.

### **PUBLIC COMMENTS / OTHER COMMENTS**

None.

### **BOARD MEMBER COMMENTS**

None.

### **EXECUTIVE SESSION**

There will be an Executive Session at 1:13 p.m. to discuss a personnel matter.

### **ADJOURNMENT**

There being no further business, the Chairman adjourned the meeting at 1:03 p.m.

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Linda A. Rosenfeld  
Secretary

## MEMORANDUM

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**TO:** LCA Board of Directors  
**FROM:** Liesel Gross, CEO  
**DATE:** February 5, 2024  
**RE:** Legal Services Authorization – Kline’s Island Sewer System

**Attached:** Salzmann Hughes Proposal

### Background

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The Kline’s Island Sewer System (KISS) is a regional sewer system serving 15 communities in Lehigh County, PA. Since the 1950s, the municipalities have been working together to provide sewer service to their residents and businesses, and a series of intermunicipal agreements have governed the administration of the system including how costs are shared among the municipalities. More than 70 agreements have been written over this time period, many of which remain in force in whole or in part, and they may include certain terms and procedures that are no longer relevant in today’s regulatory environment. Further, the agreements do not provide adequate guidance on how certain large capital improvements should be addressed from a financial perspective. Current billing methods for sewer service are complex and not well understood by the current generation of municipal leaders. This creates additional challenges with rate transparency and trust.

The KISS municipalities are currently working under a regulatory requirement by the Pa. Department of Environmental Protection (DEP) to complete a regional Act 537 Plan to address historical challenges with hydraulic overloads, sanitary sewer overflows, and capacity for new connections. The process of developing engineering solutions is nearing completion, and the KISS municipalities have begun contemplating the need for updated cost-sharing mechanisms for the new projects outlined in the plan. As a necessity of developing new cost-sharing arrangements, a new intermunicipal agreement (or agreements) will be required.

More than 70 historical intermunicipal agreements exist today. Prior adjustments to the agreements have been addressed through a mix of addenda and/or new agreements that reference terms in the old agreements that remain in force.

Current agreements are broken into subsets, or groupings of agreements based on the municipalities to which the agreements apply. For example (not an all-inclusive list):

- “1981” Agreement – current master agreement that addresses cost sharing and other factors between the City of Allentown and five of KISS municipalities or municipal authorities.
- “Western Lehigh” Agreement(s) – a set of agreements related to cost-sharing and other factors between Lehigh County Authority (LCA) and seven of the KISS municipalities.
- “Emmaus” Agreement – separate agreement related to cost sharing and other factors between the City of Allentown and the Borough of Emmaus.

Generally, the KISS municipalities would prefer one new master agreement, or multiple new master agreements if needed vs. creating an addendum to historical agreements. However, some municipalities may also prefer to retain specific provisions of the historical agreements that they feel are beneficial to their municipality.

### **Current Status & Schedule**

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Since August 2023, a team from the utility consulting firm Raftelis has been working with the KISS municipal managers to openly discuss the strengths and weaknesses of the current cost-sharing arrangements, and to develop ideas for future cost-sharing. While no conclusions have been reached at this time, there is general consensus that the Raftelis analysis shows the current highly complex process can be simplified, which is a desired goal of the municipalities. Additional financial analysis is required, and more concrete conclusions are expected to be reached in the first quarter of 2024.

Based on the progress made to date on developing cost-sharing scenarios that may be agreeable to the KISS municipalities, it was determined that the appropriate next step would be to engage a law firm to support a more detailed review of the necessary terms of a new agreement (or agreements) so that additional analysis can be completed. It is unlikely that the legal review and development of intermunicipal agreement(s) will be completed by September 2024, the target date for completion of the Act 537 Plan. However, it is expected that adequate progress can be made to support finalizing the Act 537 Plan for municipal and regulatory review. Finalization of the intermunicipal agreement(s) must be completed prior to submitting regulatory permit applications for new projects that may be included in the Act 537 Plan, the first of which is anticipated to be prepared in early 2026. With this in mind, commencing work on the intermunicipal agreement(s) now is advisable to allow up to two years of time for negotiation, preparation of documents, and municipal adoption.

### **Legal Services**

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Through discussion with the City of Allentown and the KISS municipal managers, several law firms were considered to provide support to the region to develop new intermunicipal agreements. Key factors considered included:

- Avoiding conflicts of interest with any of the KISS municipalities or LCA
- Location and availability for in-person meetings
- Demonstrated experience in the specific practice area related to developing multi-municipal agreements in the water/sewer sector
- Secondly, experience in regulatory matters related to environmental law and Act 537 planning

These considerations narrowed the field of available law firms considerably, and two law firms were pre-qualified and invited to submit proposals. The KISS municipal managers, including LCA and the City of Allentown, met with Salzmans Hughes on January 18, 2024 to review their qualifications and proposal (attached). Following receipt of adequate responses to the questions raised during that interview, the group expressed consensus to retain Salzmans Hughes to provide legal services to the KISS group for the purposes of jointly negotiating and drafting a new intermunicipal agreement (or agreements). It should be noted that their rate proposal of \$200 per hour for shareholders, \$190 per hour for associates and



principals, and an hourly rate of \$125 per hour for paralegals, law clerks, and project managers is highly competitive and compares favorably with other rates paid for specialized legal services.

**Authorization Requested**

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At the February 12, 2024 LCA Board meeting, authorization will be requested for the Chief Executive Officer, or her designee, to execute the engagement letter with Salzmann Hughes contained in the proposal. Legal expenses will be paid via reimbursement from the City of Allentown’s Administrative Order fund, through LCA coordination with the City.



**January 15, 2024**

**Proposal**  
**To Provide Legal**  
**Counsel Services**

**SALZMANN**  
**HUGHES, P.C.**  
*Attorneys at Law*  
EXPERIENCE • INTEGRITY • INNOVATION

**PREPARED FOR:**  
Lehigh County Authority  
1053 Spruce Road  
PO Box 3348  
Allentown, PA 18016

**PREPARED BY:**  
Salzmann Hughes, P.C.  
1801 Market Street | Suite 300  
Camp Hill, PA 17011



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## I. EXECUTIVE SUMMARY

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Salzmann Hughes, P.C. is pleased to submit this proposal for legal services to the Lehigh County Authority (“LCA”) in response to the Preliminary Scope of Work – Legal Services issued by LCA regarding the Kline’s Island Sewer System (“KISS”) – Intermunicipal Agreement Preparation.

When Salzmann Hughes was founded in 1995, we sought to provide common sense solutions to clients with experience, integrity, and innovation. While the firm has grown significantly over the last 25 years to include five southcentral PA locations and nearly 60 employees, that focus has not changed. Today, our team applies those values serving as legal counsel to over 100 Pennsylvania municipalities and government entities.

We understand that LCA seeks legal services for intermunicipal sewer agreement negotiations, and LCA intends to negotiate either a single master agreement or multiple master agreements among and between the 15 municipalities served by KISS. We also understand that there are more than 70 legacy agreements currently in place that date back as far as 1981, and LCA now seeks to negotiate said new agreement or agreements to update prior agreements’ terms and address new issues that have arisen since those prior agreements were executed.

Salzmann Hughes is uniquely well-equipped to assist LCA in this process. Representation of LCA in this matter will necessarily involve researching prior agreements and related issues, reviewing and assessing Act 537 Sewage Facilities Plans, NPDES Part 1 Permits, and WQM Part 2 permits and conditions, leading negotiations between LCA and the KISS municipalities, evaluating proposals and options, and assisting LCA in obtaining any engineering or other professional services necessary to ensure that all parties obtain fair and equitable terms under the new agreement or agreements.

We negotiate intermunicipal wastewater agreements by first thoroughly interviewing the clients and their knowledgeable staff and consultants to determine their goals and objectives for the desired contractual arrangement. We would then work closely with LCA and each KISS municipality’s Solicitor, public works department, management, and technical staff to develop a full understanding of the system’s operational concerns (treatment and collection). A review of applicable permits, regulatory issues regarding point of delivery, past accounting and payment procedures, and infrastructure status in light of potential present and future capital costs would be necessary to prepare for the negotiations. Creating a draft strategy and conceptual goals and objectives developed from the group’s perspective before negotiations begin is an important step in setting the proper expectations for negotiations with the KISS municipalities.

We are highly and specifically qualified to perform this work because of our attorneys’ experience in this specialized area of law for several similarly-situated entities. Over the course of multiple representations, we have guided hundreds of municipalities through the entire process of negotiating intermunicipal agreements, including providing related regulatory guidance and leading municipalities through successful litigation and Environmental Hearing Board (“EHB”) appeals. By way of example, the Wyoming Valley Sanitary Authority and 31 surrounding communities have benefited from our work in establishing a sizeable joint authority to address stormwater management. We have assisted the City of Scranton, Capital Region Water, the City



of York, and numerous other municipal entities and communities in establishing and maintaining similar relationships, and are currently guiding the City of Lock Haven through a complex sewer service agreement negotiation with its neighboring communities.

Through these representations and similar efforts throughout the Commonwealth, we have accumulated a repository of intermunicipal agreements on file that will allow for more efficient preparation of a new agreement or agreements for LCA and the KISS municipalities. Further, we have developed a broad base of knowledge regarding how municipalities throughout the Commonwealth handle intermunicipal agreements for sewer service, and an understanding of what particular terms often lead to disputes. We have become adept at crafting these terms with a mind toward fairness toward all parties and avoiding future litigation when at all possible. Having represented municipal clients who own wastewater treatment plants as well as clients who contribute flow from collection systems to another municipality's wastewater treatment plant, we understand the particular concerns of each and can anticipate their likely bargaining objectives.

We are cognizant of and experienced in infiltration and inflow ("I&I"), wastewater loading, surcharge calculations, tapping fee sharing arrangements, capital contributions, and other matters normally addressed in intermunicipal agreements. We understand the benefits and pitfalls associated with such issues and seek to work on gaining consensus among LCA and the KISS municipalities to address such concerns in a fair and equitable manner. We strive to be consensus builders.

Our team is also well-versed in the complex regulatory scheme in which wastewater authorities function. We are intimately familiar with NPDES and WQM permitting, Act 537 Planning, Chapter 94 issues, and other complex water and wastewater regulatory issues impacting authorities. We offer a wealth of experience negotiating complex water and sewer agreements with developers, neighboring municipalities, or even Federal or Commonwealth agencies. Although our firm has achieved success on behalf of its clients in many high-profile cases before federal, state, local, and administrative bodies, we pride ourselves in our ability to work cooperatively with DEP or negotiate with others to resolve environmental issues in a cost-effective and responsible manner without resorting to litigation. We have worked hard to build positive relationships within DEP, including each of the regional offices and the decision makers in Harrisburg, to best assist our clients when the need arises. We have successfully negotiated consent orders and consent assessments of civil penalties with DEP that provided favorable outcomes in difficult circumstances. These positive relationships have led to several of our attorneys serving on workgroups formed by DEP for hot-button regulatory issues.

The lead attorney that will serve as Special Counsel to the Authority is Shareholder, E. Lee Stinnett II. Providing primary support to Lee is Shareholder, Isaac P. Wakefield; and Associate, Luke X. Gibson. These attorneys are well-qualified to represent LCA in its negotiations, having negotiated a number of complex inter-agency agreements such as multi-municipal service agreements, consent orders, non-standard operating agreements, formal written contracts, and joint service(s) agreements. They have extensive experience in intermunicipal negotiations regarding sewer services, preparation and execution of intermunicipal agreements, and the evaluation of legal issues related to the services, including Pennsylvania Public Utilities Commission jurisdiction, Pennsylvania Department of Environmental Protection and United States Environmental

Protection Agency involvement with discharge limitations. Through negotiated intergovernmental agreements, they have helped many clients across the Commonwealth lower their costs, eliminate redundancy, and enjoy the benefits afforded through economies of scale. Further, their general representation of municipalities as Solicitor has given them a thorough understanding of the workings of local governments and made them uniquely well-prepared to communicate effectively with municipal managers, solicitors, engineers, and elected officials. They also have extensive experience speaking at public municipal meetings and executive sessions and gaining consensus on proposed courses of action.

The firm proposes to offer its services at a competitive hourly rate structure and is willing to work to establish alternative fee structures that meet the Authority's needs and budget. Services will be provided primarily by Salzmann Hughes, P.C.'s Camp Hill office at 1801 Market Street, Ste 300, Camp Hill, PA 17011. Our team can be reached at our Camp Hill office at (717) 234-6700.

In summary, Salzmann Hughes attorneys are familiar with negotiating intermunicipal agreements and engaging in Act 537 planning and are uniquely qualified to address these issues. We look forward to meeting with you to discuss this proposal and answer any questions that may arise.

### A. References

Below are 3 references from municipal authorities of like-size which can attest to the high quality, cost-effective, and timely manner of our municipal legal services.

Swatara Township Authority  
**Melissa DiSanto Castellano**, *Executive Director*  
Phone: (717) 418-1096  
595 Eisenhower Blvd.  
Harrisburg, PA 17111

Wyoming Valley Sanitary Authority  
**Samuel T. Guesto, Jr.**, *Board Chairman*  
Phone: (570) 825-1271  
179 S. Wyoming Avenue  
Kingston, PA 18704

Williamsport Municipal Water Authority & Williamsport Sanitary Authority  
**Michael D. Miller**, *Executive Director*  
Phone: (570) 323-6148  
253 West Fourth Street  
Williamsport, PA 17701

## II. DETAILED PROPOSAL

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### A. Personnel

All 29 of Salzmann Hughes, P.C.'s attorneys are licensed to practice law in the Commonwealth of Pennsylvania and are members of the Bar in good standing.

### B. Staffing Plan

#### **Salzmann Hughes, P.C. attorneys assigned to the Lehigh County Authority:**

The lead attorney assigned to the Authority as Special Counsel is Shareholder, E. Lee Stinnett II. Providing primary support with Lee is Shareholder, Isaac P. Wakefield; and Associate, Luke X. Gibson. In addition to the listed attorneys, Salzmann Hughes, P.C. also has a team of support attorneys and staff across five locations who are experienced in the relevant subject matter and will aid as needed.

### C. Qualifications and Experience

While resumes are included in Appendix I, a brief description of the relevant professional experience of the attorneys assigned to the Authority team is below.

Professional assigned to the Authority and individual responsible for the preparation of this proposal:

#### **E. Lee Stinnett II**



Lee has been practicing law for over a decade, focusing nearly exclusively on municipal law and practice. His practice includes complex land use matters, general municipal law, and environmental matters. Lee has represented municipalities and municipal authorities throughout the Commonwealth in complex regulatory matters. Lee has been active in representing point-source dischargers with TMDL and Chesapeake Bay regulatory requirements and sits on several Bay-related Pennsylvania Department of Environmental Protection ("DEP") work groups. Lee has also been at the forefront of the development and implementation of MS4 programs across the Commonwealth. Lee serves as Solicitor to numerous municipal entities and serves as special counsel to municipal entities throughout Pennsylvania. Lee's leadership in environmental regulation is recognized by municipalities and regulators, and Lee has spoken many times throughout Pennsylvania on the topic. Notably, Lee delivered a presentation entitled "Modernizing Intermunicipal Agreements & Practices to Reflect Today's Regulatory and Legal Landscape" at a conference of the Pennsylvania Municipal Authorities Association, and has taught seminars across the Commonwealth regarding negotiation of intermunicipal agreements and Act 537 planning. Lee's resume is included in Appendix I.

### Isaac P. Wakefield



Isaac has been practicing law for over 10 years and has represented municipal entities since joining Salzmänn Hughes, P.C. in 2013. He has hands-on experience in litigation involving a variety of municipal matters, including appellate cases. General municipal matters are also a significant portion of Isaac's practice, and he provides legal counsel regarding a range of matters to various municipalities and authorities. His daily involvement with municipal legal issues allows him to help solve problems quickly, efficiently, and practically. Isaac regularly appears in state and federal trial and appellate courts, as well as before several administrative agencies. He is the firm's leader in appellate procedure. Isaac's resume is included in Appendix I.

### Luke X. Gibson



Luke is an Associate at Salzmänn Hughes, P.C., where he concentrates his practice in Municipal Law and General Litigation. Luke earned a Bachelor of Arts, *cum laude*, in 2019 from Franklin & Marshall College in Lancaster, Pennsylvania, where he majored in Government. He then earned a J.D. from Penn State Dickinson Law in 2022. While in law school, Luke was an Articles Editor on the Dickinson Law Review. He joined Salzmänn Hughes in 2022 after completing several internships at the Dauphin County Court of Common Pleas, the Administrative Office of Pennsylvania Courts (AOPC), and several law firms in central Pennsylvania. Luke's resume is included in Appendix I.

## D. Contact Information

The contact information for members of the team from our Camp Hill office, which is the office that will provide most of the legal services to the Authority, is provided below. Salzmänn Hughes, P.C. has five convenient offices located in the southcentral region of the Commonwealth of Pennsylvania, including Camp Hill, Cumberland County; Carlisle, Cumberland County; Chambersburg, Franklin County; Gettysburg, Adams County; and Hanover, York County.

Salzmänn Hughes, P.C.  
1801 Market Street, Ste 300  
Camp Hill, PA 17011

Phone: (717) 234-6700  
Fax: (717) 249-7334

Attn: E. Lee Stinnett II\*  
[lstinnett@salzmannhughes.com](mailto:lstinnett@salzmannhughes.com)

Isaac P. Wakefield  
[iwakefield@salzmannhughes.com](mailto:iwakefield@salzmannhughes.com)



Luke X. Gibson  
[lgibson@salzmannhughes.com](mailto:lgibson@salzmannhughes.com)

*\*Professional assigned to the Authority and individual responsible for the preparation of this proposal.*

## E. Representative Services Typical to a Municipal Entity

The following are specific examples of services typical of a municipality similar to the Authority:

| EXAMPLE OF WORK  | CLIENT(S)   |
|--|---|
| <b>Negotiation of Intergovernmental Cooperation Agreements</b> | Borough of Chambersburg, Borough of Greencastle, Borough of Mercersburg, Borough of Shippensburg, Borough of State College, Borough of Waynesboro, Capital Region Water, Carroll Valley Borough, City of Lock Haven, City of Scranton, City of York, Cumberland Township, Lower Paxton Township, Northern Blair Regional Sewer Authority, South Middleton Township Municipal Authority, Susquehanna Township, Swatara Township, Wyoming Valley Sanitary Authority |

## F. Firm Municipal Client List

A list of municipal entities that Salzmnn Hughes, P.C. has represented is included in Appendix III. In representing a host of municipal clients, the attorneys assigned to the Authority have a high degree of knowledge and experience allowing the team to provide a seamless transition for legal services.

