



A G E N D A

Regular Meeting - 4:00 p.m. – February 19, 2020

- 1. Call to Order**
- 2. Approval of the Minutes** Regular Meeting – January 15, 2020
- 3. Public Comment**
 - 3.1 Other items not on the agenda
- 4. Old Business**
 - 4.1 Results of RFP – 2020 Bond Issue
 - 4.2 2020 Rate Resolution
 - 4.3 Contract 2017-08 Biter Electrical Enterprises, Inc. Change Order #4 (FINAL)
- 5. New Business**
 - 5.1 Requisitions
- 6. Reports of Officers**
 - 6.1 SCBWA Liaison
 - 6.2 Financial Report
 - 6.3 Chairman's Report
 - 6.4 Project Manager's Report
 - 6.5 Plant Superintendent's Report
 - 6.6 Collection Systems Superintendent's Report
 - 6.7 Consulting Engineer's Report
 - 6.8 Construction Engineer
 - 6.9 Executive Directors Report
- 7. Other Business**
 - 7.1 Executive Session to Discuss the Odor Control Project Contract
- 8. Adjournment**

**MINUTES
UNIVERSITY AREA JOINT AUTHORITY
1576 SPRING VALLEY ROAD
STATE COLLEGE, PA 16801
Regular Meeting – January 15, 2020**

1. Call to Order

Mr. Miller, Executive Director, called the scheduled meeting of the University Area Joint Authority to order at 4:00 p.m. Wednesday, January 15, 2020. The meeting was held in the Board Room in the office of the Authority with the following in attendance: Messrs. Auman, Dempsey, Derr, Dietz, Ebaugh, Guss, Lapinski, and Nucciarone; Cory Miller, Executive Director, Dave Smith, Assistant Executive Director; Art Brant, Plant Superintendent; Mark Harter, Collection System Superintendent; Jason Brown, Project Manager; David Gaines, Solicitor; Jeff Garrigan and Ben Burns, Consulting Engineers; Jason Wert and Michele Aukerman, RETTEW; Deb Hoag, State College Borough, Jim May, CRPA; Kevin Mullen; Thomas Smida and Kara Eshenaur, Mette, Evans and Woodside; Scott Shearer and Joe Breen, Public Financial Management; and Kathy Wheeler, Recording Secretary.

2. 2020 Board Reorganization

**Chairman
Approved**

A motion was made by Mr. Dempsey, seconded by Mr. Guss, to elect Mr. Lapinski as Chairman. The motion passed unanimously.

Mr. Miller turned the meeting over to Mr. Lapinski for the remaining election of officers.

**Vice - Chair
Approved**

A motion was made by Mr. Derr, seconded by Mr. Nucciarone, to elect Mr. Dempsey as Vice-Chairman. The motion passed unanimously.

**Secretary
Approved**

A motion was made by Mr. Nucciarone, seconded by Mr. Dempsey, to elect Mr. Dietz as Secretary. The motion passed unanimously.

**Assistant Secretary
Approved**

A motion was made by Mr. Dempsey, seconded by Mr. Guss, to elect Mr. Ebaugh as Assistant Secretary. The motion passed unanimously.

**Treasurer
Approved**

A motion was made by Mr. Nucciarone, seconded by Mr. Derr, to elect Mr. Guss as Treasurer. The motion passed unanimously.

**Assistant Treasurer
Approved**

A motion was made by Mr. Dempsey, seconded by Mr. Guss, to elect Mr. Derr as Assistant Treasurer. The motion passed unanimously.

**UAJA
Staff and Advisors
Approved**

A motion was made by Mr. Ebaugh, seconded by Mr. Dempsey, to approve all staff and advisors as follows: Mr. Cory Miller, Executive Director; Miller, Kistler & Campbell, Solicitor; Herbert, Rowland and Grubic, Consulting Engineers; Mette, Evans & Woodside, Bond Council; Maher Duessel, Auditor; First National Bank, Depository General Fund and Payroll Fund; Pennsylvania Local Government Investment Trust, Depository Investment Fund; US Bank, Trustee. The motion passed unanimously.

