



LEHIGH COUNTY AUTHORITY

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

Agendas & Minutes Posted:
www.lehighcountyauthority.org

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BOARD MEETING AGENDA – August 12, 2019

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. 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

3. Approval of Minutes

- *July 22, 2019 Board meeting minutes*

4. Public Comments

5. Action / Discussion Items:

FINANCE AND ADMINISTRATION

- *Budget Amendment Request – Allentown Division: Water Main Cycle 4 (Approval) (blue)*

WATER

- *Allentown Division – Water Filtration Plant: High Lift Pump VFD Replacements (Approval) (green)*
- *Northampton Borough Municipal Authority – Water Service Agreement Amendment (Approval) (tan)*

WASTEWATER

6. Monthly Project Updates / Information Items (1st Board meeting per month) – **August report attached**
7. Monthly Financial Review (2nd Board meeting per month)
8. Monthly System Operations Overview (2nd Board meeting per month)
9. Staff Comments
10. Solicitor's Comments
11. Public Comments / Other Comments
12. Executive Sessions
13. Adjournment

UPCOMING BOARD MEETINGS

Meetings begin at Noon at LCA's Main Office, unless noted otherwise below.

August 26, 2019

September 9, 2019

September 23, 2019

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

July 22, 2019

The Regular Meeting of the Lehigh County Authority was called to order at 12:00 p.m. on Monday, July 22, 2019, Chairman Brian Nagle presiding. Other Members present at the commencement of the meeting were: Linda Rosenfeld, Jeff Morgan, Richard Bohner, Norma Cusick, Ted Lyons and Amir Famili. Authority Staff present were Liesel Gross, Brad Landon, Ed Klein, Pat Mandes, John Parsons, Chris Moughan, Susan Sampson, and Lisa Miller.

Chairman Nagle announced that today's Board meeting is being videotaped and streaming live and recordings will be posted to the Authority's website.

REVIEW OF AGENDA

Liesel Gross noted that the second item under Finance and Administration, Suburban Division Water Tapping Fees can be removed from the agenda. There will also be an Executive Session at the end of the regular meeting to discuss matters of litigation.

Chairman Nagle announced that the Board received their packet in the mail prior to the meeting.

APPROVAL OF MINUTES

July 8, 2019 Regular Meeting Minutes

Richard Bohner offered a grammatical correction to the minutes. On a motion by Richard Bohner, seconded by Norma Cusick, the Board approved the minutes of the July 8, 2019 meeting as corrected (7-0).

PUBLIC COMMENTS

None.

ACTION AND DISCUSSION ITEMS

Resolution No. 7-2019-1 – Suburban Division Wastewater Tapping Fees

Liesel Gross explained that tapping fees are required by law to be adopted by Resolution and are legislated as to how they are calculated. The Authority utilizes the services of Keystone Alliance Consulting, Inc. to ensure that our calculations follow these legal requirements with capital spending information provided by the Authority. The components of the tapping fees are calculated two ways, the original cost method and the trended cost method. Ed Klein gave an overview of the summary page of calculations of the Suburban Wastewater Division capital recovery fees.

Kevin Baker arrived at 12:10 p.m.

Liesel Gross stated the Resolution allows for the approval of the capital recovery fees for various Suburban Division wastewater systems and also allows the Authority's Schedule of Rates and Charges to be amended to reflect the fees as adopted.

On a motion by Linda Rosenfeld, seconded by Norma Cusick, the Board approved Resolution No. 7-2019-1 which establishes the various components of the Lehigh County Authority Capital Recovery fees for the various Suburban Division Wastewater systems (8-0).

LCA 2020 Goals – 2019 Action Plan: Mid-Year Update

Liesel Gross presented a PowerPoint presentation and gave an overview of how the “LCA 2020” goals and associated action plan was developed using the Effective Utility Management (EUM) framework. She reviewed the Authority’s specific goals and key performance indicators in four main categories including Product Quality, Financial Viability, Infrastructure Stability, and Employee & Leadership Development.

Ms. Gross reviewed some of the challenges and barriers to achieving the goals outlined in the 2019 action plan. Specific barriers she reviewed included lack of regional and regulatory direction on wastewater capacity concerns, complex and manual legacy process for critical administrative and financial functions, and staffing challenges due to retirements and adequacy of staffing levels to achieve new programs..

Ted Lyons suggested looking at other utilities for their best practices. Norma Cusick suggested other utilities with regional service relationships may provide guidance on improved billing system to address intermunicipal service agreements. Amir Famili suggested a focus on productivity and efficiency as a critical measure for performance would be useful in holding departments accountable for achieving goals.

Liesel Gross acknowledged the Board’s suggestions and said they could all be incorporated into the next steps. She explained the Authority’s planned next steps include continuing to work on the LCA 2020 goals, conducting a preliminary staffing evaluation to be included in the 2020 Budget, and kicking off a comprehensive strategic planning process to better define where the Authority needs to focus its resources and develop an implementation plan to address the critical barriers discussed.

MONTHLY FINANCIAL REVIEW

Ed Klein presented the June 2019 financial report with a PowerPoint presentation, highlighting variances between budgeted revenues and expenses and actual or forecasted revenues and expenses.

MONTHLY SYSTEM OPERATIONS OVERVIEW

John Parsons reviewed the Monthly System Operations Overview report for June 2019 and noted that the numbers reflected in the report are typical for the summer months and also the wet weather conditions that the Authority has been experiencing. Mr. Parsons noted that the Authority has received permission from PennDOT and PPL to mount stream monitoring equipment on local bridges and poles and is now receiving watershed flow monitoring data. The Authority is also working with the U.S. Geological Survey (USGS) to establish several new USGS gauging stations throughout the Little Lehigh Watershed which will provide even more stream data. The report also included a status report of the Western Lehigh Interceptor High Flow Emergency Project as of July 7, 2019.

STAFF COMMENTS

None.

SOLICITOR’S COMMENTS

None.

PUBLIC COMMENTS / OTHER COMMENTS

Chairman Nagle called a recess at 1:33 p.m. The meeting reconvened at 1:41 p.m.

EXECUTIVE SESSION

An Executive Session was held at 1:41 p.m. to discuss matters of litigation.

The Executive Session ended at 1:49 p.m.