## G. Conflicts

Salzmnn Hughes, P.C. runs conflict checks on matters where the Authority may be in an adversarial position to another party. This check is run to ensure that the firm does not breach its ethical duties under the Rules of Professional Responsibility. If the check identifies a conflict or potential conflict, the matter will be disclosed to the Authority and addressed as required by the Rules of Professional Conduct and as otherwise may be desired by the Authority (provided that such resolution is consistent with said Rules). Salzmnn Hughes will also disclose any family relationship with a public servant or any material financial relationship with parties provided by the Authority.

Salzmnn Hughes has no known conflicts with any of the 15 KISS municipalities, LCA, or the Coplay-Whitehall Sewer Authority

### **H. No Litigation or Investigations**

There have been no lawsuits filed against Salzmann Hughes, P.C. within the last five years nor have any of the Salzmann Hughes, P.C. attorneys been subject to any professional disciplinary action or ongoing investigation.

### **I. Insurance**

Salzmann Hughes, P.C. maintains professional liability insurance coverage. The policy provides coverage of up to \$5,000,000.00 of professional liability coverage for each claim and \$5,000,000.00 of coverage in the aggregate.

### **J. Subcontracting**

Given our broad range of municipal services, Salzmann Hughes, P.C. does not intend to subcontract out any part of the work contained in this Proposal. Additionally, our team does not anticipate the need to recommend outside legal counsel to represent LCA. However, if the Authority or any official or employee is represented by other legal counsel, Lee and team shall monitor the legal action, serve as liaison as needed with LCA staff and Board, and provide advice as warranted to the Authority regarding the status and potential effect of the action.

### **K. Rate Proposal**

Salzmann Hughes, P.C. proposes hourly rates of \$200.00 per hour for shareholders, \$190.00 per hour for associates and principals, and an hourly rate of \$125.00 per hour for paralegals, law clerks, and project managers. The firm will work with the Authority to establish a fee arrangement that meets the LCA's needs and budget. We estimate that the work described in the scope of work would require approximately 375 hours to complete at an estimated cost of \$75,000. Please note that the actual cost may differ from this estimate due to a number of factors outside our control, including DEP's cooperation, third-party interference, and the inherent uncertainties that come with working with multiple municipal entities and their elected officials.

Enclosed in Appendix II is a copy of our standard engagement letter. If the firm is selected, the engagement letter will serve as our agreement for the provision of legal services to the Authority.

**We look forward to discussing this Proposal  
with the Lehigh County Authority.**

# APPENDIX I



**Email:**  
**lstinnett@**  
**salzmannhughes.com**

**Business Address:**  
**1801 Market Street**  
**Suite 300**  
**Camp Hill, PA 17011**

**Phone:**  
**(717) 234-6700**

**Website:**  
**salzmannhughes.com**

**Office Locations:**  
**Camp Hill**  
**Carlisle**  
**Chambersburg**  
**Gettysburg**  
**Hanover**

**SALZMANN**  
**HUGHES, P.C.**  
*Attorneys at Law*  
EXPERIENCE • INTEGRITY • INNOVATION

# E. Lee Stinnett II

## Experience

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**2009 - Present**

**Salzmann Hughes, P.C.**

Position: Shareholder Attorney  
Practice Areas: General Litigation, Environmental Law, Municipal Law, and Land Use. Lee represents individual, business, and local government clients before trial courts, administrative agencies, and appellate courts in matters related to municipal law, contract disputes, public utility regulation, and rate setting.

**2007 - 2009**

**Cumberland County Court of  
Common Pleas**

Position: Senior Judicial Clerk to Judge Kevin A. Hess  
Lee conducted legal research, drafted opinions, and edited opinions of Junior Clerks.

## Education

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**The Pennsylvania State University,  
Dickinson School of Law**

Juris Doctorate (2009)- Carlisle, PA  
CALI Award

**Washington and Lee University**

Bachelor of Arts in Philosophy (2005)- Lexington, VA

## Professional Affiliations

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Member of the Bars of the Supreme Court of Pennsylvania and the United States District Court for the Middle District of Pennsylvania; Vice President of the Keystone Chapter of the Washington and Lee University Alumni Association; Big Brother with Big Brothers Big Sisters of the Capital Region; Board member of the Central Pennsylvania Conservancy.



**Email:**  
**iwakefield@**  
**salzmannhughes.com**

**Business Address:**  
**1801 Market Street**  
**Suite 300**  
**Camp Hill, PA 17011**

**Phone:**  
**(717) 234-6700**

**Website:**  
**salzmannhughes.com**

**Office Locations:**  
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**Gettysburg**  
**Hanover**

**SALZMANN**  
**HUGHES, P.C.**  
*Attorneys at Law*  
EXPERIENCE · INTEGRITY · INNOVATION

# Isaac P. Wakefield

## Experience

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### **2013 - Present    Salzmann Hughes, P.C.**

Position:    Shareholder Attorney

Practice Areas: General Litigation, Appeals, and Municipal Law. Isaac represents individual, business, and local government clients in litigation before trial courts, administrative agencies, and appellate courts. Isaac also prepares ordinances, resolutions, and agreements for municipal clients.

### **2011 - 2013    Pennsylvania State Education Assn.**

Position:    Associate Staff Counsel

Isaac conducted research, composed memoranda, and drafted pleadings in matters involving public sector labor law, employment law, and education law.

## Education

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### **The Pennsylvania State University, Dickinson School of Law**

Juris Doctorate, *Cum Laude* (2011)- Carlisle, PA

### **Grove City College**

Bachelor of Arts in History (2008)- Grove City, PA

## Professional Affiliations

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Member of the Bars of the Supreme Court of Pennsylvania and the United States District Court for the Middle District of Pennsylvania; Member of the Pennsylvania Bar Association and the Dauphin County Bar Association; Former Vice Chairman of the Camp Hill Panning Commission.



**Email:**  
lgibson@  
salzmannhughes.com

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1801 Market Street  
Suite 300  
Camp Hill, PA 17011

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(717) 234-6700

**Website:**  
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**Office Locations:**  
Camp Hill  
Carlisle  
Chambersburg  
Gettysburg  
Hanover

**SALZMANN  
HUGHES, P.C.**  
*Attorneys at Law*  
EXPERIENCE • INTEGRITY • INNOVATION

# Luke X. Gibson

## Experience

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**Feb 2022-Present .....Salzmann Hughes, P.C.**

**Position:** Associate Attorney

**Practice Areas:** General Litigation, and Environmental  
Law, Municipal Law

**May 2021-Feb 2022.....Martson Law Office**

**Position:** Law Clerk

**May 2020-May 2021.....The Administrative Office  
of Pennsylvania Courts**

**Position:** Legal Intern

**May 2016- Aug 2016.....Dauphin County Court  
of Common Pleas**

**Position:** Intern for the Honorable  
Judge Jeannine Turgeon

## Education

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**The Pennsylvania State University,  
Dickinson School of Law**

Juris Doctorate (2022)- Carlisle, PA  
Articles Editor- Dickinson Law Review

**Franklin & Marshall College**

Bachelor of Arts in Government (2019)- Lancaster, PA  
*Cum Laude*  
Pi Sigma Alpha Political Science Honor Society

## Professional Affiliations

---

Member of the Pennsylvania Bar Association, the Dauphin County Bar Association, and the Cumberland County Bar Association.



## **APPENDIX II**



*Please reply to:*

1801 Market Street, Ste 300  
Camp Hill, PA 17011  
Phone: 717.234.6700  
Fax: 717. 249.7334

Chambersburg • Carlisle • Camp Hill • Gettysburg • Hanover

January 15, 2024

Lehigh County Authority  
Liesel Gross, Chief Executive Officer  
1053 Spruce Road, PO Box 3348  
Allentown, PA 18106

**RE: Lehigh County Authority Request for Special Counsel Proposals**

Dear Ms. Gross,

Salzmann Hughes, P.C. is pleased to have the opportunity to provide legal counsel services to the Lehigh County Authority ("Authority"). We have submitted a Proposal for Legal Counsel Services to the Authority, and this Representation Letter is offered in accordance with said Proposal.

Rates and retainer requirements are subject to the Fee Schedule and Engagement and Representation Agreement, attached and made part of this agreement. You will receive monthly invoices and agree to pay said invoices timely.

If you should have any questions or concerns with the terms of this representation, please give me a call. I would ask that you please sign a copy of this Representation Letter and Agreement where indicated below and return it to my attention, signifying your receipt and acceptance of the terms of our agreement. Again, thank you for giving us the opportunity to represent you.

Sincerely,

SALZMANN HUGHES, P.C

E. Lee Stinnett II



**FEE SCHEDULE**

Shareholders ..... \$200.00 per hour  
Principals ..... \$190.00 per hour  
Associates ..... \$190.00 per hour  
Law Clerk/Paralegal/Project Manager ..... \$125.00 per hour  
Retainer..... WAIVED  
Attorney in Charge: ..... E. Lee Stinnett II

Failure to timely remit payments will be grounds to suspend or cease legal representation. Salzmann Hughes, P.C. reserves the right to increase the above rates from time to time as a result of increased overhead and/or costs. Such increases in rates shall be noted on invoicing.

Signed and accepted by:

Lehigh County Authority  
**Liesel Gross, Chief Executive Officer**

**Signature:** \_\_\_\_\_

**Date:** \_\_\_\_\_

## **Engagement & Representation Agreement**

We are pleased that the Lehigh County Authority (the "Authority") has engaged Salzmann Hughes, P.C. (the "Law Firm") to serve as your legal counsel by providing Special Counsel services to the Authority. It is our policy to confirm in writing the nature of the engagement and the terms of our legal representation. If you do not understand all the terms or language in this engagement agreement, please contact E. Lee Stinnett II prior to signing this engagement agreement. This engagement agreement shall supersede all previous engagement agreements or representation agreements entered into by you with the Law Firm, oral, written or otherwise.

### **Scope of Representation**

We have been engaged to represent the Authority as its Special Counsel for the negotiation of intermunicipal agreements for sewer service between the Authority and various municipalities served by the Kline's Island Sewer System. E. Lee Stinnett II, who is a Shareholder with the Law Firm, will be the lead attorney for this matter. Other individuals may assist with the case from time to time or even assume the case as lead attorney as determined by the Law Firm. The use of paralegals, law clerks, and project managers results in a direct savings to you since they can more economically perform tasks which do not require the attention of an attorney. If the Authority has any questions or concerns regarding delegation of responsibilities and work between attorneys and staff, please contact the lead attorney or firm administrator to discuss these issues.

Our emphasis is on ascertaining solutions to your problems and helping you implement the strategy solutions selected by you following discussion of available options. This Agreement covers all services including but is not limited to, telephone calls, conferences with our office related to serving your needs, research, travel, and other time necessary to assist you. It covers attorney time and the time of our staff, including any time we spend with third parties we employ to help you. A minimum charge of 3/10th of one hour is charged for each telephone call, letter, memo or other item of work, however actual time is billed, in increments of six minutes if the actual time exceeds the minimum charge of 3/10th of one hour. All time expended on your behalf will be documented including telephone conversations, e-mails, drafting of documents, negotiations, legal research, meetings and any required travel time. The legal personnel assigned to Client's matter may confer among themselves about the matter, as required and appropriate. When they do confer, each person will charge for the time expended, as long as the work done is reasonably necessary and not duplicative. Likewise, if more than one of the legal personnel attends a meeting, court hearing or other proceeding, each will charge for the time spent. Attorneys will charge for waiting time in court and elsewhere and for travel time, both locally and out of town.

Alternative Billing Arrangement: From time to time, the client and the Law Firm may propose and mutually agree to alternative billing arrangements. These arrangements may include matter specific flat fees (which are typical of real estate transactions, financing proceedings, and capital projects), retainer services (which are typical of meeting attendance, routine services, and identifiable, reoccurring matters), or other forms of billing structures. Alternative Billing Arrangements must be memorialized in writing and indicate the mutual consent of the client and the Law Firm.

### **Limited Scope of Representation**

The scope of our representation does not include advice or services regarding accounting, tax, personal financial matters or business management, and related non-legal matters and advice. If you wish for us to consult with other professionals retained by you regarding this matter, we will communicate with you in writing to confirm the scope of such consultations prior to initiating same.

Our hourly attorney fees, outlined below, do not cover any work beyond what is outlined in this Agreement. If you request us to perform additional services for other work and if we agree to perform those services, then different attorney's rates or structures or terms and conditions may apply.

### **Fees and Invoicing**

We will submit an invoice to you at the beginning of every month. Expenses will be separately itemized on the invoice and fees will be charged as indicated below. Our invoices are due and payable at the end of every month and are considered past due if not paid by the end of the calendar month of the invoice date.

You are responsible for payment of all legal fees, expenses, and disbursements, regardless of whether or not any money is recovered on your behalf through a settlement or judgment. Please see the "Expenses" and "Late Payment and Failure to Pay" provisions of this agreement for further information. To the extent we are successful in recovering a settlement or judgment on your behalf, all legal fees, costs and expenses not previously paid by you will be deducted from the gross amount recovered in the settlement or judgment.

We will provide you with a summary invoice listing these deductions at the time of any payment to you from a settlement or judgment.

On the basis of our time, charges are as follows:

|          |   |
|----------|---|
| \$200.00 | per hour for the services of Shareholder(s);      |
| \$190.00 | per hour for the services of Principal(s);        |
| \$190.00 | per hour for the services of Associate(s);        |
| \$125.00 | per hour for the services of Paralegal(s);        |
| \$125.00 | per hour for the services of Law Clerk(s);        |
| \$125.00 | per hour for the services of Senior Law Clerk(s); |
| \$125.00 | per hour for the services of Project Manager(s)   |

From time to time, it is necessary to adjust our hourly rates beyond the increase contemplated below to respond to economic factors. We will, of course, notify you of such adjustments in writing at least 30 days prior to the effective date of the adjustment.

The rates set forth in the Proposal and Representation letter are subject to an annual increase in the amount of 3% of the prior year's rate, rounded to the nearest whole dollar, unless otherwise agreed to in writing by Attorney and Client.

We reserve the right to add to an invoice any Federal, State or Local taxes which may be assessed against the firm for the work we are performing on your behalf. All Federal, State and Local taxes assessed may include but are not limited to sales tax, business privilege tax and or other license fees or assessments.

It is our policy to describe services performed in a descriptive manner so that you may be able to understand the services and the charges. If there are any questions relating to the services or the charges, we will be pleased to discuss them with you at the earliest possible time after receipt of the invoice, since the matters will be freshest in our memory at that time. Accordingly, you agree to notify us in writing or email within 30 days of receiving our invoice if you dispute any entry for legal services or charges on any invoice. In the absence of any written objections thereto within 30 days of your receipt of an invoice, you will be deemed to have accepted and acknowledged the invoice as correct through the period covered by the invoice.

In addition, if as a result of our engagement, we are required to produce documents or appear as a witness in connection with any governmental or regulatory examination, audit, investigation or other proceeding or any litigation, arbitration, mediation, or dispute involving you or any related persons whether initiated by you or an opposing party, you are responsible for costs and expenses reasonably incurred by us (including professional and staff time at then-scheduled hourly rates and reasonable attorneys' fees and costs incurred by us).

### **Expenses**

In the course of rendering services to you, it may be necessary for us to incur expenses for items such as filing and recording fees, deposition transcripts, digital legal research, notary service, overnight or special delivery service, postage, photocopying, facsimile transmissions, telephone calls, travel, lodging, meals, and overtime for firm secretarial and other staff services. The actual expenses incurred will vary depending on the services that we provide to you. In no event will the administrative expense exceed 15% of the cost to the Law Firm. Expenses paid entirely to third parties, such as travel and lodging expenses will be billed to you. Certain expenses may include an adjustment, above cost, to cover our administrative expenses in providing the billed service; however in no event will adjustment exceed 15% of the cost to the Law Firm.

The cost of routine photocopies, telephone and facsimile transmissions, and postage expenses will not be billed to you. Third party duplication costs (for example, the cost of duplicating full land development plan sheets) and extraordinary photocopying (for example duplication of interest arbitration binders of 300+ pages) will be billed. Extraordinary postage (for example, if we are asked to send legal notice to property owners on behalf of the municipality) and certified mailing costs will be billed.

Expense items incurred on your behalf will be itemized separately and listed on our invoices as "expenses." Third-party expenses may be forwarded directly to you for payment. As is customary, expense disbursements may not be current at the time of final billing. Remaining disbursements, if any, will be billed at a later date.

In addition to attorney's fees, there are times when expenses must be paid to third parties such as experts, consultants, and investigators. To better enable us to represent you, it may become necessary to hire third parties. Client agrees to pay such fees and charges in advance upon request. Attorney will select any expert witnesses, consultants or investigators to be hired, and Client will be informed of persons chosen and their charges. If there are any expenses, then we will pass those expenses to you dollar-for-dollar. Third party expenses are in addition to our fee.

#### **Late Payment and Failure to Pay**

If you fail to pay our invoice in full on or before the due date set forth on the invoice and this agreement, we reserve the right to assess you with a monthly service charge equal to 1% of all fees, expenses and disbursements that are past due. This monthly service charge will be billed to you at the end of each month in which a late payment occurs. In no event will the service charge be greater than that permitted by any applicable law.

In the event we are required to file an action or proceeding to collect any late payment or assessed monthly service charge, you will be required to pay for all costs of collection, including without limitation all filing fees, third-party expenses and attorney fees incurred for our efforts in collecting such amounts. If we use our own attorneys or legal assistants to pursue such an action or proceeding, the fees charged shall be calculated on an hourly basis using the applicable hourly rates for the attorneys and legal assistants who perform such work.