3. Approval of the Minutes

3.1 UAJA Regular Meeting – December 18, 2019

**UAJA
Meeting Minutes
Approved**

A motion was made by Mr. Dietz, seconded by Mr. Derr, to approve the minutes of the UAJA meeting held on December 18, 2019 as submitted. The motion passed unanimously.

4. Public Comment

Mr. Mullen stated that he believes he has been over billed for the past twenty years but mainly the past five years. Mr. Mullen asked what he can do to his property so that he only receives a bill for one EDU. Mr. Gaines stated that Mr. Mullen has been provided the information he is requesting.

5. Old Business

5.1 Open Records Policy Schedule of Fees

Each year UAJA needs to adopt a schedule of fees associated with our Open Records Policy. This fee schedule is shown below (as a side note, this law does not allow for a retrieval fee):

1. Fees for the actual cost of mailing.
2. 25 cents per single-sided page for duplication.
3. Reasonable fees to cover other types of actual costs such as data conversion, electronic access, etc.

**Open Records Policy
Schedule of Fees
Approved**

A motion was made by Mr. Dempsey, seconded by Mr. Derr, to approve the Open records Policy Schedule of Fees as presented. The motion passed unanimously.

5.2 Meeting Dates for 2020

Proposed 2020 meeting dates are provided below. Staff will advertise upon approval.

**January 15, 2020
February 19, 2020
March 18, 2020
April 15, 2020
May 20, 2020
June 17, 2020
July 15, 2020
August 19, 2020
September 16, 2020
October 21, 2020**

**November 18, 2020
December 16, 2020**

January 20, 2021

**2020 Meeting Date
Schedule
Approved**

A motion was made by Mr. Guss, seconded by Mr. Nucciarone, to approve the meeting schedule for 2020. Motion passed unanimously.

5.3 Resolution 2020-1: Authorizing the Series 2020 Bonds

At the December 2019 Board meeting, the Board authorized staff and advisors to begin the process of refunding the Series 2015 Bonds, which at that time had an estimated savings of more than \$200,000. The bond market continues to be in a favorable position to provide UAJA with a reasonable savings. Staff and advisors are recommending proceeding with the refunding. Mr. Shearer updated the savings report.

Mr. Smida reviewed the resolution that would authorize the issuance of the Series 2020 Bonds.

**Resolution 2020-1
Approved**

A motion was made by Mr. Dietz, seconded by Mr. Guss, to approve Resolution 2020-1 authorizing the Series 2020 Bonds. Motion passed unanimously.

5.4 Reject Bids – Harris Reuse Project Contract 2019-01

Bids for the Highway Crossings and Spring Creek Crossing associated with the Beneficial Reuse Waterline Extension were received on November 18, 2019. The lowest bid was submitted by Harger Utility Contractors, Inc. in the amount of \$985,715.00, which was substantially higher than the estimated cost. HRG and the Authority worked with the low bidder to identify cost saving alternatives; however, there were no options identified that would yield substantial cost reductions. Consequently, HRG coordinated with PennDOT and the PA DEP to obtain preliminary approval to install three of the four crossings using trench excavation. The change to an open cut construction method would require permit amendments along with full lane paving overlay and seasonal restrictions for the stream crossing. A revised Engineer's Opinion of Probable Construction Cost was developed using the low bidder's unit prices from the initial bid for unchanged items along with bid results from comparable projects for trench construction. The revised opinion is \$710,000.00, corresponding to a possible cost reduction of \$275,000.00 when compared to the original bid. It is therefore recommended that the Authority reject all bids, submit permit amendments for open cutting three of the four crossings, and then re-bid the project.

**Reject Bids – Harris
Reuse Project Contract
2019-01
Approved**

A motion was made by Mr. Nucciarone, seconded by Mr. Derr, to authorize the Authority to reject all bids, submit permit amendments for open cutting three of the four crossings, and then re-bid the Harris Reuse project. Motion passed unanimously.