ADJOURNMENT

There being no further business, the Chairman adjourned the meeting at 1:49 p.m.

Richard H. Bohner
Secretary



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MEMORANDUM

To: LCA Board of Directors
From: Edward C. Klein, CFO
Date: 02 August 2019
Re: City Division Water Main Cycle 4 Project

Attachments: Budget Amendment Request – City Division Water Main Cycle 4 Project

Due to an overrun against the 2019 total capital spending budget in the City Division, a Budget Amendment is being presented to the Board for approval. Please see the attached request form.

This overrun is the product of a timing issue related to the City Division Water Main Cycle 4 Project, which was budgeted for start and completion in 2018, but was affected by a delay in required restoration work. The restoration work scope carried forward into 2019 and is near completion with final contractor payment due in September. The delay in the restoration work was not known at the time the 2019 budget was prepared and presented in September 2018.

Since there was no budget for restoration work scope in the 2019 Budget, the capital budget of \$3,200,000 will be exceeded by \$524,885. This is offset by funds not used in 2018 due to the restoration delay as well as overall reduced project scope that reduced total project cost from \$3,200,000 to \$2,047,494.



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BUDGET AMENDMENT REQUEST

Budget Year - 2019

Date: 08/02/2019

Type:	Transfer	
	Addition	X
	Deletion	

Requested By: Edward C. Klein

Approved By: _____

Budget	\$0
Amount	\$524,885

	2018 Budget	2018 Actual	2019 Budget	2019 Forecast	2019 Variance
Water Main Cycle 4 Project	3,200,000	1,522,609	-	524,885	(524,885)
Other Capital Projects	<u>9,392,500</u>	<u>6,331,380</u>	<u>3,200,000</u>	<u>3,200,000</u>	<u>-</u>
TOTAL	<u>12,592,500</u>	<u>7,853,989</u>	<u>3,200,000</u>	<u>3,724,885</u>	<u>(524,885)</u>

Budget amendment requested due to timing difference of spending on City Division Water Main Cycle 4. Work scope budgeted for year 2018 was delayed and will be completed in this year.

MEMORANDUM

Date: August 12, 2019

To: LCA Board of Directors; Liesel Gross, C.E.O.
From: Phil DePoe, Capital Works Program Manager
Subject: Allentown Division -
WFP High Service Pump VFD Replacements: Design and Bid Phase

MOTIONS / APPROVALS REQUESTED:

No.	Item	Amount
1	Capital Project Authorization – Design and Bid Phase	\$88,500
2	Professional Services Authorization – Borton Lawson (1), (2)	\$68,500

- (1) *Included in the Capital Project Authorization*
(2) *Does not include construction phase related engineering services*

PROJECT OVERVIEW

LCA operates the Allentown Division Water Filtration Plant (WFP), located at 1300 Martin Luther King Jr. Drive in Allentown, Pennsylvania. The WFP supplies water to residential and commercial customers in the City of Allentown as well as wholesale water to surrounding communities. One of the critical elements at the WFP is the High Service Pumping System (HSPS), which is the primary means of conveying treated water into the distribution system.

The HSPS contains three High Service Pumps – two of which are controlled by Variable Frequency Drives (VFDs). High Service Pump #3 is currently not controlled by a VFD. This project will replace the two existing VFDs and add a third VFD for Pump #3. This electrical equipment was originally installed in the late 1990s, has reached the end of its useful life, and needs to be replaced (as the equipment manufacturer no longer offers critical support services). If the VFDs were to fail, remedies include costly temporary equipment or costly repairs to enable the pumps to run at constant speed (jeopardizing system supply optimization).

Borton-Lawson will be used for the engineering design services. A January 2019 Engineering Report by D'Huy Engineering will be used as the basis of design. Note that the July 2017 Allentown Water Master Plan by Arcadis categorized the pump variable frequency drives (VFDs) in very poor condition and also stated that the VFDs are no longer supported by the manufacturer.

FINANCIAL

The City has reviewed and approved this project as a Major Capital Improvement, thereby allowing the cost to be recovered via a capital cost recovery charge in the LCA Allentown Division.

This project is currently listed as “Unfunded” in LCA’s Capital Plan, but may be supported through a low-interest PENNVEST loan pending ongoing discussion with the City of Allentown. Board approval is requested for the design phase of this project to ensure loan application timelines can be met in the event agreement with the City can be reached regarding funding

mechanisms for future capital improvements. The PENNVEST application would be due on February 5, 2020 in order to meet the targeted project timeline of completion by end of 2021.

PROJECT STATUS

Pending Board approval of the design and bid phase.

THIS APPROVAL – DESIGN AND BID PHASE

Lehigh County Authority (LCA) intends to retain the services of an engineering consulting firm to provide the design and bid related services. Approval for the construction related engineering services will be requested at a later date. The following table summarizes the professional services to be performed under this approval:

Professional Services ⁽¹⁾
1. Attend kick-off meeting and perform field survey
2. Attend progress meetings and provide monthly updates
3. Prepare 30%, 60%, and final construction bid documents
4. Prepare updated construction cost estimates
5. Attend prebid meeting and administer the PennBID process
6. Assist with the PennVEST application submittal as needed

(1) For Design and Bid Phase Only

CONSULTANT SELECTION PROCESS

LCA retained D'Huy Engineering in June of 2018 to prepare a report to evaluate the VFDs while estimating the cost of these replacements. This report formed the basis of the subsequent Request for Proposal (RFP).

On July 3, 2019, a detailed RFP was issued to the following four engineering firms: D'Huy Engineering, Buchart Horn, Borton Lawson, and the Keystone Engineering Group. They later visited the WFP to ask questions related to this specific project. Proposals from the four engineering firms were received on July 31, 2019 - the results of which follow:

Consultant	Cost ⁽¹⁾
D'Huy Engineering	\$63,800
<i>Borton-Lawson</i>	<i>\$68,500</i>
Buchart Horn, Inc.	\$78,036
Keystone Engineering Group	\$107,000

(1) Total Proposal Cost

Based upon our review of all aspects of both the Technical and Cost Proposals submitted by the four firms, we recommend award of the Design Phase services to Borton-Lawson. Their proposal is on scope and represents what we believe is the best overall value for the Authority. Although D'Huy was lower in price by \$4,700, Borton-Lawson proposed a few value-added engineering services (3D scanning, in-house master electricians, more design hours, accelerated schedule) that separated them from the other firms. In addition, the quality and experience of their design team appears well suited for this project.