We will maintain a lien on all files in our possession and their content until we have received payment in full on all amounts due. In litigation matters in which a money judgment or settlement is rendered in your favor, we will maintain a lien on all proceeds thereof to the extent of any unpaid fees, expenses or disbursements.

#### **Responsibilities of Law Firm and Client**

We will provide only legal services, as previously described in the "Scope of Representation" and "Limited Scope of Representation" sections of this engagement agreement. We will keep you apprised of developments and will consult with you as necessary to ensure the timely, effective, and efficient completion of our work. You acknowledge that we cannot guarantee either the outcome or the timing to complete legal services on your behalf.

You agree to be truthful and cooperative with us, to respond to our inquiries and communications promptly and to provide promptly all information known or available that may be relevant to our engagement. You will provide us with factual information and materials as we require in order to perform the foregoing services. You acknowledge and agree that you remain responsible for making all business or technical decisions and that you are not relying on us for accounting, tax, personal financial matters or business management, and related non-legal matters and advice. You also acknowledge that we are not responsible for investigating the character or credit of persons with whom you may be dealing.

As a matter of our professional responsibility and as long as in our judgment it will not substantively injure your position in this matter, we retain control over decisions affecting our reputation and professionalism. This discretion, includes, among other decisions, whether to

extend deadlines for opposing counsel; whether to cooperate with opposing counsel in scheduling or similar matters; and whether and how matters should be presented in correspondence, pleadings, or to a court or administrative body.

We may provide to you newsletters or similar materials regarding general legal developments or matters of current interest. Similarly, we may invite you to attend seminars or symposia where legal topics are discussed. In our experience, such information or events are educational, because a well-informed client will be better able to make decisions about the need for future legal representation. However, it is understood that such communications do not constitute legal advice, and do not create an attorney-client relationship beyond the scope of the representation described herein.

It is your duty to keep us informed of your mailing address and other contact information. If, at any time during the course of this representation, your address becomes unknown or we are otherwise unable to contact you, we shall be permitted to withdraw from this representation by sending you a certified letter to your last known address and by depositing with the Clerk of the Court for the county of your last known residence any property owned by you in our possession, including but not limited to items of personal property, funds, and any portions of the actual client file that belong to you.

If you have previously engaged other counsel to represent you in this matter, you hereby agree to indemnify the Law Firm for any fees, expenses, or other damages sought by prior counsel against the Law Firm arising out of, related to, or incurred in the course of prior counsel's representation of you in this or any related matter. Any and all fees and expenses due and payable to prior counsel shall be wholly your responsibility, regardless of whether they were billed on an hourly, flat or contingent fee basis. The retainer may be used to satisfy this indemnification obligation or held until the resolution of any fee dispute with prior counsel relating to this matter.

You hereby certify that, as of the date of the execution of this Agreement, that you have disclosed in writing to the Law Firm any fee, expense, or other amount claimed or sought by prior counsel related to this matter.

### **Termination**

You may terminate this representation at any time with or without cause by notifying us in writing of your desire to do so. Upon receipt of the notice to terminate representation, we will cease all legal work on your behalf immediately unless leave of court is required to discontinue representation. You will be responsible for paying all legal fees, expenses and disbursements incurred on your behalf in this matter until written notice of termination is received by our firm or leave of court is granted for the Law Firm to withdraw.

If you terminate the representation before the conclusion of the matter, we will be entitled to receive from the proceeds of any recovery a reasonable fee for the work we have performed based upon the amount of time required, the complexity of the matter, the time frame within which the work was performed, the responsibility involved, as well as our experience, ability, reputation, and the results obtained. This fee is in addition to any legal fees, expenses and disbursements incurred on your behalf that have not previously been paid by you.

We will maintain a lien on all files in our possession and their content until we have received payment in full on all amounts due. Once all amounts due have been paid to the Law Firm, your file will be returned to you.

To the extent permitted by rules of professional responsibility and the court, we may terminate our representation at any time if you breach any material term of this agreement, fail to cooperate or follow our advice on a material matter, if a conflict of interest develops or is discovered, or if there exists, at any time, any fact or circumstance that would, in our opinion, render our continuing representation unlawful, unethical, or otherwise inappropriate.

If we elect to terminate our representation, you will timely take all steps reasonably necessary and will cooperate as reasonably required to relieve us of any further obligation to perform legal services, including the execution of any documents necessary to complete our withdrawal from representation. In such case, you agree to pay for all legal services performed and any legal fees, expenses or disbursements incurred on your behalf before the termination of our representation in accordance with the provisions of this agreement.

The Law Firm may withdraw as determined necessary by Attorney including but not limited to the non-payment of any invoice as due and matters determined by Attorney to be good cause. Good cause includes Client's breach of this Agreement, refusal to cooperate or to follow Attorney's advice on a material matter or any fact or circumstance that would render Attorney's continuing representation unlawful or unethical. When Attorney's services are concluded, all unpaid charges will immediately become due and payable. In the event Client fails and/or refuses to pay such unpaid charges, the Law Firm shall retain all rights and remedies under applicable law, including (without limitation) the right to assert and enforce (i) a retaining lien to retain money, papers or other property in Attorney's possession, and/or (ii) equitable and legal charging liens with respect to certain funds of Client in Attorney's possession or in the control or possession of the Court. In addition, the Law Firm shall have the right to seek reimbursement for the costs and expenses of seeking to collect any unpaid balance, including, but not limited to, court costs, attorneys' fees, and collection agency fees.

#### **Electronic Data Communication and Storage**

In the interest of facilitating our services to you, we may communicate with you or others by email, facsimile transmission, send data over the Internet, store electronic data via computer software applications hosted remotely on the Internet, or allow access to data through third-party vendors' secured portals or clouds. Electronic data that is confidential to your case may be transmitted or stored using these methods. In using these data communication and storage methods, our firm makes reasonable efforts to keep such communications and data access secure in accordance with our obligations under applicable laws and professional standards. You recognize and accept that we have no control over the unauthorized interception or breach of any communications or data once it has been sent or has been subject to unauthorized access, notwithstanding all reasonable security measures employed by us or our third-party vendors. You consent to our use of these electronic devices and applications and submission of confidential client information to third-party service providers during this engagement.

We advise you that communications may be subject to disclosure under the Right-to-Know Law unless exempt from disclosure in accordance therewith. Additionally, privileged communications are qualified communications between the attorney and the client (the municipal entity). You should use caution when copying individuals on electronic communications other than authorized municipal officials.

#### **File Retention and Destruction**

At the conclusion of this matter, we will retain your legal files for a period of the greater of 4 years after we close our file or any applicable statute of limitation period. At the expiration of the period of 4-year period, we will destroy these files unless you notify us in writing that you wish to take possession of them. We reserve the right to charge administrative fees and costs associated with researching, retrieving, copying and delivering such files.

#### **No Guarantee of Success**

It is expressly acknowledged by you that this Law Firm has not made any warranties or representations to you, nor have we given you any assurances as to the favorable or successful resolution of your claim or defense of the action referred to above; nor as to the favorable outcome of any legal action that may be filed; nor as to the nature or amount of any awards or distributions of property, attorney fees, costs, or any other aspects of this matter. All of this Law Firm's expressions relative to your case are limited only to estimates based upon our experience and judgment and are only our opinion. Such expressions should not be considered as representations, promises, or guarantees of results, which might be obtainable, either by way of a negotiated settlement or in a contested trial.

#### **Conclusion of Matter/Representation**

At the conclusion of our representation, the Attorney will send you a letter stating our representation has ended. If you wish to obtain copies of any documents or records from your client file, please notify the Attorney prior to the expiration of the record retention period, outlined above, and we will provide such requested information. You should also retain copies of any important documents, agreements, correspondence, or other matter pertaining to your case.

#### **Arbitration of Disputes**

In the event any dispute involving legal representation arises, the dispute shall be decided exclusively by binding arbitration. Arbitration shall be conducted by way of an informal conference before a panel of three attorneys from the Franklin County Bar Association. The parties hereto agree that the decision of a majority of the members of the panel shall in no event exceed a client award of \$50,000.00 or an amount equal to the amount paid for the services to the Law Firm, whichever is less. Attorneys' fees owed to the Law Firm may be awarded in excess of \$50,000.00. The foregoing shall not be deemed to restrict in any way Attorney's right to assert any attorney's lien as authorized under Pennsylvania law.



### **Applicable Law**

This Agreement is governed by the laws of the Commonwealth of Pennsylvania.

### **Marketing**

We are often asked, in a marketing context, to identify clients of the Law Firm. Unless you let us know to the contrary, we will assume that you authorize us to identify the Authority as a client of the Law Firm in brochures, on our website and in other written materials prepared for the purpose of marketing the Law Firm's services.

### **Client Review of this Agreement**

You have a right to have this engagement agreement reviewed by another law firm prior to signing it. Likewise, you have the right to review this engagement agreement outside the presence of this Law Firm and away from the Law Firm's office prior to signing it. You understand that the Law Firm is not retained until the signed original engagement agreement is returned to the Law Firm, including the corresponding retainer.

If you have any questions or concerns about the terms of this engagement agreement, please contact us immediately. On behalf of the Law Firm, we appreciate the opportunity to represent you in this matter.

**By signing this agreement, I confirm that I have read this engagement agreement, understand its provisions, and agree to abide by it.**

Signed and accepted by:

**Lehigh County Authority**

---

**Liesel Gross, Chief Executive Officer**

---

**Date**

## **APPENDIX III**

## **Salzmann Hughes, P.C. Municipal Client List**

*Abbottstown Borough/Adams County – Solicitor*

*Adams County – General Authority/Adams County-Solicitor*

*Adams County – Special Counsel on various matters*

*Adams County Council of Governments/Adams County – Solicitor*

*Bellefonte Borough Authority/Centre County – Special Counsel*

*Bendersville Borough/Adams County – Solicitor*

*Bendersville Municipal Authority/Adams County – Solicitor*

*Berwick Township/Adams County – Solicitor*

*Bensalem Township/Bucks County- Special Counsel for Stormwater Program Implementation*

*Blain Borough/Perry County – Special Counsel*

*Bradford Sanitary Authority/McKean County – Special Counsel*

*Buffalo Township/Union County – Special Counsel*

*Butler Township/Adams County-Solicitor*

*Camp Hill Borough/Cumberland County – Solicitor*

*Camp Hill Municipal Authority/ Cumberland County – Solicitor*

*Capital Region Water/Dauphin County-Solicitor*

*Carlisle Borough/Cumberland County – Special Counsel and ZHB Solicitor*

*Carroll Township/York County – Special Counsel for Land Development Issues and Litigation*

*Carroll Valley Sewer and Water Authority/Adams County – Solicitor*

*Carroll Valley Borough /Adams County – Solicitor*

*Chambersburg Area Municipal Authority/Franklin County-Solicitor*

*Chambersburg Borough/Franklin County – Solicitor*

*City of Lock Haven/Clinton County- Solicitor to the City of Lock Haven's Department of Permits and Licensing and Special Counsel for IMA Negotiation*

*Clarion Borough/Clarion County – Special Counsel*

*Conewago Township/Adams County – Solicitor*

*Cumberland Franklin Joint Municipal Authority/Cumberland and Franklin Counties – Solicitor*

*Cumberland Township Authority/Adams County – Solicitor*

*Cumberland Township/Adams County – Solicitor*

*Dauphin County Municipalities & Authorities -- Special Counsel to Group on Utility Rate Issues*

*Derry Township/Dauphin County-Special Counsel*

*Dillsburg Borough/York County - Solicitor*

*East Hanover Township Municipal Authority/Dauphin County - Solicitor*

*East Hanover Township/Dauphin County – Solicitor*

*Ephrata Borough/Lancaster County- Solicitor*

*Ephrata Borough Authority/Lancaster County- Solicitor*

*Ferguson Township/Centre County- Special Counsel on Code Enforcement*

*Fairfield Municipal Authority/Adams County – Solicitor*

*Franklin County – Special Counsel*

*Franklin County Tax Collection Committee -FCTCC/Franklin Co- Solicitor*

*Franklintown Borough Municipal Authority/York County – Solicitor*

*Franklintown Borough/York County – Solicitor*

*Greencastle Area Franklin County Water Authority/Franklin County-Special Counsel*

*Greencastle Borough/Franklin County – Solicitor*

*Greene Township Board of Supervisors/Franklin County – Solicitor*

*Gregg Township Municipal Authority/Union County - Solicitor*

*Guilford Township/Franklin County – Solicitor*

*Guilford Water Authority/Franklin County- Special Counsel*

*Hampden Township Sewer Authority/Cumberland County – Special Counsel*

*Halfmoon Township/Centre County- Solicitor*

*Hanover Borough/York County – Solicitor*

*Hanover Borough Stormwater Authority/York County- Solicitor*

*Hartley Township Municipal Authority/Union County – Special Counsel*

*Borough of Hatfield/Montgomery County- Special Counsel for Electric*

*Heidelberg Township/York County- Solicitor*

*Huntington Township/Adams County - Solicitor*

*Hustontown Joint Sewage Authority/Fulton County – Solicitor*

*Indiana County Municipal Service Authority/Indiana County-Special Counsel*

*Jefferson Borough/York County – ZHB Solicitor*

*Kennett Township/Chester County – Special Counsel*

*Lansdale Borough/Montgomery County- Special Counsel for Electric*

*Littlestown Borough/Adams County – Solicitor*

*Logan Township/Blair County – Special Counsel*

*Lower Paxton Township/Dauphin County – Special Counsel*

*Lower Swatara Zoning Hearing Board/Dauphin County – Special Counsel*

*Lycoming County Water and Sewer Authority/Lycoming County – Special Counsel*

*McSherrystown Borough/Adams County – Solicitor*

*Menallen Township/Adams County - Solicitor*

*Mercersburg Borough/Franklin County – Solicitor*

*Mercersburg General Purpose Authority/Franklin County – Solicitor*

*Mercersburg Sewer Authority/Franklin County – Solicitor*

*Mercersburg Water Authority/Franklin County – Solicitor and Special Counsel on H2O Grant Funding*

*Mifflinburg Borough/Union County- Special Counsel on Electric*

*Milford Township/Pike County – Special Counsel to Conditional Use Land Development*

*Milton Regional Sewer Authority/Northumberland County - Special Counsel on GESA Project*

*Mont Alto Borough/Franklin County – Solicitor*

*Mount Pleasant Township/Adams County – Solicitor*

*Municipal Authority of the Borough of Bedford/Bedford County – Special Counsel*

*New Bloomfield Borough/ Perry County- Solicitor*

*New Oxford Borough Zoning Hearing Board/Adams County – Solicitor*

*Newport Borough Water Authority/Perry County – Special Counsel*

*Newville Borough Water & Sewer Authority/Cumberland County – Solicitor*

*North Middleton Township/Cumberland County – Solicitor*

*North Newton Township/Cumberland County – Solicitor*

*Northern Blair County Regional Sewer Authority/Blair County- Special Counsel*

*Palmer Township/Northampton County – Special Counsel for Formation of Stormwater Authority*

*Penn Township/Cumberland County – Solicitor*

*Perry County Planning Commission/Perry County- Solicitor*

*Reading Township/Adams County – Special Counsel*

*Rush Township/Centre County – Special Counsel*

*Sandy Township/Clearfield – Solicitor*

*Scranton Regional Stormwater Authority/ Lackawanna County- Special Counsel*

*Shippensburg Borough/Cumberland & Franklin Counties – Solicitor*

*Shippensburg Community Parks and Recreation Authority/Cumberland & Franklin Counties – Solicitor*

*Shippensburg Township/Cumberland County – Solicitor*

*State College Borough- Special Counsel*

*Southampton Township ZHB/Cumberland County – Special Counsel*

*South Middleton Township Municipal Authority/Cumberland County - Solicitor*

*South Middleton Township/Cumberland County – Solicitor*

*Straban Township/Adams County – Solicitor*

*Swatara Township Authority/Dauphin County - Solicitor*

*Swatara Township/Swatara Township Stormwater Authority/Dauphin County- Special Counsel*

*Tarentum Borough/ Allegheny County – Special Counsel for Regional Stormwater Program*

*Toboyne Township/Perry County- Solicitor*

*Tunkhannock Borough Municipal Authority/Wyoming County- Special Counsel for Stormwater Program*