6. New Business

6.1 Requisitions

Construction Fund #188	Rettew Associates ENR/AWT SCADA	\$3,222.25
Construction Fund #189	Rettew Associates ENR/AWT Engineering	\$1,780.44
Construction Fund #190	HRG Odor Control Engineering	\$4,200.00
Construction Fund #191	HRG Harris Reuse Engineering	\$358.00
Construction Fund #192	S & C Operations, Inc. Harris Reuse Truck Rental	\$1,360.00
Construction Fund #193	The Howard Company Odor Control Elect. Pay App. #10	\$13,385.50
Total #188-193		\$24,306.19

Requisitions Approved

A motion was made by Mr. Dietz, seconded by Mr. Nucciarone, to approve the Construction Fund Requisitions #188-193. The motion passed unanimously.

BRIF #395	HRG Shiloh Pump Station Replacement	\$10,846.00
BRIF #396	HRG Scott Road/Bristol 537 Study	\$24,000.00
BRIF #397	HRG Meeks Lane 537 Study	\$1,035.00
BRIF #398	Rettew Associates GDK Instrumentation Project	\$10,310.57
BRIF #399	Rettew Associates Aeration System Repair Project	\$2,170.65
BRIF #400	First Citizens Community Bank Loan #6760 – Final Payment	\$16,402.86
BRIF #401	First Citizens Community Bank Loan #6761 – Final Payment	\$16,393.49

BRIF #402	First Citizens Community Bank Loan #6762 – Payment 2 of 3	\$15,300.00
BRIF #403	First Citizens Community Bank Loan #6763 – Payment 2 of 3	\$20,000.00
BRIF #404	First Citizens Community Bank Loan #6764 – Payment 2 of 3	\$40,000.00

TOTAL BRIF **\$156,458.57**

**Requisitions
Approved**

A motion was made by Mr. Dietz, seconded by Mr. Guss, to approve the BRIF Requisitions #395-404. The motion passed unanimously.

Revenue Fund #166	Debt Service, Operation and Maintenance Expenses	\$1,000,000
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TOTAL REVENUE **\$1,000,000**

**Requisition
Approved**

A motion was made by Mr. Auman, seconded by Mr. Dempsey, to approve the Revenue Fund Requisition #166. The motion passed unanimously.

7. Reports of Officers

7.1 SCBWA Liaison

None.

7.2 Financial Report

Mr. Smith reviewed with the Board the YTD budget report for the period ending December 31, 2019.

7.3 Chairman's Report

Thanked the outgoing board members for their time and service on the Authority's board and welcomed Mr. Auman as a new member of the board.

7.4 Compost & Septage Operations Report

The following comments are as presented to the Board in the written report prepared by Jason Brown, Project Manager.

COMPOST PRODUCTION AND DISTRIBUTION

	<u>Jul. 2019</u>	<u>Aug. 2019</u>	<u>Sep. 2019</u>	<u>Oct. 2019</u>	<u>Nov. 2019</u>	<u>Dec. 2019</u>
Production	955 cu/yds.	954 cu/yds.	940 cu/yds.	1,190 cu/yds.	988 cu/yds.	1,188 cu/yds.
YTD. Production	2,949 cu/yds.	3,903 cu/yds.	4,843 cu/yds.	6,033 cu/yds.	7,021 cu/yds.	8,209 cu/yds.
Distribution	0 cu/yds.	223 cu/yds.	1,292 cu/yds.	861 cu/yds.	1,823 cu/yds.	328 cu/yds.
YTD.	3,667 cu/yds.	3,890	5,182	6,043 cu/yds.	7,866 cu/yds.	8,194

Distribution		cu/yds.	cu/yds.			cu/yds.
Immediate Sale	311 cu/yds.	2,239 cu/yds.	1,909 cu/yds.	2,108 cu/yds.	1,475 cu/yds.	2,135 cu/yds.
Currently in Storage	1,266 cu/yds.	3,193 cu/yds.	2,849 cu/yds.	3,298 cu/yds.	2,463 cu/yds.	3,323 cu/yds.