Borton Lawson will perform the services outlined in their proposal dated July 31, 2019.

BORTON-LAWSON COMPANY INFORMATION & REFERENCE CHECK

Borton-Lawson is a local, fully integrated engineering design and architectural firm based in Wilkes-Barre, PA. The firm started in 1988 and has grown to become a Top 500 ENR firm with three other offices located throughout Pennsylvania.

Borton-Lawson has not yet worked with LCA; however, their references provided positive feedback on related electrical projects.

PROJECT SCHEDULE

The project is anticipated to begin design in August of 2019. The project is anticipated to be bid ready by the end of January 2020 with an anticipated project completion date of December 2021.

FUTURE AUTHORIZATIONS – CONSTRUCTION PHASE

Upon Design Phase approval, the project will be publicly bid in May of 2020. A Capital Project Authorization (CPA) Amendment will be presented to the Board in June of 2020 for approval of the Construction Phase; and will include a professional services award, construction contract award, staff costs and other related components.

CAPITAL PROJECT AUTHORIZATION

PROJECT NO.:	<u>AD-W-19-2</u>	BUDGET FUND:	<u>Allentown Div\Water\Capital</u>
PROJECT TITLE:	<u>Allentown Division – WFP High Service Pump VFD Replacements: Design and Bid Phase</u>		PROJECT TYPE:
		<input checked="" type="checkbox"/>	Construction
		<input type="checkbox"/>	Engineering Study
THIS AUTHORIZATION:	<u>\$88,500</u>	<input type="checkbox"/>	Equipment Purchase
TO DATE (W/ ABOVE)	<u>\$88,500</u>	<input type="checkbox"/>	Amendment No. 1

DESCRIPTION AND BENEFITS:

The Allentown Water Filtration Plant (WFP) contains three High Service Pumps – two of which are controlled by Variable Frequency Drives (VFDs). High Service Pump #3 is currently not controlled by a VFD. This project will replace the two existing VFDs and add a third VFD for Pump #3. This electrical equipment was originally installed in the late 1990s, has reached the end of its useful life, and needs to be replaced (as the equipment manufacturer no longer offers critical support services).

Borton-Lawson will be used for the engineering design services. The project is anticipated to be bid ready by January 2020. Notice to Proceed for construction is anticipated in July 2020 and substantial project completion is expected by December 2021.

Please see attached Board Memo for further project details.

Authorization Status:

Requested This Authorization	
Design and Bid Phase	
Staff	\$15,000
Engineering Consultant	\$68,500
Contingencies	\$5,000
Total This Authorization	\$88,500

Future Authorizations	
Construction Phase	\$1,911,500

Total Estimated Project	\$2,000,000
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REVIEW AND APPROVALS:

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



Lehigh County Authority

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PROFESSIONAL SERVICES AUTHORIZATION

Professional: BORTON-LAWSON
389 Adler Place
Bethlehem, PA 18017

Date: August 12, 2019

Requested By: Phil DePoe

Approvals

Department Head: _____

Chief Executive

Officer: _____

Allentown Division – Water Filtration Plant High Service Pump VFD Replacements: Design and Bid Phase

Borton-Lawson will perform the design related services for the replacement of the two existing Variable Frequency Drives (VFDs) on existing High Service Pump 1 and 2. In addition, a new VFD for High Service Pump 3 will be installed. The existing VFDs are no longer supported by the equipment manufacturer and need replaced.

Professional Services ⁽¹⁾
1. Attend kick-off meeting and perform field survey
2. Attend progress meetings and provide monthly updates
3. Prepare 30%, 60%, and final construction bid documents
4. Prepare updated construction cost estimates
5. Attend prebid meeting and administer the PennBID process
6. Assist with the PennVEST application submittal as needed

(1) For Design and Bid Phase Only.

Design and Bid Phase:

- PREVIOUS AUTHORIZATION: \$0
- **THIS AUTHORIZATION: \$68,500**

TOTAL AUTHORIZATION (not to be exceeded without further authorization): \$68,500

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

(For Authority Use Only)

Authorization Completion:

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

AMENDMENT TO THE 15 JULY 1997 WATER SERVICE AGREEMENT

THIS AMENDMENT, dated for convenience the _____ day of _____, 2019,
by and between

NORTHAMPTON BOROUGH MUNICIPAL AUTHORITY, a municipal authority organized and existing under the Pennsylvania Municipal Authorities Act (hereinafter called "NBMA"), with its office at 1 Clear Springs Drive, Northampton, Pennsylvania, party of the first part,

AND

LEHIGH COUNTY AUTHORITY, a municipal authority organized and existing under the Pennsylvania Municipal Authorities Act (hereinafter called "LCA"), with its office at 1053 Spruce Road, Wescosville, Pennsylvania, party of the second part.

WITNESSETH:

WHEREAS, the parties had previously entered into an Agreement for Water Service dated 10 November 1992 (the "1992 Agreement") with various addenda and amendments thereto dealing with water service in North Whitehall Township (the "Township"); and

WHEREAS, the parties thereafter entered into 15 July 1997 Water Supply Agreement (the "1997 Agreement") to combine all the terms of the 1992 Amendment and all of its various addenda and amendments for clarity and to replace the 1992 Amendment and all of its various addenda and amendments in total; and

WHEREAS, the parties then entered into an amendment dated 11 September 2007 (the "2007 Amendment") changing references in the documents from gallons to cubic feet, but referenced the 1992 Agreement, addenda and amendments rather than the 1997 Agreement; and

WHEREAS, it is the desire of the parties hereto to amend the 1997 Agreement to reflect this incorrect reference and to increase the Annual Capacity Limit and Minimum Annual Purchase Requirement.

NOW THEREFORE, in consideration of the promises and mutual covenants of this Amendment and with the intent of the parties to be legally bound, the parties agree that the above recitals form a part of this Agreement and further agree as follows:

1. The language of the 2007 Amendment, since it incorrectly referenced the 1992 Agreement to which it was an amendment, is added here as an amendment to the 1997 Agreement:

Any and all references wherever set forth in the Agreement, Addenda and/or Amendments thereto as referenced above relating to gallons shall be changed to cubic feet and shall be converted to such by NBMA in its usage calculations and billing to LCA as of the October 2007 billing.