*Union Township/Adams County – Special Counsel for ZHB*

*Washington Township/Franklin County-Special Counsel*

*Waverley Township/Lackawanna County – Special Counsel*

*Waynesboro Borough/Franklin County – Solicitor*

*Weatherly Borough/ Carbon County – Special Counsel for Electric*

*West Hanover Township/Dauphin County – Solicitor*

*West Hanover Township Authority/Dauphin County – Solicitor*

*West Manheim Township/York County – Special Counsel*

*White Run Regional Municipal Authority/Adams County - Solicitor*

*White Township Municipal Authority/Indiana County – Special Counsel*

*Williamsport Water & Sewer Authority/ Lycoming County- Special Counsel*

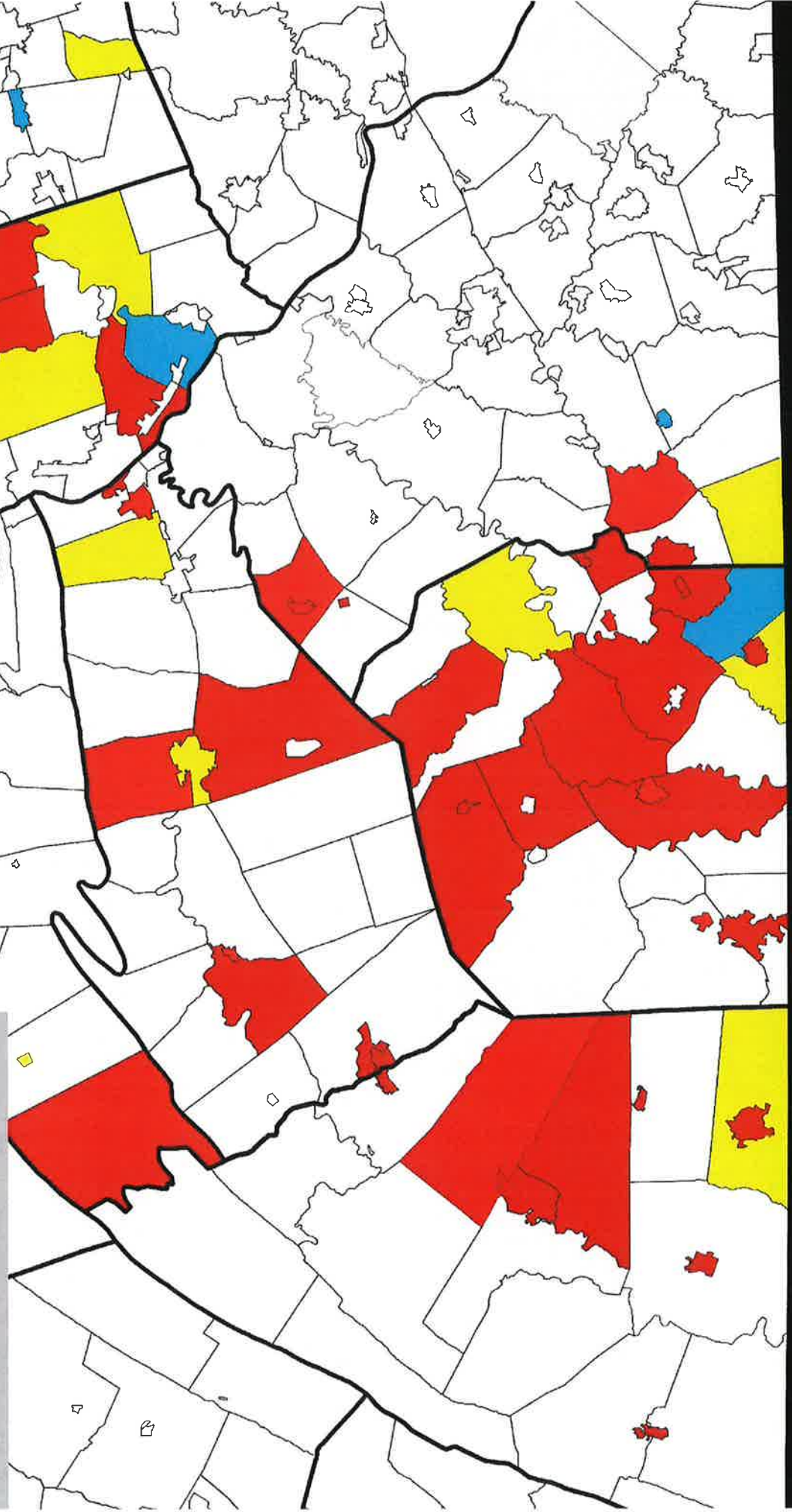
*Wormleysburg Borough/Cumberland County – Solicitor*

# LEGEND

RED - Solicitor

YELLOW - Special Counsel

BLUE - ZHB Solicitor





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# MEMORANDUM

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**Date:** February 12, 2024

**To:** LCA Board of Directors  
Liesel Gross, CEO

**From:** Phil DePoe, Senior Planning Engineer

**Subject:** Kline’s Island Sewer System (KISS) Act 537: KISS Relief Interceptor (KRI)  
– Pre-Design Phase

**MOTIONS / APPROVALS REQUESTED:**

| No. | Item  | Amount     |
|-----|---|------------|
| 1   | Capital Project Authorization: KISS Act 537 – KISS Relief Interceptor (KRI) | \$879,000  |
| 1A  | Professional Services Authorization: Arcadis – KRI Pre-Design               | \$779,000* |

*\*Included in the Capital Project Authorization*

## **1. KISS Relief Interceptor (KRI) – Pre-Design Phase**

### **AUTHORIZATION OVERVIEW:**

The City of Allentown’s Little Lehigh Interceptor (LLI) was constructed in 1928 to convey flow from the City of Allentown to its then new Kline’s Island Wastewater Treatment Plant (KIWWTP). As the surrounding communities developed sewer systems and grew, additional relief facilities were constructed in the 1980s and 1990s. Growth has continued, existing assets have aged, and current Act 537 planning studies show additional conveyance relief is required. Per PA DEP instructions, new pipelines need to have their alignments nearly finalized prior to Act 537 submission. To satisfy this DEP requirement while maintaining overall Act 537 program schedule, the next stage of planning requires survey, subsurface utility locating, geotechnical investigation, groundwater investigation, wetlands assessments, and PNDI/PHMC evaluations. See attached for clear identification of proposal goals, objectives, and deliverables.

### **FINANCIAL:**

To proceed with the pre-design work associated with the required “Act 537 driven” KISS Relief Interceptor, LCA proposes to use the LLRI-1 fund, a subset of the LCA Suburban Wastewater Division that was established to manage shared capital and operating costs associated with the Park Pump Station. Per current intermunicipal agreements, LLRI-1 fund distributes costs to the nine KISS municipalities who currently use and pay for the Park Pump Station. However, the KISS Relief Interceptor project is required to convey future flows from all 15 KISS municipalities. Therefore, upon execution of new agreements associated with Act 537, a “true-up” of these pre-design project costs will be conducted to redistribute the expenses to all KISS municipalities in accordance with the new agreement. This arrangement has been reviewed with municipalities subject to the LLRI-1 fund cost-sharing and found to be acceptable.

### **CURRENT STATUS:**

The KRI project concept was developed over a period of several years as the KISS Act 537 Plan engineering analysis has been completed. Several key authorizations and studies have been completed since 2020 leading to the final KRI project concept, which is now ready to move to pre-design stage:

- Authorization to create the KISS model and an authorization to commence the flow characterization study occurred in early 2021
- As the flow characterization study ended in the fourth quarter of 2021, the model calibration commenced on schedule and concluded in early July 2022
- The Capacity Problem Definition phase of work occurred from July through September of 2022
- The Preliminary Screening of Alternatives phase of work occurred from October 2022 through April of 2023
- The Final Alternatives Analysis phase of work occurred from April 2023 through November 2023
- The Selection of Solution is ongoing (December 2023 – current)

This next critical phase of Act 537 Plan preparation will begin upon approval of this authorization.

### **THIS APPROVAL – PRE-DESIGN PHASE TASKS:**

Lehigh County Authority (LCA) intends to retain the services of an engineering consulting firm to provide these services. These services include, but are not limited to, the following:

| <b>Professional Services</b>                                  |
|---|
| 1. Existing Buried Utility Identification                     |
| 2. Survey   |
| 3. Geotech and Groundwater Delineation                        |
| 4. Permitting Requirements                                    |
| 5. Wetlands and Stream Delineation                            |
| 6. Hydraulic Basis of Design Model Confirmation               |
| 7. Basis of Design Report                                     |
| 8. Meetings, Presentations, Workshops, and Project Management |

The proposal contains three subconsultants to Arcadis: Art Swallow & Associates, EnviroAce, and Schnabel Engineering:

- Art Swallow & Associates will perform an aerial topographical survey via an un-manned aerial vehicle
- EnviroAce will provide environmental permitting services (reviewing site constraints and evaluating the likely federal, state, and local permit requirements)
- Schnabel Engineering will prepare a geophysical plan prior to the geotechnical investigation (via test borings). The geophysical work will consist of an Electromagnetic (EM) Survey and a Seismic Refraction (SR) survey. The results of these surveys will help create and refine the locations of the test borings. Up to 20 test borings will be conducted, with four of these locations having permanent groundwater wells installed. Test boring soil samples will be collected and analyzed prior to completion of a Preliminary Geotechnical Engineering Report.

*See attached proposal for further details.*

### **CONSULTANT SELECTION PROCESS:**

In addition to serving as LCA's engineering consultant for annual ongoing sewer program support services, Arcadis has worked with the City of Allentown since the 2009 EPA Administrative Order. They are also a critical Act 537 Partner and are developing crucial elements related to the Plan's development.

**SCHEDULE:**

Services listed in this proposal will conclude by the end of September 2024.

**FUTURE AUTHORIZATIONS:**

The consultant for the proposed design services will be procured via a formal request for proposals, following submission and DEP approval of the Act 537 Plan.

See below for a tentative schedule/milestone for this project:

- Pre-Design authorization (February 2024)
- Select Design Engineer (2026)
- Submit Part 2 Permit (2027)
- Start Construction (2027)
- Finish Construction (2029)

Mr. Philip DePoe  
Capital Works Program Manager  
Lehigh County Authority  
1053 Spruce Road  
Allentown, PA 18106-0348

Arcadis U.S., Inc.  
1600 Market Street  
Suite 1810  
Philadelphia  
Pennsylvania 19103  
Tel 215 625 0850  
[www.arcadis.com](http://www.arcadis.com)

Subject:  
KISS Relief Interceptor (KRI) Planning Study Scope and Budget

Date:  
January 22, 2024

Dear Mr. DePoe:

Arcadis U.S., Inc. (Arcadis) is pleased to submit this proposal to provide design services to Lehigh County Authority (LCA) for the Planning Study for the KISS Relief Interceptor (KRI). This scope and budget cover planning work required to identify the new pipes' alignment (Act 537 Plan requirement) and to support both design services procurement and engineering of the actual design.

Contact:  
Jim Shelton

Phone:  
302.723.1450

Email:  
[James.Shelton@arcadis.com](mailto:James.Shelton@arcadis.com)

## BACKGROUND

The City of Allentown's Little Lehigh Interceptor (LLI) was constructed in 1928 to convey flow from the City of Allentown to its then new Kline's Island Wastewater Treatment Plant (KIWWTP). As the surrounding communities developed sewer systems and grew, they connected to this 30"-60" cast in place sewer, including the upstream 1959 24"-36" Allentown Emmaus Interceptor (AEI). Eventually, the flows in the AEI and LLI exceeded their hydraulic capacity and the Park Pump Station and forcemain were constructed in 1983. Growth has continued as these assets have aged, and current Act 537 planning studies show additional conveyance relief is required. Engineering evaluations and operations considerations have determined a new parallel gravity interceptor from the Robin Hood Bridge to KIWWTP is the desired solution. This new interceptor, which is needed to convey both dry day and wet day flows from all of the Signatories to the Kline's Island Sewer System (KISS), is called the KISS Relief Interceptor and is to be designed to handle flows through at least the 2050 planning horizon and be capable of conveying all the peak wet weather flow during a 5 year

*This proposal and its contents shall not be duplicated, used, or disclosed — in whole or in part — for any purpose other than to evaluate the proposal. This proposal is not intended to be binding or form the terms of a contract. The scope and price of this proposal will be superseded by the contract. If this proposal is accepted and a contract is awarded to Arcadis as a result of — or in connection with — the submission of this proposal, Arcadis and/or the client shall have the right to make appropriate revisions of its terms, including scope and price, for purposes of the contract. Further, client shall have the right to duplicate, use or disclose the data contained in this proposal only to the extent provided in the resulting contract.*

[https://Lehighcountyauthority-My.Sharepoint.Com/Personal/Depoe\\_Pm\\_Lehighcountyauthority\\_Org/Documents/YEARS/2024/537/PSA Approvals/KISS Interceptor/KISS Relief Interceptor Planning Study.Pro \(1\).Docx](https://Lehighcountyauthority-My.Sharepoint.Com/Personal/Depoe_Pm_Lehighcountyauthority_Org/Documents/YEARS/2024/537/PSA Approvals/KISS Interceptor/KISS Relief Interceptor Planning Study.Pro (1).Docx)

design event from the KISS collection systems to KIWWTP without overflow and without cause any other connected interceptors or trunklines (notably, the Lehigh, Jordan Creek, Trout Creek, and Cedar Creek Interceptors and their current and planned relief interceptors).

Initial alignment walk-throughs have been conducted to do an above ground assessment of a variety of open cut and trenchless construction methods. These included review of available geological information, property ownership, past land uses (especially previous buildings and industrial uses), traffic, streams, and future land use plans. Several potentially viable alignments have been identified as shown below.

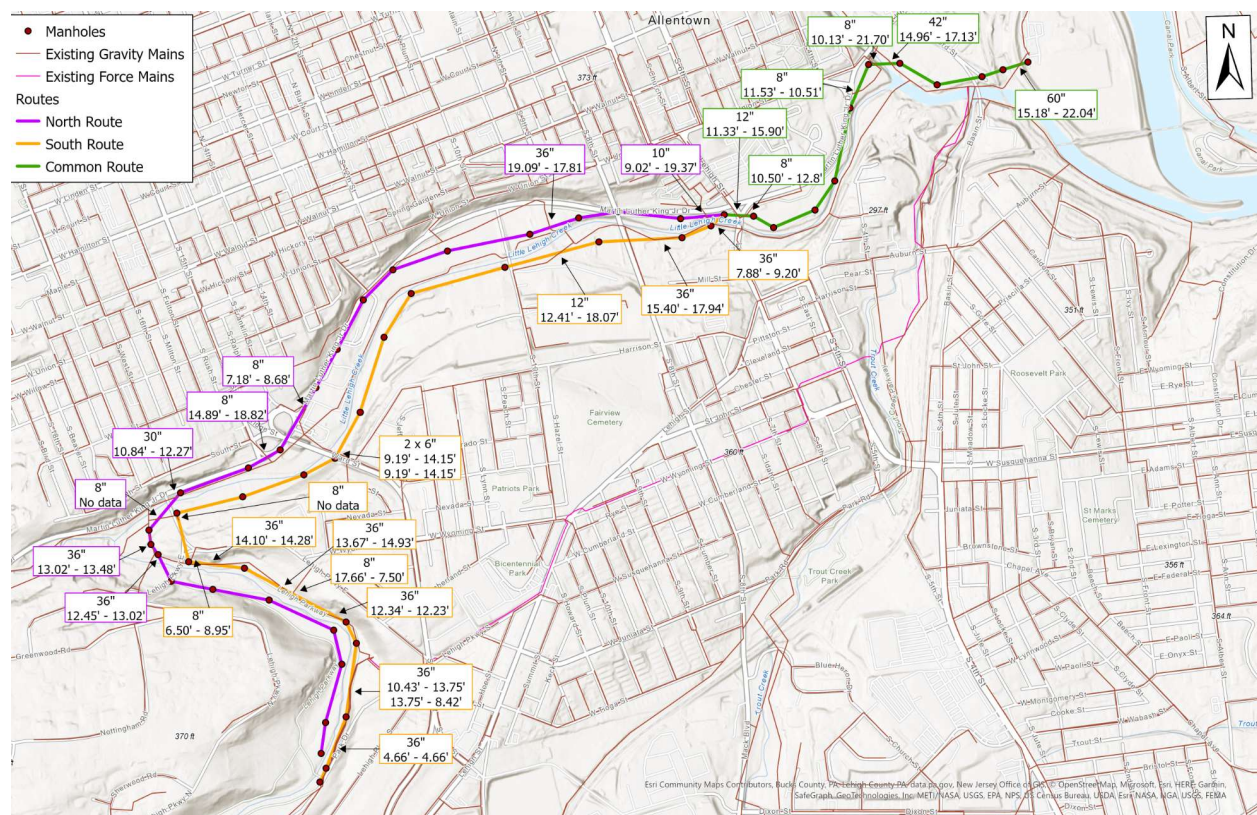


Figure 1 – Potential Alignment Options Considered

The current most attractive alignment is shown below. However, significant unknowns exist that will influence the final selection of alignment.





Figure 2 – Current Selected Alignment

Per PADEP instructions, to meet the requirements of the 537 Plan, new pipelines need to have their alignments finalized. To do this, the next stage of planning requires survey, subsurface utility locating, foundation locating in Wire Mill Park, geotechnical investigation, groundwater investigation, wetlands assessments, PNDI, and PHMC evaluations to select the alignment.

## SCOPE OF WORK

### Task 1 – Existing Buried Utility Identification

Arcadis will submit PA 811 utility locate tickets to have all utility agencies within the alignment zones provide record plans and to physically mark-out their buried assets within potential alignments. These tickets will be submitted 3 weeks prior to surveying.

### Task 2 – Survey

Arcadis will conduct an aerial topographical survey of the potential alignments from the north curb line of MLK Boulevard to the nearest occupied properties' northern boundary on the south side of the

Little Lehigh River and along the entire width of the Lehigh Park from Robin Hood Bridge to Schreiber's Bridge. This encompasses a survey area approximately 125 acres and approximately 6 miles in length and fully encompasses the likely impacted areas of the orange, purple and green alignments (50' either side) shown in Figure 1. The scope of work will include the placement of up to 30 survey quality control points for the aerial survey. Aerial survey will be by means of un-manned aerial vehicle and will include the primary road corridors and adjoining roads, existing features and the necessary overlap. The aerial survey will locate and map the visible items such as permanent manmade features, structures, buildings, parking areas, striping, curbs, sidewalks, impervious areas, light poles, fencing, utility poles, manholes, catch basins, water valves, fire hydrants, tree masses, swales and/or detention areas, etc. Arcadis will engage Arthur Swallow Associates for survey.

Mapping/CAD files will show the results of the survey, property ownership will be shown utilizing Lehigh County GIS records and the Lehigh County Tax Parcel Viewer. The CAD file will depict 1-foot contours and will be drafted in the Arcadis layering system.

The survey will be geo-referenced in the Pennsylvania State Plane Coordinate System (South zone) NAD 83 (2011) (Epoch 2010.00). The vertical datum can be NAVD 88 (Geoid 12A), the City of Allentown datum.

Underground utilities will not be surveyed, located or mapped at this time.

### **Task 3 – Geotechnical and Groundwater Delineation**

Arcadis will conduct a geotechnical and groundwater delineation study of the new interceptor potential alignments to identify subsurface soil, rock, and groundwater conditions that will affect construction cost and life of a new interceptor. Arcadis will engage Schnabel Engineering for geotechnical assessments.