SEPTAGE OPERATIONS

	<u>Jul. 2019</u>	<u>Aug. 2019</u>	<u>Sep. 2019</u>	<u>Oct. 2019</u>	<u>Nov. 2019</u>	<u>Dec. 2019</u>
Res./Comm.	30,150 gals.	23,050 gals.	20,730 gals.	19,200 gals.	17,150 gals.	4,050 gals.
CH/Potter	5,600.47 lbs/solids	2,710.50 lbs/solids	3,361.02 lbs/solids	5,204.16 lbs/solids	4,553.64 lbs/solids	4,374.33 lbs/solids
Port Matilda	2,368.56 lbs/solids	914.40 lbs/solids	1,317.72 lbs/solids	166.80 lbs/solids	767.28 lbs/solids	1,017.48 lbs/solids
Huston Twp.	500.40 lbs/solids	667.20 lbs/solids	834.00 lbs/solids	366.96 lbs/solids	650.52 lbs/solids	517.08 lbs/solids
Total Flow	101,150 gals.	52,050 gals.	60,230 gals.	61,700 gals.	63,650 gals.	51,550 gals.

7.5 Plant Superintendent's Report

The following comments are as presented to the Board in the written report prepared by Art Brant, Plant Superintendent.

Plant Operation

The treatment plant is operating well with no exceptions for the month of December 2019. The 12-month rolling average flow for December was 4.07mgd with the average for the month being 2.95mgd. The average monthly **influent** flow was 5.03mgd.

Treatment units on line are as follows: primary clarifiers #1, #5 and #6; aeration basins #1 and #3; secondary; clarifiers' #1, #2, #3 and #4; four of eight tertiary filters are on line.

Below is the chart for Reuse Distribution and Temperature Data:

	Dec-19	YTD	Plant Effl. Temp	Wetland Effl. Temp.
Best Western	10,000	321,000		
Centre Hills	0	27,866,000	Dec-19	Dec-19
Cintas	563,000	7,526,000	58.3	56.8
Red Line	531,000	4,667,000		
Uaja Wetland	1,890,000	37,358,000		
GDK Vault	54,056,000	297,738,000		
Kissingers	1,890,000	18,870,000		
Stewarts/M.C.	14,000	219,500		
TOTAL	58,954,000	394,565,500		

Plant Maintenance

- Installed salt spreader on T-tag.
- Replaced coolant and coolant hoses on Plant Generator.
- Replaced Indecco Heater in the Headworks Bldg.
- Replaced panelview at the Main Station for pump control.
- Rebuilt both Alum Pumps.
- Replaced belts and filters for Main Station air unit.
- Hauled chips as needed for Compost.

- Replaced thermal couplers on Bay #8 zone B and Bay #12 zone C.
- Rebuilt blower for Bay 13 zone E.
- Worked on Polymer Control panel.
- CIP'ed both RO Units.
- Replaced one actuator, and one broken collar on MF #1 and one actuator on MF#3.

7.6 Collection System Superintendent's Report

The following comments are as presented to the Board in the written report prepared by Mark Harter, Collection System Superintendent.

Mainline Maintenance:

New Construction – Greenbriar – Installed (670 ft) of mainline – (235 ft) of lateral pipe – (1) Air Release.
Harris Reuse Project – Installed (145 ft) of 12" main, clearing of R.O.W.
Mainline Televising – (2,966 ft) televised – (19) manholes inspected.
Mainline Cleaning – (6,181 ft) – (49) manholes inspected.
Casting repairs – (2).
Equipment maintenance.

Lift Station Maintenance:

Cleaned (8) lift station wet wells.
Replaced transducer at Big Hollow station.
Replaced impeller on pump one at Ghaner station.
Kaywood station is now communicating through SCADA.
Routine maintenance.

NEXT MONTH PROJECTS:

Continue Greenbriar project.
Continue Harris Reuse project.
Cleaning wet wells.
Flushing mains.
New lateral on Kennard Rd.

Inspection: Final As-Built Approved: a. Morningside Nursing Home.

Mainline Construction:

- a. The Cottages at State College – (90%) Complete.
- b. Village of PSU phase 9&10 –Reviewing As-Built..
- c. Dreibelbis Street Hotel –Reviewing As-Built.