2. The language of §3 of the 1997 Agreement shall be revised to read as follows:

3. It is expressly agreed by the parties hereto that NBMA shall not be obligated to supply water to the North Whitehall System in excess of 1,000,000 gpd/133,680.56 cubic feet per day. Unless supplemental capacity is purchased by LCA, if this limit is exceeded on an average daily basis of any calendar month, LCA shall pay charges in accordance with NBMA's then current rate structure and regulations for amounts which exceed these limits.

3. The language of §6(e) of the 1997 Agreement referencing the Minimum Annual Purchase Requirement shall be revised from 99,000 gpd annually to 200,000 gpd/26,736.11 cubic feet per day.

4. The permits referenced in §9 of the 1997 Agreement shall be amended or revised accordingly by each of the parties to reflect the new limits.

5. Nothing in this Amendment is intended to be construed to in any way amend, modify, or supersede existing agreements and addenda between the parties; to waive, release, surrender or bar any rights, any issues, transactions or controversies between the parties; or to any other way affect any rights, privileges or obligations of either of the parties, directly or by implication, except to the extend as reflected herein.

IN WITNESS WHEREOF, the parties hereto, intending to be legally bound hereby, have hereunto set their hands and seals the day and year first above written.

ATTEST:

NORTHAMPTON BOROUGH MUNICIPAL AUTHORITY

By:_____

ATTEST:

LEHIGH COUNTY AUTHORITY

Bradford E. Landon, Solicitor

By:_____
Liesel M. Gross, Chief Executive Officer

FINANCE & ADMINISTRATION**ACTION ITEMS****1. Budget Amendment Request – Allentown Division: Water Main Cycle 4 – August 12, 2019**

A Budget Amendment related to capital spending on the Allentown Division Water Main Cycle 4 Project will be presented to the Board for approval. Originally slated to be finished in 2018, the required restoration is nearing completion. Final contractor payment is due in September. No money was budgeted for this project in 2019; however, due to the timing of this restoration, money was set aside at the end of 2018 to pay for this restoration. The original Capital Budget Authorization has not been exceeded. This request is due to the timing of project spends.

2. Resolution 8-2019-1 – Suburban Division Water Tapping Fees – August 26, 2019

A Resolution will be presented for Board consideration to update certain tapping fees related to the Suburban Water Division. Upon adoption, these fees will be effective September 1, 2019. Resolution and Exhibits will be provided in advance of the August 26, 2019 Board meeting.

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

Fund	Bank	Location	Gross Amount	Date of Purchase	Date Due	Net Rate %
LLRI CR	Barclays Bank Delaware	Wilmington, DE	245,000.00	7/17/19	7/19/21	2.000
WW Capac	Franklin Synergy Bank	Franklin, TN	249,000.00	7/23/19	7/23/21	2.100
LLRI CR	PSDLAF Flex Pool		400,000.00	7/9/19	8/1/19	2.200
Cons Wtr (2)	PSDLAF Flex Pool		155,000.00	7/9/19	8/1/19	2.200
Cons LL2 (314)	PSDLAF Flex Pool		245,000.00	7/9/19	8/1/19	2.200
WW Capac	PSDLAF Flex Pool		600,000.00	7/9/19	8/1/19	2.200
Wtr R&R	PSDLAF Flex Pool		1,000,000.00	7/9/19	8/1/19	2.300

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

2. Developments

Water system construction is occurring in the following developments:

5354 Hamilton Blvd., 1 commercial lot, LMT – No Change
 Air Products & Chemicals, 1 commercial lot, UMT – No Change
 Kohler Tract, 123 residential lots (sfa), UMIT, water and sewer – No Change
 Lower Macungie Twp. Community Center Expansion, 1 institutional lot, LMT – No Change

Stone Hill Meadows, Phase 2, 85 residential units (sfd), LMT – No Change
Trexler Business Center, 1 lot with 6 commercial buildings, LMT – No Change
Trexler Fields, Phase 1B/8/9, 100 residential lots (sfa), UMT – No Change

Water system plans are being reviewed for the following developments:

5329-5347-5357 Hamilton Blvd., 1 commercial lot, LMT – No Change
5374/5392 Hamilton Blvd., 1 commercial lot, LMT – No Change
5420 Crackersport Road, 1 commercial lot, UMT – No Change
8615/8783 Congdon Hill Drive, 2 industrial lots with warehouses, LMT – No Change
Cedarbrook Road Industrial Park, 2 industrial lots, LMT – No Change
Estates at Maple Ridge, 30 residential units (sfd), UMiIT – No Change
Lehigh Hills, Lot 5, Phase 1, 273 apartments & clubhouse, UMT – No Change
Madison Village at Penn's View, 66 manufactured homes, 1 lot, LynnT, water and sewer –
No Change
Millbrook Farms, Section 6, 42 residential units, LMT & UMiIT
Mill Creek Hotel, 1 commercial lot with 205 room hotel & restaurant, UMT – No Change
Mountain View Estates, 27 residential units (sfd), LMT – No Change
Ridings at Parkland, 53 residential units (sfd), NWT – No Change
Schoeneck Road, Lot 1, 1 lot warehouse, LMT – No Change
Towneplace Suites by Marriott, 91-room hotel, UMT – No Change
Weilers Road Twins, 82 residential lots (sfa), UMT – No Change
Woodmont Ridge, Phase II, 30 apartment units, UMT – No Change
Wrenfield Townhouses, 98 townhouse units, UMT

Sewage Planning Modules Reviewed in Prior Month:

Deanna Caldwell, Lower Macungie Township, 223 gpd.

WATER

ACTION ITEMS

1. **Allentown Division – Water Filtration Plant: High Lift Pump VFD Replacements – August 12, 2019**

The Water Filtration Plan (WFP) supplies water to residential and commercial customers in the City of Allentown, as well as wholesale water to surrounding communities. One of the critical elements at the WFP is the High Service Pumping System (HSPS), which is the primary means of conveying treated water into the distribution system. The HSPS has experienced regular failures of aging electrical components. The July 2017 Allentown Water Master Plan categorizes the pump variable frequency drives (VFDs) in very poor condition and notes that the VFDs are no longer supported by the manufacturer. This project will replace two of the existing VFDs and add a third VFD. This project is currently unfunded, but may be supported through a PENNVEST loan pending ongoing discussion with the City of Allentown. Board approval is requested for the design phase of this project to ensure loan application timelines can be met in the event agreement can be reached. If funding is available, project completion is expected in 2021.