Geotechnical investigations will guide the constructability for open cut and trenchless construction methods based on soil and rock characterization. Geophysical and geotechnical work will include the following:

- Historic photo review
- Electromagnetic for areas with buried industrial buildings
- Seismic refraction for depth to bedrock
- Borings for overburden characterization, and rock within excavation window characterization
- Piezometers for civil dewatering demands
- Initial recommendations on rock rippability, overburden quality for reuse, sinkhole probability

Based on a brief review of publicly available geologic information, the proposed alignments are underlain by two formations separated by a fault: the Allentown Formation and the Leithsville

Formation. Both formations are predominantly dolomite and contain chert; the Allentown Formation also contains limestone with minor amounts of siltstone; the Leithsville Formation also contains shale. Dolomite and limestone are carbonate rocks. Therefore, the site is in a geologic area known as karst. Both formations commonly develop karst features such as sinkholes, closed depressions, soft soils at depth, bedrock pinnacles and cutters, overhanging bedrock, and bedrock solution cavities. Available karst features mapping from the Pennsylvania Department of Conservation and Natural Resources (PA DCNR, <https://www.gis.dcnr.state.pa.us/pageode/>) show numerous sinkholes and/or closed depressions mapped within a 1/2-mile radius of the alignments. The closest mapped feature is within 100 ft of the alignment, indicating the alignments are in an active karst setting. Note that while the PA DCNR maps give an indication of the likely locations of karst features, they are a reference derived from features that were voluntarily reported to PA DCNR and it is typical that additional karst features are or will occur in the vicinity. There are three primary risks related to karst features that may affect an overall project's cost and schedule, both during construction and long-term following completion:

- Shallow bedrock or bedrock pinnacles that may require rock removal;
- Relatively short-term, fast-paced sinkhole development that may occur both during and after construction;
- Long-term, relatively slow-paced subsidence over time after construction.

The objective of this task is to provide preliminary site characterization information and to perform a preliminary evaluation of the subsurface conditions along the proposed alignments to help the team make an informed decision about the selection of an alignment. Of particular interest are the depth to rock and rock rippability characteristics, groundwater levels, soil classifications, earthwork and possible reuse of soils as backfill, areas of potential karst features, and former building foundation considerations. This exploration is considered preliminary for use in selecting a preferred route, and that additional follow-up explorations will likely occur once an alignment is selected, and installation (trenchless or open-cut) methods are evaluated/selected to develop geotechnical engineering recommendations for design of the project.

A traditional geotechnical drilling program alone covers only the discrete location of each test boring and may miss the larger expression of the typical highly variable subsurface karst features. A geophysical survey conducted before the test boring program has the advantage of estimating the variability in the depth to rock and identifying possible karst features over large continuous areas as well as being able to identify areas of former building foundations that may obstruct drilling. The results can be used to fill in the gaps between test borings to allow a more accurate estimate of quantities, help target the test boring program to potential areas of interest and may help identify areas more prone to karst feature development along the alignment. Therefore, plan a geophysical program to be completed prior to the test boring program.



We propose two geophysical methods: electromagnetics (EM) and seismic refraction (SR). The EM will be conducted first in targeted locations to help define areas that may be underlain by former building foundations, especially in Wire Mill Park. The SR will be conducted along the tentative alignment options to estimate depth to rock and rock rippability characteristics. The results of the geophysical program will also be used to provide interpretations about karst conditions and to refine the proposed locations of the test borings.

Our scope for the Geophysical Investigation is divided into three sub-tasks.

### **Sub-Task 3A: Desk Study and Geophysical Survey Location Planning**

Arcadis will conduct a brief historical document review to assist in planning the specific details of the geophysical survey. Arcadis will gather publicly available historical topographic maps and aerial photographs of the alignments and review them to identify areas with a higher likelihood of being underlain by former building foundations as well as to identify possible former karst features. Based on our initial review of available maps, we expect to review maps at least back to 1894. Arcadis will refine the proposed geophysical locations based on the results of the desk study.

### **Sub-Task 3B: EM Survey**

The eastern portion of the alignment from Kline's Island to South 10th Street have a higher likelihood of being underlain by former building foundations. Arcadis will conduct the EM survey along this section of the potential alignment as well as the section upstream of that. This totals approximately 1.7 miles of alignment, including all the green route on Figure 1 and a portion of both the North and South routes (shown in orange and blue, respectively, on Figure 1), from approximately South 10th Street and east. The target area for the EM survey may be refined based on the findings of Task 1A but is based on the assumption of 1.7 miles of data collection length and 2 days on site with 2 geophysicists. EM data is collected while the operator carries the instrument and walks the alignment. In order to complete the survey in 2 days on site, we may skip minor sections of the alignment that are heavily wooded or that have other obstructions may be skipped. A Geonic's EM31 instrument or a GF Instrument's CMD Explorer (or equivalent system) will be used. Data will be collected with real-time GPS for location purposes with an accurate within 3 feet. Data analysis and interpretation will follow the field survey. EM results will be correlated with other available site information and provide the results in plan-view overlain on site plans. This will include interpretations about the findings including possible buried foundations, buried debris, and interpretations about possible karst features.

### **Sub-Task 3C: Seismic Refraction (SR) Survey and Site Reconnaissance**

During the SR survey, geophysicists will perform a site reconnaissance as they move along the routes to visually identify and document the location of observable features related to shallow bedrock, karst features, and former site use. Using 1 lead field geophysicist and 1 field personnel to collect SR data along the approximate 4.9 miles of the proposed alignments will take approximately 3 weeks.

SR equipment used will be primarily shear-wave SR data along the alignment; that will be supplemented with P-wave SR data at occasional locations. Shear-wave SR data is preferred in conditions where groundwater is expected within the depth of investigation because shear-waves are less affected by the water. However, it is P-wave velocities that are empirically correlated to rippability in published literature. The relationship between shear-wave and P-wave velocities is the Poisson's Ratio, which can be either estimated based on measured and compared shear- and P-wave velocities, or calculated based on laboratory compressive strength testing of rock. Using localized measurements of both shear- and P-wave velocities and laboratory testing results, we plan to develop a site-specific conversion of shear-wave velocities to P-wave velocities for referencing published rippability tables.

A 48-channel seismic system with 2 Geometrics Geode seismographs, horizontal geophones, and a sledgehammer impacting a shear-wave source will be used. A geophone spacing of 10 ft with 11 source locations per 48-channel geophone spread will be used. Multiple locations along each section of the seismic traverses will be recorded with GPS for location documenting purposes.

The ground surface elevation along the alignments will be estimated from topographic data from the survey and incorporated into the seismic modeling.

SR data is collected by laying geophones and cables along arrays up to about 470 ft long at a time, and each array can take 1 to 4 hours depending on conditions. The arrays are not easily moved to allow passing traffic; therefore, roads will not be crossed with the SR equipment. For sections of the alignments that are along roads, such as the approximately 2,000 lf in front of the LCA water filtration plant along Martin Luther King, Jr. Drive north of Ward Street, SR data will be collected in the grass at the edge of the road or sidewalk.

For work off road in heavily vegetated fields, specifically from 10<sup>th</sup> Street to Lehigh Street, it is assumed that LCA crews will clear the brush to make a path for the SR crew to set up the SR array. The remainder of the routes are generally open, including most areas with easy access of maintained park property lawn. If hazardous conditions such as excessive poison ivy or multiple downed trees and/or thick vines, those sections may be skipped.

The SR method will identify trends of bedrock depth but will not be able to identify relatively narrow bedrock pinnacles or cutters (zones of deep bedrock adjacent to zones of shallow bedrock) that may be encountered during construction.

Data analysis in the office following the field survey. Arcadis will perform SR analysis to produce preliminary cross-sections of shear-wave velocity with depth along the SR arrays conducted. These preliminary cross-sections will be used to refine the test boring program.

Following the completion of the test boring program, additional interpretations about depth to rock and rock rippability based on the correlations of the drilling results and SR results will be made and those interpretations added to the cross-sections. Results will be provided in profile-view and plan-view overlain on available site plans with interpretations about the findings including depth to rock and rock rippability characteristics of the subsurface materials based on comparisons between the resulting data and published bedrock rippability studies. We will also comment on possible buried foundations and possible interpretations about karst features.

Our scope for the Geotechnical Investigation is divided into four sub-tasks.

### **Sub-Task 3D: Test Boring Plan Development**

Upon completion of the geophysical investigation, Arcadis will refine and finalize the test boring sites. This may include moving test borings away from possible remnants of former building foundations/slabs and investigating areas of potential shallow bedrock and/or soft soils. During this refinement, specific test boring depths based on the latest invert elevations provided to us of the proposed sewer at the location of the test borings will be determined. Arcadis will submit a test boring location plan to LCA for review/ approval and to assist LCA in the coordination of rights of entry and access to the drilling sites, as required. In addition, we will coordinate with LCA prior to and during the field investigations regarding access and schedule/duration of the proposed field activities, existing utilities, and any unexpected site conditions.

### **Sub-Task 3E: Private Utility Location**

The drilling subcontractor will notify the Pennsylvania 811 system (as required by law) to mark out the underground public utilities within the study areas. However, public utility companies do not mark out private utilities. To reduce the risk of impacting buried facilities, we will conduct utility-locating to scan for private underground utilities within a 10-ft radius of each test boring location. The private utility locating will not be able to detect non-conductive utilities (those manufactured from materials such as PVC, clay, and concrete), very deep utilities, utilities that are buried directly below other utilities, utilities located next to a conductive source such as overhead electric lines, non-conductive utilities that are inaccessible via manholes, spring or irrigation systems, buried tanks, septic systems, and wells.

### **Sub-Task 3F: Test Borings**

Arcadis will perform up to 20 test borings along the potential alignments of the proposed sewer. The actual locations of the test borings will depend upon drilling rig access, known utility locations, and the results of the geophysical investigation. Pennsylvania 811 System will be called to mark out the underground public utilities within the test boring areas.

Surface cover along the potential alignments includes asphalt roadways/ paths; open, grass-covered lawns/fields; former railroad beds (wooden ties with no rails); and vegetated areas with portions to be cleared in the future for the construction of a proposed rail for trail. Most of the test boring

locations should be accessible to a truck-mounted drilling rig. However, due to maneuverability constraints, the test borings along the Little Lehigh Parkway Path and similar locations may require a smaller, rubber-track drilling rig. As many of the test borings as possible with a truck-mounted rig and then complete the remainder with the smaller, rubber-track drilling rig, as necessary. For purposes of this scope and budget, we have assumed that 12 test borings will be completed with a truck-mounted rig, and 8 test borings will be completed with the rubber-track rig. We assume that all test boring locations will be accessible and readily available to the drilling equipment discussed above, and that the clearing for the SR survey work will be sufficient to allow rig access.

Thirteen shallow test borings are proposed to account for open cut installation methods. These test borings will extend to a maximum depth of 30 feet below grade. If auger refusal is encountered before the designated depth test boring, up to 10 feet of rock coring will be performed. One of these test borings is assumed to be along the shoulder area of Martin Luther King, Jr. Drive and Maintenance of Traffic (i.e., a shoulder closure) will be provided for this boring.

Seven deep test borings are proposed to account for trenchless installation methods. These test borings will extend to a depth of 55 feet. If auger refusal is encountered before this, rock coring 10 feet into rock will be performed.

In the event shallow obstructions are encountered below grade that cannot be penetrated with ordinary soil drilling equipment, the obstructed test borings will be offset and redrilled.

It is assumed that water from City hydrants may be used to support the rock coring work.

At four of these locations, we have budgeted the installation of a permanent groundwater observation well (2-inch diameter pipe with sand pack and bentonite, and a flush-mounted cover). We have assumed two wells will be installed to the depth of 55 feet and two wells installed to 35 feet.

Soil samples will be obtained in the test borings by means of the Standard Penetration Test (ASTM D1586). Continuous soil samples will be obtained to 10 ft below the ground surface. Sampling beneath the depth of 10 ft will be performed at 5-ft intervals thereafter to the proposed completion depth of the test boring. Rock coring will be performed in accordance with ASTM D2113.

Upon completion of the test borings that will not be converted to permanent groundwater observation wells, the boreholes will be backfilled with a grout-drilling spoils mixture. For test boring locations in paved areas, the borehole will be capped with asphalt cold patch mix and the pavement surface will be swept with a broom. Excess drilling spoils will be left at or near the test boring locations or deposited at Kline's Island. This proposal does not include the off-site disposal of excess drilling spoils.

Disturbance of the test boring areas is unavoidable during the boring work. Reasonable efforts to minimize this disturbance will be employed, but the drilling equipment will leave tracks and bare earth/excess soil will be left at test boring locations in non-paved areas. In addition, some settlement of the borehole backfill may occur over time. The repair of such disturbance/settlement is not included as part of our proposed scope of services.

It is assumed that subsurface materials are free of environmental contaminants, that the materials encountered will not require personal protective equipment beyond OSHA Level D, and that no special handling of samples will be required. If environmentally contaminated materials are encountered, Arcadis will not take responsibility for managing them.

Soil samples obtained during this investigation will be retained for a period of 60 days beyond the submission of our report, unless other disposition is requested.

### **Sub-Task 3G: Coordination and Drilling Observation**

Arcadis will provide full-time technical supervision during the test boring drilling to witness the drilling, visually classify the soil/rock samples, and document the collected field information on logs with descriptions of the encountered subsurface materials. This documentation also includes the measurement of the groundwater level, if encountered. Water level readings will be obtained in each test boring during drilling. At the permanent groundwater observation wells, water level readings will be obtained after installation, 24 hours later, and weekly thereafter, for up to 4 weeks following completion of the test boring investigation. Following drilling, the test boring locations will be documented (recorded) using a submeter accuracy GPS unit. Following drilling, soil and rock samples will be assigned laboratory testing.

### **Sub-Task 3H: Geotechnical Laboratory Testing**

Arcadis will conduct a limited geotechnical laboratory testing program on representative soil samples collected from the test borings to assist with the definition of subsurface stratigraphy and classification. This testing will also provide indications of the physical and engineering properties of the site soils and rock. The rock core testing will also be used to help correlate the SR results in terms of rippability. The following geotechnical laboratory testing program is based on the following assumptions:

- Water Content, ASTM D2216: 120 tests
- Particle Size Distribution without hydrometer, ASTM D6913/7928: 26 tests
- Particle Size Distribution with hydrometer, ASTM D6913/7928: 21 tests
- Liquid Limit, Plastic Limit, and Plasticity Index of Soils, ASTM D4318: 47 tests
- Unconfined Compression on Rock Core (ASTM D7012): 10 tests
- Unconfined Compression on Rock Core with Stress-Strain Curve and Poisson's Ratio (ASTM D7012): 10 tests

The geotechnical laboratory testing program listed above may be modified, as deemed necessary, based on the conditions encountered in the test borings.

### **Sub-Task 3I: Geophysical Investigation and Preliminary Geotechnical Engineering Report**

The data and information gathered in the prior tasks will be correlated and analyzed to evaluate the subsurface conditions. At the conclusion of the correlations/analyses, a preliminary geotechnical engineering report, including results of both the geophysical and geotechnical program, will be prepared. The report will contain discussions on the following:

- Desk study findings including copies of maps and/or aerial photographs with findings.
- Discussion of publicly available geological information.
- Desk study and site reconnaissance findings including photographs and a location plan showing visually observed features related to depth to rock, karst features, and former site use.
- Scaled and annotated profiles and plan-views of the geophysical results.
- Discussion of the geophysical data collection and analysis methodology and our interpretation of the results.
- Locations likely to contain buried foundations or debris.
- Depth to rock and rippability characteristics of the subsurface materials based on comparisons between the resulting data and published bedrock rippability studies.
- Discussion of the subsurface conditions encountered in the test borings.
- Discussion of the karst conditions observed and/or interpreted from the geophysical and geotechnical programs.
- Comments regarding the use of the site soils as trench backfill.
- Comments regarding dewatering considerations.
- Conceptual level comments on geotechnical considerations for trenchless installation.
- Test boring location plan.
- Logs of test borings.
- Results of the geotechnical laboratory testing.

The report will be signed by a Professional Engineer and Professional Geologist registered in the Commonwealth of Pennsylvania.

### **Task 4 – Permitting Requirements**

Arcadis will review the site constraints and evaluate the likely federal, state, and local permit requirements for constructing a pipeline in this location. Permitting agencies likely requiring permitting include:

- PA Department of Environmental Protection (PA DEP)
- US Fish and Wildlife
- PA Historical and Museum Commission (artifacts)



- US Army Corps of Engineers
- PA Department of Transportation
- Lehigh County
- City of Allentown

Arcadis will identify permit needs for a pipeline project in this location. That includes federal, state, and local permits likely to be needed, including construction-specific items like traffic control permits and civil dewatering requirements. Arcadis will prepare a comprehensive list of permit application and known permit-driven construction requirements that can be listed in the RFP for design engineering, who will be responsible for completing the actual design-based applications, and known permit-driven construction requirements in the contract bid documents. This list of required permits will include the initial contact person(s) for each permit.

Arcadis will prepare a Pennsylvania Natural Diversity Inventory Manual Project Submission form and submit a PNDI request to the four jurisdictional agencies to identify if any rare, endangered or threatened plant and animal species need to be assessed within the project area.

Arcadis will prepare a Cultural Resource Notice and submit a request to Pennsylvania Historical and Museum Commission to seek a Cultural Resource Notice declaration. Arcadis will submit request to Bureau of Historic Preservation to identify if there are potential impacts on known archaeological and historic sites.

## **Task 5 – Wetland and Stream Delineation**

Arcadis will conduct a wetland and stream delineation within the proposed 150-foot survey buffer along the 2-mile-long corridor. In performing the field survey, Arcadis' wetland scientists will identify and delineate wetlands, streams, and other waterbody resources potentially regulated under the Federal Clean Water Act as Waters of the United States or under the jurisdiction of the Commonwealth of Pennsylvania. Arcadis will perform an on-site routine wetland determination as described in the U.S. Army Corps of Engineers (USACE) Wetland Delineation Manual, Technical Report Y-87-1 (Environmental Laboratory, 1987) using wetland criteria detailed in engineers Wetland Delineation Manual: Eastern Mountains and Piedmont Region (Version 2.0) (USACE, 2012). Wetlands will be classified following Classification of Wetlands and Deepwater Habitats for the United States (Cowardin et al. 1979). Streams will be identified in accordance with the USACE's Regulatory Guidance Letter No. 05-05 addressing ordinary high-water mark identification.