New Connections:

a.	Single-Family Residential	6	c.	Commercial	0
b.	Multi-Family Residential	0	d.	Non-Residential	0

TOTAL 6

PA One-Calls Responded to 12/1-31/19: 146

7.7 Engineer's Report

The following comments are as presented to the Board in the written report prepared by the Consulting Engineer.

Consulting Engineer Services

- The proposed Retained Engineering Services for 2020 remain unchanged from previous years: Phase 01 - Meetings at \$7,000/year, Phase 02 – Assignments with

Time and Materials limit of
\$15,000.

Odor Control Systems Upgrades

Contract Times								
Contract No.	Notice to Proceed	Contract Time	Substantial Completion Date	Days Used*	Days Remaining	Final Completion	Percent of Time Remaining	Time Used
17-03	9/4/2018	320	7/21/2019	470	-178	9/4/2019	0%	100%
17-04	9/4/2018	320	7/21/2019	470	-178	9/4/2019	0%	100%

*As of date of board meeting (01/15/2020).

- Start-up of the biofilter has been delayed due to the delivery and installation of essential fiberglass components. The scheduled delivery of these components has been repeatedly extended; however, they are not anticipated to be delivered three weeks of January 13th. Based on current information, start-up is projected to occur in late January.
- Progress Meeting No. 16 was held on January 8, 2020. Minutes have been prepared.
- Applications for Payment submitted by the Contractors are summarized in the following table.

Applications for Payment						
Contract No.	Application for Payment No.	Amount Due	Current Contract Price	Total Completed and Stored	% Monetary Complete	Balance to Finish Plus Retainage
17-03	15	\$26,291.25	\$8,358,000.00	\$8,177,935.00	97.8	\$588,961.75
17-04	10	\$13,385.50	\$587,890.00	\$564,629.35	96	\$51,492.12

- The Contracts are 178 days beyond the date of Substantial Completion. Liquidated Damages in the amount of \$231,400.00 (\$1,300/day x 178 days) have accrued. The Owner is entitled to impose a set-off against payment to the Contractor for liquidated damages that have accrued. If a set-off is imposed, immediate notification must be provided stating the reason. Additional discussion will be provided at the meeting. Any imposed off-sets are not reflected in the aforementioned table.

Greenbriar Sanitary Sewer Design

- HRG is assisting with construction phase services as needed.

Shiloh Road Pump Station Upgrades

- The pump selection and generator sizing have been finalized. Drawings and permit applications are being updated accordingly.

Extension of Beneficial Reuse Water to Harris Township

- Easements are being coordinated with the Authority's solicitor.
- HRG is providing alignment and appurtenance stakeout for the project as needed.
- The regulatory agencies (PennDOT and PA DEP) have indicated that they would be amenable to permitting the trenched construction of three of the four highway/stream crossings. This would require the submission of permit modifications. Consequently, additional conditions (full lane pavement overlay) and restrictions (seasonal access) would

likely be placed on any amended permits. Nonetheless, the estimated reduction in cost compared to the lowest bid amount is \$275,000.

- Harger Utility Contractors, Inc. (the low bidder for the Crossings Contract) provided several cost saving alternatives that were evaluated. These alternatives include directional drilling as opposed to auger boring and a reduced scope of work (more work completed by the Authority's crew). However, the realized savings were not that appreciable.

Scott Road Pump Station and Bristol Interceptor – Act 537 Plan Special Study

- A draft of the study is nearly complete.

Meeks Lane Pump Station – Act 537 Plan Special Study

- HRG is working to complete the study.

Developer Plan Reviews:

- The Developer's as-built drawings for the Dreibelbis St. Hotel were reviewed and recommended to Staff on December 30, 2019

7.8 Construction Report

The following comments are as presented to the Board in the written report prepared by the Construction Engineer.

General Services Items Completed for the Authority:

Pump Station SCADA Integration

- RETTEW is currently transitioning the pump stations from the old SCADA to the new SCADA network. Big Hollow and Kaywood pump stations have been completed and Ghaner is in process.

WWTP NPDES Permit – Phosphorus Study

- The plan of study for the upcoming Phosphorus Study was submitted to the PA DEP on December 23rd. Per the Authority's NPDES permit, the DEP has 60 days to provide any comments to the Authority.