2. **Northampton Borough Municipal Authority (NBMA) Agt. Amendment – August 12, 2019**

The Authority has an existing agreement with NBMA to supply some of the water for its North Whitehall Division. With the abandonment of Well NL6 because of high manganese levels, it is necessary to increase the amount of NBMA water used in the North Whitehall Division. The attached amendment to the existing 15 July 1997 Water Supply Agreement that has been negotiated by the management staff is recommended for approval by the Board.

3. **Suburban Division – Buss Acres Pump Station Replacement Construction – August 26, 2019**

The project consists of the consolidation and replacement of two well stations with a single new pump station and a new water storage tank to replace two antiquated hydropneumatic pump stations. The new station will be a variable frequency drive controlled double pumping system with full SCADA control. The design will include radon reduction elements and also accommodate the future installation of additional radon removal equipment, to be implemented upon DEP's mandate of a regulatory limit. Design phase was authorized at the August 28, 2017 Board meeting. The Public Water Supply Permit was received from DEP in late 2018. Zoning approval from Upper Milford Township for a "Special Exception" use for the upgrade project was approved in June 2019. Plans and specifications were finalized in June and the project was advertised for bid in July. Bids will be opened on 8/13/19, and authorization to award bids will be requested at the 8/26/19 meeting.

DISCUSSION ITEMS

INFORMATION ITEMS

1. **Allentown Division – Hamilton Street Cedar Creek Bridge Water Main Relocation Project**

As part of the Pennsylvania Rapid Bridge Replacement Program, the replacement of the Cedar Creek Bridge on Hamilton Street has required the relocation of approximately 500 linear feet of water main. The construction phase was approved at the December 2016 Board meeting and the construction phase at the January 2018 meeting. As of February 22, 2018, the contractor has completed a majority of the relocation work for LCA's facilities; however, they were pulled off the site due to construction conflicts. As of March 22, 2019 the original LCA water line relocation scope of work has been completed, however an additional relocation of a LCA sanitary sewer line has been added to the original scope and agreement as of April 15, 2019 with an anticipated completion of April 26, 2019. LCA anticipated submitting all final paper work to the state for

reimbursement in the very near future. It is anticipated that this work will be reimbursed 100% by the state and that the construction related activities. **(No Change)**

2. Allentown Division – Water Main Replacement Program Cycle 4

The project is the replacement of 0.97-mile of aged and/or failing cast iron water main in multiple locations throughout the City, in accordance with our prioritization protocol. We propose to utilize the 1.1-mile credit of excess water main replacement length accumulated from previous years in order to satisfy the 2.0 miles of annual pipe replacement as outlined in the lease. This Project is required under the Operating Standards in the Concession Agreement and will be funded by the LCA Allentown Division. The reduced-scale project was re-bid following rejection of the bids for the original 2.2-mile project. The project was authorized by the Board on 9/10/18 and will be completed by December 2018. On October 30, 2018 the contractor (Doli Construction) began water main installation. As of January 4, 2019 all water main construction, prelease valve and meter replacement was completed. As of April 2019, Doli began final restoration throughout the project with an anticipated completion by mid-Summer 2019. **(No Change)**

3. Allentown Division – Water Main Replacement Program Cycle 5

The project is the replacement of 2-mile of aged and/or failing cast iron water main in multiple locations throughout the City, in accordance with our prioritization protocol. Currently Gannett Fleming is designing the 2-miles of required water main replacement. At this time, the construction phase of this project is not budgeted for unless monies become available in 2019. **(No Change)**

4. Allentown Division – Water Filtration Plant: SCADA System Replacement

The project consists of the replacement of the existing SCADA System at the Water Filtration Plant. The purchase and installation of new servers, new control panel cabinets, new cabling, and new programming software will encompass this project. Board approval to purchase this equipment was granted at the August 27, 2018 Board Meeting. Replacement will be completed by late 2019. This project will be funded by LCA Allentown Division. **(No Change)**

5. Suburban Division - Water Main Replacement Program Cycle 5

The project consists of the replacement of approximately 1.4 miles of aged and/or failing Cast Iron water mains throughout multiple location in the Suburban Division. The construction phase of this project was approved at the May 20, 2019 meeting. As of July 9, 2019 construction had begun and is progressing along very smoothly. This project is funded by the LCA Suburban Division.

6. Suburban Division – Mechanical Asset Management Upgrade Project

This next phase of Asset Management upgrade work focuses on mechanical components, along with some HVAC and electrical system improvements at ten locations in the Suburban Division. The upgrade locations were determined from asset management data collected from internal interviews conducted by Capital Works with senior Operations staff, and based on risk rating. Also as part of the design phase of this project was the condition assessment of seven (7) hydropneumatic tanks that were placed into service in the 1970s and are reaching the end of their service lives. Design phase was authorized in April 2018, the project was advertised for bid in September 2018, bids were opened on October 11, 2018, and award of bids was authorized at the October 22, 2018 Board meeting. Construction will be finished by Summer 2019. **(No Change)**

7. Suburban Division – CLD Auxiliary Pump Station Project

The project consists of installation of a new booster pumping station with SCADA and water main extension to pump water from the Lower Pressure System to the Upper Pressure System.

The LCA Suburban Division will fund the project. Bids for the project were received on 6/29/18. Board approval for the construction phase of the project was granted at the 7/23/18 meeting. A preconstruction meeting was held on August 28th and construction should be completed by Fall of 2019. **(No Change)**

8. **Suburban Division – Upper Milford-CLD Interconnection Project (Kohler Tract)**

The project will feature the installation of a new booster pumping station and water main extension to interconnect the Central Lehigh Division (CLD) with the Upper Milford Division (UMD) allowing the abandonment of the UMD water supply facilities, and to provide water service to the proposed 123-lot Kohler Tract subdivision in Upper Milford Township. Costs are being shared between the LCA Suburban Division and the developer of the Kohler Tract. Pumping station bids were opened on 4/25/19. Board approval for the construction phase of the project was granted at the 5/13/19 meeting. A preconstruction meeting was held on 6/25/19. Construction should be completed by May of 2020.