Once a resource is determined present, the boundaries of the wetland or stream will be field marked with surveyor's flagging tape and the boundaries of each resource will be recorded.

Arcadis will prepare a wetland and stream delineation report (WDR) describing the methods and results of the field delineation effort. This report will include field data sheets, photographs of delineated resources, and mapping of the delineated resources and environmental study area. The report will be suitable for inclusion with environmental permit applications. Delineated wetland areas will be provided in a base file survey.

## **Task 6 – Hydraulic Basis of Design Model Confirmation**

Based on the Tasks 1-5 evaluations, Arcadis will prepare up to three potential final alignment and profiles of the Signatory Relief Interceptor. These will be loaded into the KISS hydraulic model and run with the final Selection of Alternatives flow conditions for an extended 23 year simulation to understand proposed interceptor performance. These results will be used to verify alignment and profile meet design goals, identify where tributary interceptor and trunklines are impacted, evaluate peak flow rates to Park Pump Station and KIWWTP Main Pump Station, and identify surcharge manholes, manhole overflow locations when design events are exceeded, and where manhole may need to be sealed to maximize in-line storage.

## **Task 7 – Basis of Design Report**

Arcadis will prepare a report containing schematic layouts, sketches, and conceptual design criteria with appropriate exhibits to indicate the considerations involved (including applicable requirements of governmental authorities having jurisdiction as aforesaid) and the alternative solutions available to LCA and setting forth Arcadis's updated findings and recommendations. This report will accompany Arcadis's opinion of probable costs for the Project.

Based on the overall length of the alignment, Arcadis will prepare a list of anticipated drawings, typical details for installation and restoration, technical specifications, and permits required for the design and construction of the work that LCA can use to solicit proposal for design phase services.

## **Task 8 – Meetings, Presentation, Workshops, and Project Management**

During the course of this work, Arcadis will prepare for and lead meetings, presentations, and workshops to LCA staff and the program steering committee. For the purposes of this scope and budget, we have assumed regular monthly meetings, presentations of each deliverable, a presentation to LCA Board, and a presentation to City of Allentown. This task will also account for project management costs.

## **DELIVERABLES**

Arcadis will prepare the following deliverables:

- Survey in AutoCAD format
- Record drawings of identified buried utilities
- Geophysical investigation results
- Geotechnical investigation results
- Geophysical Investigation and Preliminary Geotechnical Engineering Report
- List of required permits and contact person(s) for each permit
- Wetland and stream delineation report



- Hydraulic Basis of Design results
- Engineer's opinion of probable construction costs
- Basis of Design Report
- Presentation of the Basis of Design to the LCA Board

## SCHEDULE

Arcadis will begin work upon receipt of the executed agreement. Work is slated to begin within 10 days of Notice to Proceed and be completed 6 months after authorization. Meetings and presentations to review deliverables will be scheduled throughout this period.

## BUDGET ESTIMATE

We estimate the cost and level of effort of this work as shown in the below table.

| Tasks |   | Arcadis Hours | Expense and Subcontractors | Estimated Budget |
|-------|---|---------------|----------------------------|------------------|
| 1     | Existing Buried Utility Identification                    | 54            | \$ 400                     | \$ 11,000        |
| 2     | Survey  | 42            | \$ 49,500                  | \$ 58,000        |
| 3     | Geotech and Groundwater Delineation                       | 218           | \$ 540,600                 | \$ 579,000       |
| 4     | Permitting Requirements                                   | 26            | \$ 13,600                  | \$ 19,000        |
| 5     | Wetlands and Stream Delineation                           | 142           | \$ 1,600                   | \$ 26,000        |
| 6     | Hydraulic Basis of Design Model Confirmation              | 138           | \$ -                       | \$ 23,000        |
| 7     | Basis of Design Report                                    | 168           | \$ -                       | \$ 31,000        |
| 8     | Meetings, Presentation, Workshops, and Project Management | 131           | \$ 1,500                   | \$ 32,000        |
| Total |   | 919           | \$ 607,200                 | \$ 779,000       |

We propose to complete these services on a time and materials basis in accordance with the Agreement between LCA and Malcolm Pirnie, Inc., and the current Summary of Standard Charges for Lehigh County Authority. Arcadis will track the costs associated with this work and report them to LCA monthly throughout the project; we will not exceed the authorized budget without written professional services authorization from LCA. Payment for services will be based upon the actual labor and expenses incurred. Invoicing will be completed monthly. The invoice will include the defined contract tasks listing the day-by-day personnel performing the task with hourly rate and hours worked. The invoice will provide total billed for month. Support documents will be provided if there are any 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.

Sincerely,

Mr. Philip DePoe  
KISS Relief Interceptor Planning Study  
January 22, 2024



ARCADIS U.S., Inc.

A handwritten signature in blue ink that reads 'James W. Shelton'.

James W. Shelton, PE  
Vice President

A handwritten signature in blue ink that reads 'John Scioscia'.

John Scioscia, PE  
Vice President

Cc: Tony Dill



Lehigh County Authority

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

## BUDGET AMENDMENT REQUEST

### Budget Year 2024

Date: February 12, 2024

Type:            Transfer \_\_\_\_\_  
                 Addition      X    
                 Deletion    \_\_\_\_\_

Requested By: Phil DePoe  
Approved By: \_\_\_\_\_

Budget:              \$0  

Amount:            \$879,000 

#### Item(s) Requested:

Little Lehigh Relief Interceptor Phase 1  
(LLRI-1):  
*KISS Relief Interceptor (KRI Pre-Design)*

#### Source(s) of Funds:

LCA Suburban  
Wastewater Division

#### Project:

Act 537: KRI Pre-Design

2024 Forecast: \$1,499,106  
2024 Budget: \$620,106  
2024 Variance: (\$879,000)

#### Reason:

To proceed with the pre-design work associated with the required "Act 537 driven" KISS Relief Interceptor, LCA proposes to use the LLRI-1 fund, a subset of the LCA Suburban Wastewater Division that was established to manage shared capital and operating costs associated with the Park Pump Station. Per current intermunicipal agreements, LLRI-1 fund distributes costs to the nine KISS municipalities who currently use and pay for the Park Pump Station. However, the KISS Relief Interceptor project is required to convey future flows from all 15 KISS municipalities. Therefore, upon execution of new agreements associated with Act 537, a "true-up" of these pre-design project costs will be conducted to redistribute the expenses to all KISS municipalities in accordance with the new agreement. This arrangement has been reviewed with municipalities subject to the LLRI-1 fund cost-sharing and found to be acceptable.

## CAPITAL PROJECT AUTHORIZATION

|                     |  |               |  |
|---------------------|--|---------------|--|
| PROJECT NO.:        | SD-S-15                                    | BUDGET FUND:  | Suburban Div\Wastewater\Capital  |
| PROJECT TITLE:      | KISS Relief Interceptor – Pre-Design Phase | PROJECT TYPE: | <input checked="" type="checkbox"/> Construction<br><input checked="" type="checkbox"/> Engineering Study<br><input type="checkbox"/> Equipment Purchase<br><input type="checkbox"/> Amendment |
| THIS AUTHORIZATION: | \$879,000                                  |               |  |
| TO DATE (W/ ABOVE)  | \$879,000                                  |               |  |

### DESCRIPTION AND BENEFITS:

The City of Allentown's Little Lehigh Interceptor (LLI) was constructed in 1928 to convey flow from the City of Allentown to its then new Kline's Island Wastewater Treatment Plant (KIWWTP). As the surrounding communities developed sewer systems and grew, additional relief facilities were constructed in the 1980s and 1990s. Growth has continued, existing assets have aged, and current Act 537 planning studies show additional conveyance relief is required. Per PA DEP instructions, new pipelines need to have their alignments nearly finalized prior to Act 537 submission. To satisfy this DEP requirement while maintaining overall Act 537 program schedule, the next stage of planning requires survey, subsurface utility locating, geotechnical investigation, groundwater investigation, wetlands assessments, and PNDI/PHMC evaluations. See proposal for further details.

**Prior Authorizations:** None related to this specific authorization. To date, Arcadis has been granted multiple authorizations throughout this Act 537 planning process, including the recently completed FAA (Final Alternatives Analysis) and the recently authorized Selection of Solution (SOS).

**This Authorization:** Completion of the work associated with this KISS Relief Interceptor (KRI) proposal. See attached Board Memo for further project details.

### Authorization Status:

| Requested This Authorization (KRI Pre-Design) |                  |
|---|------------------|
| <i>Design Phase</i>                           |                  |
| Staff   | \$50,000         |
| Contractor                                    | \$0              |
| Engineering Consultant                        | \$779,000        |
| Contingency                                   | \$50,000         |
| <b>Total This Authorization</b>               | <b>\$879,000</b> |

|   |                         |
|---|-------------------------|
| Prior Act 537 Authorizations (2019-present) | Various                 |
| <b>Subtotal</b>                             | <b>\$879,000</b>        |
| <i>Future Authorizations</i>                | <i>To be determined</i> |

### REVIEW AND APPROVALS:

|                                      |               |                                  |               |
|--------------------------------------|---------------|----------------------------------|---------------|
| _____<br>Project Manager             | _____<br>Date | _____<br>Chief Executive Officer | _____<br>Date |
| _____<br>Chief Capital Works Officer | _____<br>Date | _____<br>Chairman                | _____<br>Date |



**Lehigh County Authority**

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

## PROFESSIONAL SERVICES AUTHORIZATION

**Professional:** ARCADIS U.S., INC.  
1600 Market Street  
Suite 1810  
Philadelphia, PA 19103

**Date:** February 12, 2024

**Requested By:** Phil DePoe

### Approvals

**Department Head:** \_\_\_\_\_

**Chief Executive**

**Officer:** \_\_\_\_\_

### Suburban Division: KISS Relief Interceptor (KRI) – Pre-Design Phase

The City of Allentown's Little Lehigh Interceptor (LLI) was constructed in 1928 to convey flow from the City of Allentown to its then new Kline's Island Wastewater Treatment Plant (KIWWTP). As the surrounding communities developed sewer systems and grew, additional relief facilities were constructed in the 1980s and 1990s. Growth has continued, existing assets have aged, and current Act 537 planning studies show additional conveyance relief is required. Per PA DEP instructions, new pipelines need to have their alignments nearly finalized prior to Act 537 submission. To satisfy this DEP requirement while maintaining overall Act 537 program schedule, the next stage of planning requires survey, subsurface utility locating, geotechnical investigation, groundwater investigation, wetlands assessments, and PNDI/PHMC evaluations.

The services of the proposal include, but are not limited to, the following:

| Professional Services <sup>(1)</sup>                          |
|---|
| 1. Existing Buried Utility Identification                     |
| 2. Survey   |
| 3. Geotech and Groundwater Delineation                        |
| 4. Permitting Requirements                                    |
| 5. Wetlands and Stream Delineation                            |
| 6. Hydraulic Basis of Design Model Confirmation               |
| 7. Basis of Design Report                                     |
| 8. Meetings, Presentations, Workshops, and Project Management |

*(1) Pre-design phase only*

**This Approval:** \$779,000 *(see attached proposal)*

**Total Amount (not to be exceeded without further authorization):** \$779,000

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

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(For Authority Use Only)

**Authorization Completion:**

**Approval:** \_\_\_\_\_ **Actual Cost:** \_\_\_\_\_ **Date:** \_\_\_\_\_

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## MEMORANDUM

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**Date:** February 12, 2024

**To:** Lehigh County Authority Board of Directors  
**From:** Matt Dorner, Project Manager  
**Subject:** Suburban Division – Arcadia Wastewater Treatment Plant Mechanical Screening System Project – Design Phase

**MOTIONS / APPROVALS REQUESTED:**

| No. | Item  | Amount   |
|-----|---|----------|
| 1   | Capital Project Authorization – Design Phase  | \$66,300 |
| 2   | Professional Services Authorization: Design Phase<br>Engineering Services – D’Huy Engineering | \$48,800 |

**PROJECT OVERVIEW AND OBJECTIVE**

The Lehigh County Authority (LCA) operates the Arcadia Wastewater Treatment Plant (WWTP) located in Weisenberg Township (New Smithville), Lehigh County. The WWTP facility serves the Arcadia West Industrial Park and adjacent businesses. The WWTP facility consists of the following processes:

- Influent pumping station with submersible pumps and sewage grinder
- Sequencing Batch Reactors (SBRs) – 2 parallel covered tanks
- Post SBR equalization
- Disk filtration
- Ultraviolet (UV) disinfection
- Effluent metering and effluent discharge

The WWTP receives an average daily flow of approximately 30,000 gpd and serves eleven industrial and commercial customers in the Arcadia West Industrial Park in Weisenberg Township. There is a sewage grinder located in the influent wet well, however the WWTP has no screening system for the raw wastewater. Consequently, rags and other bulky debris accumulate in the SBRs, which create operational and maintenance issues, particularly from instrumentation fouling and process pump clogging.

This project consists of the installation of two automatic mechanical screening units (one per SBR), to be installed in-line with the influent force mains for the tank. The units are to be mounted on platforms at the top head end of each SBR tank, along with associated piping, electrical, and controls. The mechanical screens will remove all bulky inorganic debris and rags from the waste stream, dewater the screenings, and discharge the material into a waste container that will be periodically emptied by the plant operators.

**FINANCIAL**

This Project will be funded by the LCA Suburban Division.

**PROJECT STATUS**

Board approval is requested for Design Phase.

**THIS APPROVAL – DESIGN PHASE****PROFESSIONAL SERVICES**

Design phase services are to be provided by D'Huy Engineering (D'Huy). D'Huy is familiar with the Arcadia WWTP, as the firm completed an influent screening evaluation and preliminary engineering in 2023. The scope of the consultant's services shall include the following:

- 1) Provide detailed design services including structural, mechanical, and electrical.
- 2) Provide permitting services, including pre-application meeting with DEP, DEP Water Quality Management Part II permit application submission, and address DEP comments.
- 3) Coordinate and attend progress meetings with LCA.
- 4) Provide bid phase services including pre-bid meeting attendance, issue addenda, respond to bidders RFIs, bid review.

**PROJECT SCHEDULE**

Based on design phase approval at the February 12, 2024 LCA Board meeting, it is anticipated that final design and permitting will be completed by late spring with bid phase to follow. Construction phase is anticipated to be completed by the end of 2025.

**FUTURE AUTHORIZATIONS**

Construction Phase

## CAPITAL PROJECT AUTHORIZATION

|                            |   |  |  |
|----------------------------|---|--|--|
| <b>PROJECT NO.:</b>        | <u>SD-S-8</u>   | <b>BUDGET FUND:</b>                                    | <u>Suburban Div\Wastewater\Capital</u> |
| <b>PROJECT TITLE:</b>      | <u>Suburban Division – Arcadia Wastewater Treatment Plant Screening System Project – Design &amp; Bidding Phase</u> | <b>PROJECT TYPE:</b>                                   |  |
|                            |   | <input type="checkbox"/> Construction                  |  |
|                            |   | <input checked="" type="checkbox"/> Engineering Design |  |
| <b>THIS AUTHORIZATION:</b> | <u>\$66,300</u>   | <input type="checkbox"/> Equipment Purchase            |  |
| <b>TO DATE (W/ ABOVE)</b>  | <u>\$84,300</u>   | <input type="checkbox"/> Amendment                     |  |

### DESCRIPTION AND BENEFITS:

#### Screening System Project – Design & Bid Phase:

This authorization consists of providing design and bid phase services for Suburban Division Arcadia WWTP Screening System Project. The design includes, but is not limited to, two new screening units, above grade platforms and enclosures to support and protect the screening systems, and associated piping, electrical, and controls.

| Previous Authorizations              |  |
|--------------------------------------|--|
| Influent screening feasibility study |  |

| REQUESTED THIS AUTHORIZATION                    |                 |
|---|-----------------|
| Design & Bid Phase                              |                 |
| Professional Services:                          |                 |
| Design & Bid Phase Services – D’Huy Engineering | \$48,800        |
| Staff   | \$7,500         |
| Contingency                                     | \$10,000        |
| Total This Authorization                        | <b>\$66,300</b> |

| Future Authorization |     |
|----------------------|-----|
| Construction Phase   | TBD |

|                         |     |
|-------------------------|-----|
| Total Estimated Project | TBD |
|-------------------------|-----|

### REVIEW AND APPROVALS:

|                                    |             |                                |             |
|------------------------------------|-------------|--------------------------------|-------------|
| <u>Project Manager</u>             | <u>Date</u> | <u>Chief Executive Officer</u> | <u>Date</u> |
| <u>Chief Capital Works Officer</u> | <u>Date</u> | <u>Chairman</u>                | <u>Date</u> |





**Lehigh County Authority**

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(610)398-2503 \* FAX (610)398-8413 \* Email: service@lehighcountyauthority.org

## PROFESSIONAL SERVICES AUTHORIZATION

**Professional:** D'HUY ENGINEERING, INC.  
One East Broad Street, Suite 310  
Bethlehem, PA 18018

**Date:** February 12, 2024

**Requested By:** Matt Dörner

**Approvals**

**Department Head:** \_\_\_\_\_

**Chief Executive**

**Officer:** \_\_\_\_\_

### Suburban Division – Arcadia Wastewater Treatment Plant Screening System Project

D'Huy Engineering will perform the design and bid phase services for the Arcadia WWTP Screening System Project in accordance with their proposal dated 12/29/23. D'Huy will perform the following tasks:

| Professional Services <sup>(1)</sup>   |
|--|
| 1. Provide detailed design services including structural, mechanical, and electrical.  |
| 2. Provide permitting services, including pre-application meeting with DEP, WQM Part II permit application submission and address DEP comments |
| 3. Coordinate and attend progress meetings with LCA  |
| 4. Provide bid phase services including pre-bid meeting attendance, issue addenda, respond to bidders RFIs, bid review                         |

**Cost Estimate (not to be exceeded without further authorization): \$48,800**

**Time Table and Completion Deadline:** Anticipate NTP for construction in October 2024.

(For Authority Use Only)

**Authorization Completion:**

**Approval:** \_\_\_\_\_ **Actual Cost:** \_\_\_\_\_ **Date:** \_\_\_\_\_

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## MEMORANDUM

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**Date:** February 12, 2024

**To:** Lehigh County Authority Board of Directors  
**From:** Amy Rohrbach, Project Manager  
**Subject:** Allentown Division – WWTP: Secondary Digester Cleaning - Construction Phase

**MOTIONS / APPROVALS REQUESTED:**

| No.              | Item  | Amount    |
|------------------|---|-----------|
| 1                | Capital Project Authorization – Construction Phase                            | \$292,900 |
| 2 <sup>(1)</sup> | Professional Services Authorization – GHD Inc.                                | \$17,900  |
| 3 <sup>(1)</sup> | General Contract Award – Romesberg Trucking, Inc. dba Mobile Solids Solutions | \$265,000 |

*(1) Included in the Capital Project Authorization.*

**PROJECT OVERVIEW:**

Cleaning of the digester tanks is performed on a 5-year cycle at Kline’s Island Wastewater Treatment Plant (KIWWTP). The Secondary Digester is due for cleaning. The work is to be performed by an outside contractor. This project will also include replacement of the sludge sample lines and repairs to the overflow box as was done on the most recent Primary Digester cleanings (No. 1 and No. 2 tanks).