Sludge Storage Tank Mixer

- RETTEW is currently preparing contract documents for the installation of a new submersible mixer in the Sludge Storage Tank, as well as modifications to the aeration system. We anticipate receiving bids for the Board's consideration in March.

Aeration System Leaks

- Recent investigations have uncovered several significant leaks in the underground aeration piping between the Administration Building and the Aeration Tanks. We are preparing recommendations to address this air loss, which will lead to decreased operation of the aeration blowers.

Nutrient Credit Offsets – Solar Installation

- The PA DEP has provided an initial response denying the Authority's request for approval of nutrient offsets generated by reductions in nitrous oxide emissions through the transition to solar power. However, we feel that there is strong case yet to be made in the Authority's favor

and the PA DEP has suggested a meeting with the EPA’s Chesapeake Bay Office to continue this discussion.

ENR/AWT Upgrade Project (094612009)

- Both contractors, Contract UAJA 2017-06 (HRI) and Contract UAJA 2017-08 (Biter), are in the process of completing all punchlist items.

Solar System (Phase I/II)

- The Interconnection Application for the Phase II Solar Array is being prepared for submission to First Energy/West Penn Power. RETTEW has begun regulatory design packages (such as Zoning and Land Development).

7.9 Executive Director’s Report

Mr. Miller, Executive Director, had no additional information.

8. Other Business

8.1 Executive Session

**Executive Session
Approved**

A motion was made by Mr. Nucciarone, seconded by Mr. Dietz, to adjourn to an executive session at 4:53 p.m. The motion passed unanimously.

**Executive Session
Approved**

A motion was made by Mr. Nucciarone, seconded by Mr. Derr, to adjourn the executive session and return to the regular meeting at 6:20 p.m. The motion passed unanimously.

Construction Fund #194

Global Heavy Corporation
Odor Control Gen Pay App 15

\$26,291.25

**Requisitions
Approved**

A motion was made by Mr. Dietz, seconded by Mr. Derr, to set-off against payment the entire amount of the pay application due to liquidated damages. The motion passed unanimously.

9. Adjournment

The meeting was adjourned at 6:25 p.m.