The remaining two permanent waterline easements were obtained from the Engelmans and Fosters. Legal counsel will be retained during the zoning process to assist with obtaining a “Special Exception” from Upper Milford Township to use the Kern Tract as a pumping station site. **(No Change)**

9. **Suburban Division – Water Meter Reading Equipment Upgrade**

LCA’s capital program includes the replacement of 20,000 transceiver units, and 10,000 units will be replaced in 2019 with the remaining to be replaced in 2020 under separate authorization. The new units have a 20-year battery life and are compatible with the new meter reading software purchased in 2017. This project will replace 100% of the remaining old style radio units over a two-year period. Construction phase services for the first round of 10,000 units was approved at the 5/13/19 Board meeting. Construction began in July 2019 and is expected to be concluded by December of 2019. This project will be funded by the LCA Suburban Division.

10. **Suburban Division – Watershed Monitoring Program**

The project will include setting up a surface water flow-monitoring network for the Little Lehigh Creek. The work is in response to the Watershed Monitoring Plan that was developed and reported to LCA by AI Guiseppe (SSM, Inc.) in 2017. Flow monitoring in 2019 will focus on the Little Lehigh Creek only. In 2019, LCA will develop plans for subsequent years to add new monitoring wells to supplement existing groundwater data that is being collected. Total daily flow recordings at Schantz Spring that will need to include the spring field bypass and the tank overflows as well. SSM will assist LCA in calibrating surface flows under the bridges based on the recorded stream elevations. Authorization for the award of the project was approved at the 3/26/2018 Board meeting. LCA and Fybr are currently gaining PennDOT and PPL approvals that will allow us to mount our equipment on their bridges and poles, which has turned out to be a very slow process. Agreement received from PPL on April 22, 2019. Equipment is to be mounted and flow data is to be received by late summer/early fall 2019. In 2018, USGS selected the Delaware River Basin to pilot the National Next Generation Integrated Water Observing System (NGWOS). The Little Lehigh Watershed was picked as a targeted area of the NGWOS Project and additional surface water and ground water monitoring stations will be developed. USGS and LCA are currently working together on new gaging locations in the LL watershed. Automatic data collection and migration directly to LCA Main Office is currently being developed by Fybr and it should be completed by late July/August.

11. **Suburban Division - Additional (Redundant) Water Supply - Small Satellite Divisions**

This Project addresses the needs of three satellite water systems that currently are operating on one source of supply and have no redundant water supply. The Madison Park North system has only one well, and an additional well is planned to be developed and constructed. The Clear

View Farms and Mill Creek systems have one operating well each, but have at least one other existing well that has water supply or quality issues and cannot be presently utilized. An engineer has been retained to assist with the development of a second well for Madison Park North and the rehabilitation of an existing well at Clear View Farms. An agreement is in place with an adjoining property owner to Madison Park North to drill a test well on their property, in coordination with DEP guidelines. The “step drawdown test” was performed on 3/26/19 and indicated that the test well is a viable backup source to Well 1. A Pre-Drilling and Aquifer Test Plan will be prepared by our Engineer as required by DEP **(No Change)**.

WASTEWATER

ACTION ITEMS

1. **Suburban Division – Sand Spring WWTP Upgrade Project Construction – August 26, 2019**

The Sand Spring WWTP was constructed in 1972 by the developer to serve the Sand Spring development, located in the Schnecksville area in North Whitehall Township. Sewer service is provided to approximately 248 apartment units, 8 commercial properties, and an elementary school. Lehigh County Authority (LCA) acquired the system in 2005.

The plant, while meeting effluent limits, has reached the end of its useful life. The plant is constructed of in-ground steel tanks that are in poor condition, with areas of corrosion and loss of structural integrity. The mechanical and electrical systems are also at the end of their service life and in need of replacement. The proposed project includes replacement of the existing treatment facility in entirety with new technology and concrete tanks appropriate for the wastewater flows and loading characteristics. The new facility shall meet the effluent limits criteria established in the respective DEP and DRBC permits, including new or additional limits that may be imposed during the permitting process. Design phase was authorized in February 2017 and final design was delayed due to DEP Part 2 Water Quality Management and NPDES permitting issues. DEP approval of the Water Quality Management Permit was received in late December 2018, the design was finalized in late Spring 2019, and the project was advertised for bid in July 2019. Bids will be opened on 8/13/19 and authorization to award bids is to be requested at the 8/26/19 Board meeting.

DISCUSSION ITEMS

INFORMATION ITEMS

1. **Allentown Division – Kline's Island WWTP: Phase 1 AO Design Improvements**

This project includes the design of the AO improvements at the wastewater treatment plant. This conceptual design concept was approved by the City and the relevant final deliverables were received by LCA. The City then directed LCA to proceed with the final design of improvements related to the blending alternative. Board approval for the Professional Services Authorization with Kleinfelder East, Inc. was granted at the September 11, 2017 Board Meeting. The project is identified as Administrative Order Work and will be funded by the City. The 30% design drawings and specifications have been received. The City directed to "pause" the design phase of the project. The City has now directed LCA to keep this project on indefinite hold. **(No Change)**

2. **Allentown Division – I&I Source Reduction Program Plan**

This project includes the design of the City of Allentown's I&I Source Reduction Program Plan. In 2014, Video Pipe Services complete various CCTV inspections throughout twenty Primary and Secondary Basins. All pipe segments that called for complete pipe replacement have already been repaired. The remaining source reduction activities within the twenty Basins have been organized into a 5-Year Plan, with each year focusing on a different geographic region of the City's sewer collection system. Design has been approved for all five years, with the first project commencing in 2020 and the last project finishing in 2024. Board approval for the construction of the "Year 1 Project" will be requested in Q1 of 2020. This project is considered an AO expense under terms of the Lease and is City funded. **(No Change)**

3. **Allentown Division – Kline's Island WWTP: Electrical Substation Replacement**