**FINANCIAL:**

This Project will be funded by the LCA Allentown Division.

**PROJECT STATUS:**

The project was advertised for bid on January 5, 2024. A pre-bid meeting was held on January 11, 2024 and bids were received on January 25, 2024.

**THIS APPROVAL – CONSTRUCTION PHASE:**

The construction phase includes activities that are necessary to clean the Secondary Digester. The General Contractor will be responsible for all construction activities, including but not limited to the following:

- Emptying, dewatering, and cleaning the Secondary Digester
- Replacement of digested sludge sample lines (4 each)
- Repair of Secondary digester overflow box

The design engineer will be responsible for periodic oversight of the construction, which will be supplemented by in-house project management provided by LCA.

**BIDDING SUMMARY:**

The project requires a General Construction (GC) Contract. The bid results are summarized below:

| <b>Bidder</b>  | <b>Bid Results</b> |
|--|--------------------|
| <b>Romesberg Trucking Inc. dba Mobile Solids Solutions</b> | <b>\$265,000</b>   |
| Denali Water Solutions, LLC                                | \$307,838          |
| Spectraserv Inc.   | \$329,720          |
| Syangro Central, LLC                                       | \$429,718          |

Based upon the review of the bids, we recommend award of the General Construction contract to Romesberg Trucking Inc. dba Mobile Solids Solutions (MSS) subject to the receipt of the necessary Performance Bonds, Insurance, and other required documentation. Mobile Solids Solutions, located in Somerset, PA, specializes in digester cleaning and sludge removal, and has been in business for 6 years. In fact, MSS performed the cleaning of Primary Digester No. 2 in 2023 and performed emergency dewatering of the primary clarifiers in late summer of 2023. The contractor's prior job performance with satisfactory and in accordance with the specifications and timelines set by LCA Operations staff. LCA staff has reviewed the bid documents and supplied references and recommend award of the contract to Mobile Solids Solutions.

**PROFESSIONAL SERVICES:**

GHD Inc. has been our design consultant on this project (and prior digester cleaning and rehabilitation projects) and will provide construction engineering services for the construction phase of the project.

**PROJECT SCHEDULE:**

The specifications require that the tank cleaning and associated rehabilitation work be completed within 60 days of the Notice to Proceed.

**FUTURE AUTHORIZATIONS:**

No future authorizations are anticipated for this project.



Our ref: 12624141

February 01, 2024

Amy Rohrbach, PE  
Project Manager  
Lehigh County Authority  
112 Union Street  
Allentown, PA 18102

**Re: Proposal for Professional Engineering Services  
Secondary Digester Cleaning and Improvements – Construction Phase Services**

Dear Ms. Rohrbach:

As requested GHD is submitting the following proposal for construction phase services associated with the dewatering and cleaning of the Secondary Digester located at the Kline's Island WWTP, as well as other miscellaneous improvements. Our understanding of the project scope is as follows:

## **Construction Phase Tasks**

### **Project Award and Office Administration**

GHD will prepare and issue a Notice of Award and coordinate receipt of bonds, insurances, signed Agreement and other required documents from the apparent low bidder. GHD will prepare and issue a Notice to Proceed to the Contractor after LCA countersigns the Agreement. Three conformed, fully executed sets of Contract Documents will be provided to LCA for its use. A single set of Contract Documents will be provided to the Contractor. A digital copy of the Contract Documents will be provided to all parties.

GHD will answer questions regarding the design intent, provide interpretation and clarifications of the Contract Documents, and in connection therewith, prepare work directives for issuance to the Contractor, as needed. Progress payments will be reviewed on a monthly basis and either recommended to LCA for payment or returned to the Contractor for revisions. Change orders will be reviewed, if any, and GHD will recommend actions and contract cost adjustments to LCA as appropriate. It is assumed that the Contractor will complete the digester cleaning work, digested sludge sample line replacement, and overflow box rehabilitation work within the stipulated Contract Times.

### **Meetings and Inspections**

GHD's onsite attendance at meetings and inspections is included as follows:

1. Pre-construction meeting.
2. Construction progress meetings.
3. Overflow box inspection.
4. Substantial completion inspection.

*Pre-Construction Meeting:* GHD will attend a pre-construction meeting prior to the Contractor mobilizing to review the Contractor's approach to cleaning the digester as well as their anticipated cleaning schedule. At this

meeting we will also outline the procedures and protocols for dewatered cake sampling, maintaining project records, progress payments, and project closeout. Meeting minutes will be prepared and distributed by GHD.

*Construction Progress Meetings:* GHD will coordinate and run up to two (2) progress meetings while the digester is being cleaned, the sample lines are being replaced, and the overflow is being rehabilitated. At these meetings GHD will review the cleaning progress and schedule compliance with the Contractor, and discuss coordination issues, as necessary. Meeting minutes will be prepared and distributed by GHD.

*Overflow Box Inspection:* GHD will inspect the overflow box repair work, determine the actual amount of spill repair completed and/or required, and confirm the adequacy of the proposed repair approach based on the actual extent of the concrete damage observed. If the timing works out, GHD will attempt to conduct this inspection in coordination with one of the progress meetings.

*Substantial Completion Inspection:* GHD will conduct a substantial completion inspection when the Contractor indicates the cleaning and other work is substantially complete. A Certificate of Substantial Completion will either be issued along with a punch list of work items to be finalized, or else written documentation of why the work is not considered substantially complete will be provided.

## **Project Closeout and Final Payment**

GHD will coordinate receipt of all required project closeout documents from the Contractor, including the Contractor's affidavit of payment of debts and claims, affidavit of release of liens, and consent of Surety to final payment. GHD will prepare a final balancing change order taking into actual amount of dry tons of material removed from the digester tank, as well as the actual amount of overflow box rehabilitation work completed, in conjunction with the Contractor's final application for payment.

## **Cost Proposal**

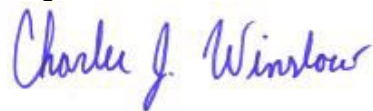
GHD proposes to complete the construction phase services outlined in this proposal for a not to exceed price of \$17,900 inclusive of all labor and expenses. LCA will only be billed for the actual time and expenses required to complete each task.

## **Terms and Conditions**

All work will be completed in accordance with the terms and conditions outlined in the "2023-2024 Master Services Agreement for Professional Services" between Lehigh County Authority and GHD dated April 12, 2023.

Please do not hesitate to contact me with any questions you may have regarding the project and/or this proposal. We look forward to a successful and timely completion of this project.

Regards,



**Charles J. Winslow, PE**  
Project Manager

1-215-853-3331  
charles.winslow@ghd.com

CJW

# CAPITAL PROJECT AUTHORIZATION

|                     |   |               |   |
|---------------------|---|---------------|---|
| PROJECT NO.:        | AD-S-A  | BUDGET FUND:  | Allentown Div\WW\Capital  |
| PROJECT TITLE:      | Allentown Division – KIWWTP Secondary<br>Digester Cleaning – Construction Phase | PROJECT TYPE: | <input checked="" type="checkbox"/> Construction<br><input type="checkbox"/> Engineering Study<br><input type="checkbox"/> Equipment Purchase<br><input type="checkbox"/> Amendment No. 1 |
| THIS AUTHORIZATION: | \$292,900   |               |   |
| TO DATE (W/ ABOVE)  | \$313,900   |               |   |

## DESCRIPTION AND BENEFITS:

Cleaning of the digester tanks is performed on a 5 year cycle at Kline’s Island Wastewater Treatment Plant (KIWWTP). The Secondary Digester is due for cleaning. The work is to be performed by an outside contractor. This project will also include replacement of the sludge sample lines and repairs to the overflow box as was done on the most recent Primary Digester cleanings (No. 1 and No. 2 tanks).

Notice to Proceed shall be issued March 2024 and substantial completion is anticipated by the end of May 2024.

## AUTHORIZATION STATUS:

| Prior Authorizations  |                         |
|---|-------------------------|
| <i>Design Phase – D’Huy Engineering, Inc.</i>                                     | <i>\$21,000</i>         |
| Requested This Authorization – Construction Phase                                 |                         |
| <b>General Contract: Romesberg Trucking, Inc.<br/>dba Mobile Solids Solutions</b> | <b>\$265,000</b>        |
| <b>Construction Administration Services: GHD,<br/>Inc.</b>                        | <b>\$17,900</b>         |
| <b>Staff</b>  | <b>\$5,000</b>          |
| <b>Contingencies</b>  | <b>\$5,000</b>          |
| <b>Total This Authorization</b>   | <b>\$292,900</b>        |
| <b>Future Authorizations</b>  | <b>NONE ANTICIPATED</b> |

## REVIEW AND APPROVALS:

|                             |       |                         |       |
|-----------------------------|-------|-------------------------|-------|
| _____                       | _____ | _____                   | _____ |
| Project Manager             | Date  | Chief Executive Officer | Date  |
| _____                       | _____ | _____                   | _____ |
| Chief Capital Works Officer | Date  | Chairman                | Date  |



**Lehigh County Authority**

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

## PROFESSIONAL SERVICES AUTHORIZATION

**Professional:** GHD INC.  
1140 Welsh Rd, Suite 120  
North Wales, PA 19454

**Date:** February 12, 2024

**Requested By:** Amy Rohrbach

**Approvals**

**Department Head:** \_\_\_\_\_

**Chief Executive**

**Officer:** \_\_\_\_\_

### Allentown Division – KIWWTP: Secondary Digester Cleaning: Construction Phase

GHD Inc. will perform construction phase related services for the Secondary Digester Cleaning at the Kline's Island Wastewater Treatment Plant (KIWWTP). The construction phase services include the following tasks:

| Professional Services <sup>(1)</sup>                 |
|--|
| 1. Attend pre-construction and progress meetings (2) |
| 2. Review shop drawings                              |
| 3. Respond to contractor RFIs                        |
| 4. Overflow Box repair inspection                    |
| 5. Review pay applications                           |
| 6. Substantial Completion Inspection                 |
| 7. Contract closeout administration                  |

*(1) Reference the GDH, Inc. proposal dated 2/1/2024 for additional information.*

Not to be exceeded without further authorization: **\$17,900**

**Time Table and Completion Deadline:** As required to meet the deadline as set forth in the construction contract.

**(For Authority Use Only)**

**Authorization Completion:**

**Approval:** \_\_\_\_\_ **Actual Cost:** \_\_\_\_\_ **Date:** \_\_\_\_\_



# Lehigh County Authority – Monthly Report to Board of Directors

## Upcoming Board Agenda Items & Project Updates – February 2024

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Published: February 5, 2024

### ***PART 1 – Upcoming Agenda Items – Action & Discussion Items***

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#### **FINANCE & ADMINISTRATION**

**Project Title: Board of Directors - Election of Officers**

Division / Funding: n/a

Board Action Date: 2/26/2024

Status or Action Desired: Election Vote

Project Phase: n/a

Project Notes: The Board of Directors will nominate and elect officers for 2024 at the February 26, 2024 Board meeting. Staff Responsibility: Liesel Gross

**Project Title: Monthly Financial Review**

Division / Funding: n/a

Board Action Date: 2/26/2024

Status or Action Desired: Information

Project Phase: n/a

Project Notes: The December 2023 monthly financial report will be presented in February 2024. The January 2024 report will be distributed to the Board in March. Staff Responsibility: Ed Klein

#### **SYSTEM OPERATIONS**

**Project Title: Monthly Operations Report**

Division / Funding: n/a

Board Action Date: 2/26/2024

Status or Action Desired: Discussion

Project Phase: n/a

Project Notes: The January 2024 monthly operations report will be presented. Staff Responsibility: Andrew Moore & Chris Moughan

#### **WATER PROJECTS**

**Project Title: Water Main Replacement Program Cycles 9 - 11**

Division / Funding: Allentown Division

Board Action Date: 2/26/2024

Status or Action Desired: Approval

Project Phase: Design Phase

Project Notes: Through the Lease Agreement with the City of Allentown, LCA is anticipating to replace a total of six miles of water main during the period of 2025 through 2027. Approximately two miles of water main replacement each year will be scoped for cycle 9 through 11 to satisfy the Lease requirement through 2027. This project will be funded by the LCA Allentown Division and has been approved by the City as a Major Capital Improvement. Board Authorization is therefore requested at the February 26, 2024 meeting. Staff Responsibility: Jason Peters

**Project Title: Lead Service Line Replacement Project Cycle 2**Division / Funding: Allentown DivisionBoard Action Date: 2/26/2024Status or Action Desired: ApprovalProject Phase: Design Phase

Project Notes: This project focuses on Cycle 2 of the lead service line (LSL) replacement program in the City of Allentown. The scope of the project consists of the replacement of approximately 1,000 lead service lines within a prioritized project area. LCA will be seeking grants and low interest loans from PennVest for each cycle of this program. LCA anticipates seeking Design and Bid phase Board authorization at the February 26, 2024 meeting. Staff Responsibility: Albert Capuzzi

**WASTEWATER PROJECTS****Project Title: Legal Services: Development of New Intermunicipal Agreement(s)**Division / Funding: City of Allentown (AO)Board Action Date: 2/12/2024Status or Action Desired: ApprovalProject Phase: Planning Phase

Project Notes: One of the Act 537 Plan requirements is to complete a financial evaluation of the selected alternative, including rate impacts, cost-sharing, and financing approach. Another key requirement is to evaluate the institutional / governance approach to completing the projects, operating and maintaining the facilities, and monitoring performance. As the financial analysis of various cost-sharing options is drawing to a close, the KISS municipalities have agreed to jointly retain the services of a single law firm to support the development of new intermunicipal agreement(s) that will be necessary to implement the Act 537 Plan and the new cost-sharing methodology being developed. This work is anticipated to begin immediately and span up to two years while all municipalities consider adoption of the new agreement(s). At the 2/12/2024 Board meeting, authorization to retain a law firm to support this effort will be requested. Staff Responsibility: Liesel Gross

**Project Title: KISS Act 537 Planning - Financial & Institutional Evaluation, Phase 3**Division / Funding: City of Allentown (AO)Board Action Date: 2/26/2024Status or Action Desired: ApprovalProject Phase: Planning Phase

Project Notes: One of the Act 537 Plan requirements is to complete a financial evaluation of the selected alternative, including rate impacts, cost-sharing, and financing approach. Another key requirement is to evaluate the institutional / governance approach to completing the projects, operating and maintaining the facilities, and monitoring performance. In December 2022, authorization was granted to retain a professional consultant (Raftelis) to conduct phase 1 of this work, which included a preliminary financial evaluation focused on gathering data from all municipalities and conducting preliminary analyses on system costs and user rates. Phase 2 work was authorized in July 2023 and included more detailed analysis of existing agreements and cost-sharing mechanisms, and workshops with the municipalities to develop updated cost-sharing methods and alternatives. The results of Phases 1 and 2 will be incorporated into a financial model for further analysis of rate impacts and system capacity to fund the projects included in the Act 537 Plan. Phase 3 work will include final preparation of financial analyses to be completed in the Act 537 Plan submission, and support provided to the legal team to be retained to help the municipalities draft new intermunicipal agreement(s). Board authorization for Raftelis to continue this work in Phase 3 will be requested at the 2/26/2024 meeting. Staff Responsibility: Liesel Gross

**Project Title: KISS Relief Interceptor Pre-Design Study**Division / Funding: Suburban DivisionStatus or Action Desired: ApprovalBoard Action Date: 2/12/2024Project Phase: Planning Phase

Project Notes: During the Preliminary Screening of Alternatives (PSOA) and Final Alternatives Analysis (FAA) phase of Act 537 planning work, the need for a new conveyance asset from the Water Filtration Plant (WFP) to KIWWTP became more and more clear. The core engineering team looked at various alternatives and finally settled on the following recommendation: install a parallel gravity interceptor in this general area. Several potential viable alignments have been identified but significant unknowns exist that will influence the final selection of alignment. In order to eliminate these unknowns while maintaining the Program's implementation schedule, detailed alignment planning for this new interceptor needs to occur now. Board authorization is therefore requested at the February 12, 2024 Meeting. Staff Responsibility: Phil DePoe

**Project Title: Arcadia WWTP Screening System Project**Division / Funding: Suburban DivisionStatus or Action Desired: ApprovalBoard Action Date: 2/12/2024Project Phase: Design Phase

Project Notes: The Arcadia WWTP receives an average daily flow of approximately 30,000 gpd and serves eleven industrial and commercial customers in the Arcadia West Industrial Park in Weisenberg Township. There is a sewage grinder located in the influent wet well; however, the WWTP has no screening system. Consequently, rags and other debris continue to accumulate in the SBRs, which create operational and maintenance issues, particularly with instrumentation fouling and process pump clogging. This project is for the design of two screening units (one per SBR), to be mounted above grade on platforms and enclosures, along with associated piping, electrical, and controls. Staff Responsibility: Matt Dorner

**Project Title: Kline's Island WWTP: Secondary Digester Cleaning**Division / Funding: Allentown DivisionStatus or Action Desired: ApprovalBoard Action Date: 2/12/2024Project Phase: Construction Phase

Project Notes: The cleaning of the digesters at KIWWTP are performed on a 5 year cycle. The Secondary digester is due for cleaning this year as it was last cleaned in 2019. A PSA was issued to GHD on October 5, 2023 for design and bid phase, with the scope to include cleaning of the secondary digester as well as replacing sludge sample lines and repairs to the overflow box. The bid package was advertised 1/5/2024 and a prebid meeting was held on 1/11/2024. Bids were opened via PennBID on 1/25/2024. Capital Project Authorization is being requested to award the construction contract as well as Professional Services Authorization for Engineering services during construction. Staff Responsibility: Amy Rohrbach

**Project Title: Sanitary Sewer Collection System: I&I Source Reduction Program (LCA Year 1)**Division / Funding: Allentown DivisionStatus or Action Desired: ApprovalBoard Action Date: 2/26/2024Project Phase: Construction Phase

Project Notes: As the EPA driven 5 year Regional Flow Management Strategy (RFMS) concludes, the next phase of system I&I work shifts to the amended Lease Agreement and ongoing Act 537 commitments. With the amended Lease Agreement, responsibility of the City's I&I program now shifts to LCA in 2024. Following terms of the Lease, LCA and the City have collaborated in 2022 to prepare a 10 Year I&I source reduction plan. The first year of construction authorization will occur in 2024, with design services authorized at the February 27, 2023 Board meeting. The City, along with the majority of the KIWWTP municipalities, have prepared these Source Reduction Plans (SRPs) that will be submitted with the Final Act 537 Plan. LCA received competitive project bids on January 23, 2024 for the construction phase of this project. Board authorization is therefore requested at the February 26, 2024 meeting. Staff Responsibility: Jason Peters

**Project Title: Kline's Island WWTP: Master Plan**Division / Funding: Allentown DivisionBoard Action Date: 2/26/2024Status or Action Desired: ApprovalProject Phase: Planning Phase

Project Notes: Per the Concession Lease Agreement with the City, LCA is required to perform a Master Plan of the KIWWTP every 5 years. The first Master Plan was completed in 2019. The Master Plan objectives are to assess the current condition of the KIWWTP infrastructure and identify and prioritize capital projects to enable continued permit compliance, address operational issues, address high risk processes and equipment, and enhance efficiencies. The Master Plan is to include a short term, near term and long term capital improvement plan. A Master Plan update is to be performed in 2024. Planning phase authorization is to be requested at the 2/26/2024 LCA Board meeting. Staff Responsibility: Chuck Volk

### **WATER PROJECTS – SUBURBAN DIVISION**

**Project Title: Central Lehigh and North Whitehall Systems – Water Supply Study**Division / Funding: Suburban DivisionBoard Action Date: n/aStatus or Action Desired: UpdatedProject Phase: Planning Phase

Project Notes: This project involves the preparation of a water supply study (the “Study”) to identify and evaluate feasible means to address current and long-term water supply needs in the Central Lehigh Division (CLD) and North Whitehall Division (NWD). Recently completed planning studies have identified the need for additional supply in these two systems. Authorization was granted at the February 14, 2022 Board meeting and the draft Study will be completed in the second quarter of 2023. From this study, additional engineering work will be initiated to develop water supply projects that enhance the region's water system resiliency and redundancy. This water supply study will serve as the backbone for the future development of a comprehensive Master Plan update for the entire LCA Suburban Division Water System. A presentation on the study's findings to date was given at the May 22, 2023 Board Meeting. A draft report was delivered in mid January 2024 and is currently under review. Staff Responsibility: Phil DePoe

### **WATER PROJECTS – ALLENTOWN DIVISION**

**Project Title: Lehigh River Pump Station Upgrades**Division / Funding: Allentown DivisionBoard Action Date: 3/11/2024Status or Action Desired: NEWProject Phase: Planning Phase

Project Notes: The Lehigh River Pump Station is infrequently utilized due to taste and odor concerns as well as operations issues with the existing pumps and intake screens. This preliminary engineering evaluation will identify treatment plans for taste and odor control as well as pump upgrades and intake screening modifications. The goal is to be able to utilize the Lehigh River source fully in the event the Little Lehigh Creek intake has to be taken out of service for any reason. A request for proposal was distributed to four firms on 1/23/2024 and proposals are scheduled to be received 2/21/2024. Board authorization will be requested at the March 11, 2024 meeting. Staff Responsibility: Amy Rohrbach

## **WASTEWATER PROJECTS – KISS ACT 537**

### **Project Title: Kline's Island WWTP - High-Rate Wet-Weather Treatment Pilot Study**

Division / Funding: Allentown Division

Board Action Date: n/a

Status or Action Desired: Updated

Project Phase: Planning Phase

Project Notes: As part of the final Act 537 Plan that is due to DEP by March 2025, three separate alternatives are being evaluated to address current and future wet-weather events at the Kline's Island WWTP. One alternative involves construction of flow equalization tanks to store wet-weather flow. The second alternative involves constructing internal plumbing modifications and control systems to temporarily run plant treatment systems in parallel (vs. sequentially) during wet-weather scenarios. These first two alternatives are well understood and can be evaluated and costs estimated without further testing. The third alternative involves the construction of a high-rate wet-weather treatment system known as "BioActiflo," which is expected to be similar or lower in cost to other options being explored. Due to this being a newer technology, three rounds of bench scale testing for BioActiflo occurred in 2021 for proof-of-concept validation. The next step to determine if BioActiflo is a viable alternative is a full-scale pilot project, which would be required for permitting in the future if this option is selected. An authorization request for this pilot was granted at the November 14, 2022 Board meeting. The equipment arrived on site in late April of 2023 and the pilot study concluded in mid-July. Full results were published in late September. A recommendation on the preferred alternative will be presented to the KISS Managers and Engineers in February 2024. Staff Responsibility: Phil DePoe

### **Project Title: Regional Sewer Capacity & Wet-Weather Planning - Regional Act 537 Plan Preparation**

Division / Funding: City of Allentown (AO)

Board Action Date: n/a

Status or Action Desired: Updated

Project Phase: Planning Phase

Project Notes: All municipalities flowing into the Kline's Island Wastewater Treatment Plant completed an Interim Act 537 Plan ("Interim Plan") in September 2020. This Interim Plan primarily consisted of projecting new connections to the regional sewer system from 2021 through 2025 and outlining steps to be taken during this timeframe to prepare a full Regional (Long-Term) Act 537 Plan ("Regional Plan"). This two-step planning process has been developed to allow all municipalities to work cooperatively toward a regional plan to meet future sewer capacity needs of the region, and to provide proper regulatory oversight and control of new connections to the system while the Interim Plan is in force from 2021 to 2025. To begin the process of compiling the Regional Act 537 Plan (due in March 2025), a Professional Service Authorization for ARRO to complete this work was approved at the February 28, 2022 Board meeting. Costs associated with the development of this Regional Act 537 Plan will be paid by the City of Allentown and reimbursed through existing intermunicipal agreements and by City customers through the use of the Administrative Order Fee. Preliminary writing of the Final Act 537 is under way with Draft #1 due before Memorial Day. Staff Responsibility: Phil DePoe

**Project Title: Industrial Pretreatment Plant Master Plan**Division / Funding: Suburban DivisionBoard Action Date: n/aStatus or Action Desired: UpdatedProject Phase: Planning Phase

Project Notes: This project involves the preparation of a Master Plan for the LCA Industrial Pretreatment Plant, the first of its kind for this facility. The Master Plan process included full-scale condition assessments, review of treatment process optimization, and development of short-term and long-term capital plans. The Master Plan will be incorporated into the ongoing regional Act 537 Plan that is due to DEP in 2025. As part of the Act 537 planning process that is currently under way, a detailed upgrade analysis was recently completed by the plant operator (Jacobs). That analysis was incorporated into the Master Plan as well. Board authorization for the Master Plan was approved on December 13, 2021. The project will be funded by the LCA Suburban Division. A preliminary draft report was submitted in December of 2022 and a final report was delivered in April of 2023. A Board presentation of the Master Plan was provided by Jacobs at the March 27, 2023 meeting. Value engineering and external stakeholder discussions are ongoing with recommended solutions forthcoming by March 2024. An update to the Board is expected to be provided in early March 2024. Staff Responsibility: Phil DePoe



**PART 3 – Open Project List – No Updates**

| <b>Project Category</b>  | <b>Project Title</b>  | <b>Division / Funding</b> | <b>Project Phase</b> | <b>Staff Responsibility</b> |
|--------------------------|---|---------------------------|----------------------|-----------------------------|
| Finance & Administration | Project Management / Construction Management Software Installation & Setup      | All Divisions             | Planning Phase       | Matt Dorner                 |
| Finance & Administration | LCA Strategic Plan - Quarterly Progress Reporting                               | All Divisions             | n/a                  | Liesel Gross                |
| Finance & Administration | Capital Works Planning Room Organizing, Secure Storage and Digitizing - Phase 2 | All Divisions             | Planning Phase       | Matt Dorner                 |
| Finance & Administration | LCA Munis ERP System Planning & Re-Implementation                               | All Divisions             | Planning Phase       | Chris Moughan & Brooke Neve |
| Finance & Administration | Asset Management Roadmap & Strategic Asset Management Plan (SAMP)               | All Divisions             | Planning Phase       | Albert Capuzzi              |
| System Operations        | Suburban Water Facilities - SCADA System Upgrade                                | Suburban Division         | Construction Phase   | Chris Moughan               |
| System Operations        | Watershed Monitoring Program  | Suburban Division         | Planning Phase       | Andrew Moore                |
| Water - Suburban         | Water Main Replacement Program Cycle 7  | Suburban Division         | Construction Phase   | Jason Peters                |
| Water - Suburban         | Fixed Base Meter Reading Stations   | Suburban Division         | Planning Phase       | Amy Kunkel                  |
| Water - Suburban         | Upper System Pump Station and Main Extension                                    | Suburban Division         | Design Phase         | Amy Kunkel                  |
| Water - Suburban         | North Whitehall Meter Replacement   | Suburban Division         | Construction Phase   | Amy Kunkel                  |
| Water - Suburban         | Suburban Division Lead Service Line Inventory Program & Compliance Planning     | Suburban Division         | Planning Phase       | Matt Dorner                 |
| Water - Suburban         | 2022 Commercial Meter Replacement Project                                       | Suburban Division         | Project Closeout     | Amy Kunkel                  |
| Water - Suburban         | Memorial Road Emergency Water Main Realignment                                  | Suburban Division         | Project Closeout     | Chuck Volk                  |
| Water - Suburban         | Water Main Replacement Program Cycle 7 & 8                                      | Suburban Division         | Design Phase         | Jason Peters                |

| <b>Project Category</b> | <b>Project Title</b>  | <b>Division / Funding</b> | <b>Project Phase</b> | <b>Staff Responsibility</b> |
|-------------------------|---|---------------------------|----------------------|-----------------------------|
| Water - Allentown       | Water Filtration Plant: Emergency Power Design  | Allentown Division        | Design Phase         | Amy Rohrbach                |
| Water - Allentown       | Water Filtration Plant: Filter Upgrade Project  | Allentown Division        | Construction Phase   | Amy Rohrbach                |
| Water - Allentown       | Lead Service Line Replacement Project Cycle 1   | Allentown Division        | Design Phase         | Jason Peters                |
| Water - Allentown       | Allentown Division Lead Service Line Inventory Program & Compliance Planning                        | Allentown Division        | Planning Phase       | Matt Dorner                 |
| Water - Allentown       | 30" & 36" East Side Transmission Main Repair Project  | Allentown Division        | Design Phase         | Jason Peters                |
| Water - Allentown       | Large Meter Chamber Replacement   | Allentown Division        | Construction Phase   | Amy Kunkel                  |
| Water - Allentown       | Water Filtration Plant: PFAS Compliance Study   | Allentown Division        | Planning Phase       | Albert Capuzzi              |
| Water - Allentown       | Water Main Replacement Program Cycles 7 & 8   | Allentown Division        | Design Phase         | Jason Peters                |
| Water - Allentown       | Large Diameter Valve Rehabilitation & Replacement Program   | Allentown Division        | Design Phase         | Jason Peters                |
| Water - Allentown       | Lead Service Line Replacement Program Planning  | Allentown Division        | Planning Phase       | Andrew Moore                |
| Water - Allentown       | Water Filtration Plant: 2022-2023 Indenture Upgrades  | Allentown Division        | Construction Phase   | Chuck Volk                  |
| Sewer - Act 537         | Sanitary Sewer Collection System: City of Allentown Manhole Inspections                             | Allentown Division        | Planning Phase       | Phil DePoe                  |
| Sewer - Act 537         | KISS Act 537 Planning - Financial & Institutional Evaluation, Phase 2                               | City of Allentown (AO)    | Planning Phase       | Liesel Gross                |
| Sewer - Act 537         | Sanitary Sewer Collection System: City of Allentown Interceptor Inspections                         | City of Allentown (AO)    | Planning Phase       | Phil DePoe                  |
| Sewer - Act 537         | KISS System Modeling - Sewage Billing Meter QA/QC Data Analytics and 2021 Flow Metering Preparation | City of Allentown (AO)    | Planning Phase       | Phil DePoe                  |
| Sewer - Act 537         | Upper Western Lehigh Pump Station & Force Main  | Suburban Division         | Construction Phase   | Amy Kunkel                  |

| <b>Project Category</b> | <b>Project Title</b>   | <b>Division / Funding</b> | <b>Project Phase</b>     | <b>Staff Responsibility</b> |
|-------------------------|--|---------------------------|--------------------------|-----------------------------|
| Sewer - Act 537         | Regional Sewer Capacity & Wet-Weather Planning: Engineering & Program Support    | Suburban Division         | Planning Phase           | Phil DePoe                  |
| Sewer - Act 537         | Western Lehigh Interceptor Municipalities Test & Seal Lateral Grouting Project   | Suburban Division         | Construction Phase       | Jason Peters                |
| Sewer - Act 537         | Western Lehigh Service Area - Engineering & Program Support                      | Suburban Division         | Planning Phase           | Phil DePoe                  |
| Sewer - Suburban        | Lynn Township WWTP Final Clarifier Project                                       | Suburban Division         | Design Phase             | Matt Dorner                 |
| Sewer - Suburban        | Pretreatment Plant (PTP) Near-Term Facility Improvements                         | Suburban Division         | Preliminary Design Phase | Albert Capuzzi              |
| Sewer - Suburban        | Western Lehigh Manhole Rehabilitation Project - Phase 4                          | Suburban Division         | Construction Phase       | Jason Peters                |
| Sewer - Suburban        | Park Pump Station Phase 2 Upgrade  | Suburban Division         | Construction Phase       | Amy Kunkel                  |
| Sewer - Suburban        | North Whitehall Township Act 537 Plan  | Suburban Division         | Planning Phase           | Phil DePoe                  |
| Sewer - Suburban        | Heidelberg Heights Sanitary Sewer Consent Order & Agreement                      | Suburban Division         | Construction Phase       | Jason Peters                |
| Sewer - Suburban        | Spring Creek Pump Station Upgrades   | Suburban Division         | Design Phase             | Amy Kunkel                  |
| Sewer - Suburban        | Pretreatment Plant (PTP) Electrical Study  | Suburban Division         | Planning Phase           | Albert Capuzzi              |
| Sewer - Suburban        | Heidelberg Heights Wastewater Treatment Plant - Mechanical Screen Project        | Suburban Division         | Construction Phase       | Chuck Volk                  |
| Sewer - Suburban        | Spring Creek Force Main Relocation - PA Turnpike Commission                      | Suburban Division         | Design Phase             | Amy Kunkel                  |
| Sewer - Suburban        | Lynn Township Corrective Action Plan   | Suburban Division         | Planning Phase           | Jason Peters                |
| Sewer - Suburban        | LCA Meter Stations 1 and 2 Upgrades  | Suburban Division         | Design Phase             | Phil DePoe                  |
| Sewer - Allentown       | Kline's Island WWTP - Septage Receiving and Vacuum Truck Unloading Modifications | Allentown Division        | Construction Phase       | Amy Rohrbach                |

| <b>Project Category</b> | <b>Project Title</b>  | <b>Division / Funding</b> | <b>Project Phase</b> | <b>Staff Responsibility</b> |
|-------------------------|---|---------------------------|----------------------|-----------------------------|
| Sewer - Allentown       | Kline's Island WWTP: Substation No. 1 and Switchgear Replacement                  | Allentown Division        | Construction Phase   | Amy Rohrbach                |
| Sewer - Allentown       | Kline's Island WWTP: 2023-2024 Architectural and Structural Upgrades              | Allentown Division        | Construction Phase   | Amy Rohrbach                |
| Sewer - Allentown       | Kline's Island WWTP: Main and Auxiliary Pump Station Improvements                 | Allentown Division        | Preliminary Design   | Amy Rohrbach                |
| Sewer - Allentown       | Kline's Island WWTP: Solids Process Boiler and HVAC System Upgrade Project        | Allentown Division        | Construction Phase   | Chuck Volk                  |
| Sewer - Allentown       | Kline's Island WWTP: Wet Weather Capacity Enhancements - Tertiary Bypass          | Allentown Division        | Preliminary Design   | Chuck Volk                  |
| Sewer - Allentown       | Kline's Island WWTP: Intermediate Pump Station Improvements                       | Allentown Division        | Preliminary Design   | Chuck Volk                  |
| Sewer - Allentown       | Lehigh Street (Rte. 145) Water and Sewer Main Relocation Project                  | Allentown Division        | Construction Phase   | Jason Peters                |
| Sewer - Allentown       | Kline's Island WWTP: Effluent Disinfection and Dechlorination System Improvements | Allentown Division        | Project Closeout     | Chuck Volk                  |
| Sewer - Allentown       | KISS Act 537 Planning - Selection of Solution (SOS) Phase                         | City of Allentown (AO)    | Planning Phase       | Phil DePoe                  |
| Sewer - Allentown       | Sanitary Sewer Collection System: I&I Source Reduction Program (City Year 4)      | City of Allentown (AO)    | Project Closeout     | Phil DePoe                  |