This project involves the replacement of the existing Substation No. 2. The equipment was installed in 1977 and has reached the end of its useful life. The City has reviewed this and has approved this project as a Major Capital Project. Approval of the design engineer was granted at

the May 8, 2017 Board Meeting. The project was advertised in early May 2018 and bids were due on June 8, 2018. Approval of the construction contract (Base Bid) was granted at the July 9, 2018 Board Meeting. The construction phase of the project began in August of 2018 and was completed in May 2019. Minor punchlist items remain. This Major Capital Project was funded by the LCA Allentown Division. **(No Change)**

4. Allentown Division – Kline’s Island WWTP: Sodium Hypochlorite Disinfection

This project involves the replacement of the existing gas chlorination system at the WWTP. The use of gas chlorination for sewage disinfection, while reliable, is outdated and contains inherent risks. In addition, the existing equipment has reached the end of its useful life. Switching to sodium hypochlorite was also identified in the recently completed WWTP Maser Plan. The design started in March of 2019. Approval of the construction contract will be requested at a Board Meeting in early 2020. The construction phase of the project will begin in Q1 of 2020 and will be completed by Q4 of 2020. This project will be funded by the LCA Allentown Division. **(No Change)**

5. Allentown Division – Lehigh Street (Rte. 145) Water and Sewer Main Relocation Project

As part of the Pennsylvania Rapid Bridge Replacement Program, the proposed replacement of the Lehigh Street Bridge near the intersection with MLK Boulevard has required the relocation of existing City water and sewer lines that are located within the PennDOT right of way. PennDOT initially indicated that LCA would be eligible for 75% reimbursement for all projects costs associated with the utility relocations, and the LCA board adopted Resolution No. 3-2019-1 in March 2019 to authorize the negotiation of the PennDOT cost reimbursement. Following the submission of project incorporation paperwork to PennDOT by LCA’s design engineer, the local PennDOT office submitted the resolution and agreement to the Harrisburg office, and was later informed that this bridge is owned by Lehigh County and not the Commonwealth. Although PennDOT is handling all preconstruction activities and will administer the federal funding participation between the Commonwealth and the County, the cost reimbursement agreement with PennDOT does not apply. LCA’s engineer is working on behalf of LCA on a final sewer relocation design that minimizes the extent of the relocation. There will be less water infrastructure relocation work required since the existing water main is attached under the bridge and will be reattached after the new bridge is constructed. LCA staff will pursue water and sewer relocation cost reimbursement from the County out of the federal (80%) and state (15%) funds being applied to this project. Design work will be finalized by Summer 2019 **(No Change)**.

6. Suburban Division – Park Pump Station Force Main Rehabilitation

The Park Pump Station and Force Main line were constructed in 1980 to provide wet weather relief to the Little Lehigh Creek Interceptor, which conveys wastewater from ten municipalities from outlying areas to the Kline’s Island Wastewater Treatment Plant (KIWWTP). The force main consists of 8,715 linear feet of prestressed concrete cylinder pipe (PCCP) of various sizes (2,615’ of 24”; 2,695’ of 30”; and 3,405’ of 36”), and connects with the 54” sanitary sewer interceptor that runs to KIWWTP. PCCP is particularly sensitive to deterioration due to hydrogen sulfide gas from wastewater, and corrosion of exposed reinforcing steel can result in structural degradation and pipe failure. An internal investigation of the pipe is required to assess the condition of the PCCP pipe and identify damage areas, in order to determine the locations and extent of rehabilitation needed to restore the level of service, prolong service life, and mitigate the risk of failure. Capital Works is planning a limited manned inspection of the force main pipe at 5 air release valve (ARV) locations, 100 feet in both directions from the ARV manhole, which will be used as the initial evaluation of the representative condition of the pipe. Using this data, the need for performing a complete pipeline condition assessment will be determined, possibly utilizing a new electromagnetic technology for performing an internal pipe condition assessment that entails minimal interruption of operation of the pump station and force main. LCA and Arcadis are currently waiting for a “normal flow” dry weather period to use the

PTP Flow Equalization Basin (FEB) at the pretreatment plant to hold back flow in order to perform a temporary shut-down of the Park Pump Station to perform the force main inspection. **(No Change)**

7. Suburban Division – Park Pump Station Upgrade

The Park Pump Station is to be upgraded to address mitigate risk of failure, restore station capacity, and prolong the service life of this critical facility. Design was completed in December 2017. The Park Pump Station Upgrade was advertised for bid in December 2017, pre-bid meeting was held on 1/4/18, and bids were opened 2/1/18. Construction phase was authorized at the 2/12/18 Board meeting. Notice to proceed for the construction contracts was issued dated 3/26/18. A pre-construction meeting was conducted in early April 2018, and construction is anticipated to be completed by Fall 2019. **(No Change)**

8. Suburban Division – Heidelberg Heights Wastewater Treatment Plant Improvements

As part of an asset management approach to maintaining the level of service and mitigating risk of failure at the Heidelberg Heights Wastewater Treatment Plant, a condition assessment evaluation is being performed for the Equalization/Sludge Holding tank. The steel tank is part of the original plant, installed in the mid-1970s, and is compartmentalized to serve as both a raw sewage equalization tank (for sequenced pumping to the newer SBR tanks), and for storing liquid sludge (for pump and haul removal). The exposed portions of this tank display areas of corrosion, and the tank was drained and cleaned and a thorough assessment was performed to determine structural integrity and remaining service life, and a study provided to LCA. Design phase services were completed in March 2019, the project was advertised for bid in early April, and a pre-bid meeting was held on 4/16/19. Bids will be opened on 5/2/19 and award of bid and construction phase services was authorized at the 6/10/19 meeting. A pre-construction meeting was held on 7/19/19, and construction is anticipated to be completed by Fall 2019. **(No Change)**

9. Suburban Division – Wynnewood WWTP Upgrade Project

Wynnewood Terrace WWTP was constructed in 1980 by the developer to serve the Wynnewood Terrace subdivision, located in the Laury's Station area in North Whitehall Township. Sewer service is provided to approximately 217 residential and 2 commercial properties. LCA acquired the system in 2003.

The plant, while meeting effluent limits, has reached the end of its useful life. The plant is constructed of in-ground steel tanks that are in poor condition, with areas of corrosion and loss of structural integrity. The mechanical and electrical systems are also at the end of their service life and in need of replacement. The proposed project includes replacement of the existing treatment facility in entirety with new technology and concrete tanks appropriate for the wastewater flows and loading characteristics. The new facility shall meet the effluent limits criteria established in the respective DEP and DRBC permits, including new or additional limits that may be imposed during the permitting process. Design phase was authorized in February 2017 and was concluded in late Summer 2018. The DEP Part 2 Water Quality Management Permit was received in March 2018. The project was advertised for bid in August 2018, bids were opened in September 2018, and bids were authorized for award at the October 22, 2018 Board meeting. Construction work mobilized in early 2019 and is anticipated to finish in early 2020. **(No Change)**

10. Suburban Division – SCARP

On December 21, 2018, LCA and all of the municipalities named in the AO received a detailed letter from DEP requesting additional information about the Regional Flow Management Strategy (RFMS) including more specifics related to schedules for system characterization, sewer flow metering and monitoring, and other details related to each municipality's operations and maintenance program and inflow and infiltration source removal program. LCA led the effort to

develop a full response to DEP, which was submitted on March 8, 2019. On April 25, 2019, DEP submitted a letter asking for some additional information and maps. The information was forwarded to DEP. DEP recently requested some additional information on the interceptor work and bypassing from LCA and we will provide it.

Among the commitments made by the municipalities in the response to DEP included submission of RFMS updates and information on system hydraulic restrictions within the annual Chapter 94 submissions, and other scheduled commitments related to system characterization work, sewer flow metering and monitoring.

For the Western Lehigh Sewerage Partnership, the closeout of the EPA Administrative Order has no significant impact as the group remains committed to implementing the SCARP plan including inflow and infiltration source removal and conveyance capacity improvements to address dry-day and wet-weather flows for current and future customers. **(No Change)**

11. Sanitary Sewer System Flow Metering for WLI

The installation of the 35 flow meters began in mid-December and was completed in January and is on-going. All meters were installed and operating properly by the end of February. Results of the flow monitoring are being observed by Arcadis. **(No Change)**

12. WLI High Flow Emergency Declaration

LCA began the Emergency Response protocol to deal with the high flows within the Western Lehigh Interceptor (WLI) on November 28, 2018. The Emergency Declaration was presented to and approved by the Board on December 10, 2018, retroactive to November 29, 2018. Through December 28, 2018, the entire Iron Run Trunk Line (IRTL) has been televised from outside the Pretreatment Plant (PTP) down to the confluence with the Breinigsville Line, which is south of Hamilton Boulevard. This area is referred to as Phase 1 and the total distance televised in this reach was 7,115', and includes 93 manholes. In this section, LCA has identified 18 defects within that reach, the majority of which are joint leaks, along with heavy sediment in several areas. Once repaired, staff expects to have eliminated approximately 500,000 gallons per day of infiltration from the interceptor based on estimates. Repair work will begin while additional downstream inspection is ongoing. Phase 2 will include the WLI from where the IRTL and the Breinigsville lines meet down to the point where the relief line ends. Phase 3, which will include a major long-term bypass, will start at the end of the relief line and go to the Spring Creek Pump Station. Phases 4-6 will be the WLI from Spring Creek Pump Station down to Park Pump Station. A pre-bid meeting was held for Phase I on 1/29/2019 and bids were due on 2/15/2019. Standard Pipe Services (SPS) out of Delaware was awarded the contract. The Phase I pre-construction meeting was held on 3/25/2019. Construction on Phase 1 was completed on 5/24/2019. Phases 2 and 3 construction services will be added to the SPS contract via change orders. Bypass bids were due on 4/26/2019. Only one bid was received for \$483,000 and it was rejected. A re-bid was due on May 10, 2019 and the low bid this round was \$374,400. CCTV work is continuing downstream and has reached in to Phase 4 and with the intention of reaching the PPS (end of Phase 6) in Q3. Phase 2 construction began on July 1, 2019. Phase 3 construction of the bypass began on July 8, 2019. CCTV work is now completed to the Wildlands Conservancy and will continue all the way to the Park Pump Station.

13. Suburban Division - Heidelberg Heights and Lynn Township Sewer System Updates

Excessive inflow and infiltration (I&I) and high wet-weather flows into the Heidelberg Heights and Lynn Township sewer systems have been ongoing and increasingly challenging to address. As noted in LCA's monthly operations report, treatment plant bypasses and sanitary sewer overflows have occurred more frequently in these systems and must be addressed. Staff have developed Corrective Action Plans (CAPs) that include structural and non-structural initiatives and involves coordination with the host municipality. The framework for the CAPs was shared with the Board in February and are being developed further for submission to DEP. A meeting

was held at Lynn Township with DEP in June 2019 to discuss the Lynn Township CAP and Township sewer planning/growth issues, and DEP directed LCA to submit a CAP amendment by the end of August 2019. The CAP amendment is to contain an updated sewer system condition assessment and a plan to further mitigate I/I flows. Updated CCTV work of the entire system is in progress, and will be used to scope a capital repair project.

14. Suburban Division - Heidelberg Heights Sanitary Sewer Rehabilitation Project

High wet-weather flows caused by excessive inflow and infiltration into the sewage collection system have challenged the Heidelberg Heights sanitary sewage system and has been the cause of numerous wastewater treatment plant bypasses over the past two years. This project includes the replacement of approximately 1,100 lf of VCP sewer main and 26 residential sewer laterals to address high priority areas of the system to continue to work toward eliminating leakage. The pre-bid meeting was held on 3/28/19, bids were opened on 4/9/19, and award of bid and construction phase services was requested at the 4/22/19 Board meeting. Construction is anticipated to begin in Summer 2019. **(No Change)**

15. Suburban Division - Heidelberg Heights Corrective Action Plan

On February 11, 2019, the Pa. Department of Environmental Protection (DEP) submitted a notice of violation to LCA regarding bypasses and permit exceedances at the Heidelberg Heights wastewater treatment plant. As discussed with the LCA Board during several meetings in 2018, this small satellite system is challenged by high groundwater levels and significant infiltration and inflow (I&I) of clear water into the sewer system during rain events. LCA staff met with DEP officials on March 6, 2019 to discuss the problems and, as a result, LCA is preparing a comprehensive corrective action plan (CAP) for submission to DEP by May 5, 2019. A draft of the plan was attached for Board review at the April 22, 2019 Board meeting. The final CAP was submitted to DEP on 4/29/19. **(No Change)**