Respectfully submitted,

UNIVERSITY AREA JOINT AUTHORITY

Secretary/Assistant Secretary

02/06/2020 14:51
kwheeler

UNIVERSITY AREA JOINT AUTHORITY - LIVE
YEAR-TO-DATE BUDGET REPORT

P 1
glytdbud

FOR 2020 01

ACCOUNTS FOR: 10 OPERATING FUND	ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USED
1040410 REVENUE-SEWER	-15,152,692	0	-15,152,692	76,199.49	.00	-15,228,891.49	-.5%
1040420 REVENUE-SOLIDS	-74,000	0	-74,000	-666.44	.00	-73,333.56	.9%
1040425 REVENUE-BU WATER	-25,000	0	-25,000	.00	.00	-25,000.00	.0%
1040430 MAINTENANCE	-56,631	0	-56,631	-68,150.66	.00	11,519.66	120.3%
1040440 REVENUE-PERMIT/TAP FEES	-1,297,027	0	-1,297,027	-133,223.46	.00	-1,163,803.54	10.3%
1040450 REVENUE-ADVCD. CONSTR FEE	-40,000	0	-40,000	-11,865.83	.00	-28,134.17	29.7%
1040451 REVENUE-MISC. REIMBURSEMENT	-127,358	0	-127,358	-892.79	.00	-126,465.21	.7%
1040470 INTEREST EARNINGS-CASH ACCT	-1,790	0	-1,790	-154.60	.00	-1,635.40	8.6%
1040472 INTEREST EARNINGS-PLIGIT	-375	0	-375	-5.91	.00	-369.09	1.6%
1040474 INTEREST EARNINGS - TRUSTEE	-119,600	0	-119,600	13,916.36	.00	-133,516.36	-11.6%
1040480 REVENUES-MISCELLANEOUS	-85,400	0	-85,400	-3,774.61	.00	-81,625.39	4.4%
1045921 CIP-COLLECTION MAINT I&I	1,061,500	0	1,061,500	45,530.33	.00	1,015,969.67	4.3%
1045922 CIP-COLLECTION-CONST. EQUIP	68,300	0	68,300	52,796.35	.00	15,503.65	77.3%
1045924 CIP-WWTP-PHYSICAL PLANT	365,800	0	365,800	22,473.34	.00	343,326.66	6.1%
1045928 CIP-BENEFICIAL REUSE	1,223,000	0	1,223,000	28,585.04	.00	1,194,414.96	2.3%
1045929 CIP-WWTP-DEWATERING FACILIT	95,000	0	95,000	.00	.00	95,000.00	.0%
1045930 CIP-WWTP-COMPOST FACILITY	560,000	0	560,000	101,404.25	.00	458,595.75	18.1%
1050050 GENERAL & ADMINISTRATIVE	1,719,320	0	1,719,320	250,922.52	.00	1,468,397.48	14.6%
1050053 G & A - INFORMATION TECHNOL	71,000	0	71,000	1,736.51	.00	69,263.49	2.4%
1050054 G & A - FLEET/FUEL	160,500	0	160,500	12,596.78	.00	147,903.22	7.8%
1052052 DEBT SERVICE	6,373,458	0	6,373,458	420.84	.00	6,373,037.16	.0%
1060019 WWTP - LABORATORY	303,620	0	303,620	35,439.43	.00	268,180.57	11.7%
1060022 TREATMENT PLANT MAINTENANCE	1,071,381	0	1,071,381	98,031.33	.00	973,349.67	9.1%
1060023 MAIN STATION	46,817	0	46,817	6,309.43	.00	40,507.57	13.5%
1060025 WWTP - IPP	111,987	0	111,987	12,371.90	.00	99,615.10	11.0%
1060028 WWTP - BENEFICIAL REUSE	795,430	0	795,430	90,428.31	.00	705,001.69	11.4%
1060029 WWTP - DEWATERING	402,847	0	402,847	26,488.08	.00	376,358.92	6.6%
1060030 WWTP - COMPOST	883,294	0	883,294	91,999.66	.00	791,294.34	10.4%
1060032 TREATMENT PLANT OPERATION	1,796,766	0	1,796,766	191,655.29	.00	1,605,110.71	10.7%
1070021 COLLECTION-MAINTENANCE	1,711,510	0	1,711,510	190,045.43	.00	1,521,464.57	11.1%
1070022 CONSTRUCT EQUIP MAINTENANCE	45,500	0	45,500	1,079.87	.00	44,420.13	2.4%
1070034 COLLECTION-INSPECTION	430,179	0	430,179	49,585.25	.00	380,593.75	11.5%
1070036 COLLECTION-PUMP STATION	135,250	0	135,250	20,165.59	.00	115,084.41	14.9%
TOTAL OPERATING FUND	2,452,586	0	2,452,586	1,201,447.08	.00	1,251,138.92	49.0%
TOTAL REVENUES	-16,979,873	0	-16,979,873	-128,618.45	.00	-16,851,254.55	
TOTAL EXPENSES	19,432,459	0	19,432,459	1,330,065.53	.00	18,102,393.47	

02/06/2020 14:47
kwheeler

UNIVERSITY AREA JOINT AUTHORITY - LIVE
YEAR-TO-DATE BUDGET REPORT

P 1
glytdbud

FOR 2020 01

ACCOUNTS FOR: 10 OPERATING FUND	ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USED
<hr/>							
1040410 REVENUE-SEWER	<hr/>						
1040410 4101 UAJA TOTAL SEWER R	-10,324,496	0	-10,324,496	2,530.72	.00	-10,327,026.72	.0%*
1040410 4102 BORO SEWER TOTAL R	-4,018,120	0	-4,018,120	.00	.00	-4,018,120.00	.0%*
1040410 4103 PGM TOTAL SEWER RE	-379,200	0	-379,200	.00	.00	-379,200.00	.0%*
1040410 4104 PSU TOTAL SEWER RE	-244,508	0	-244,508	46,004.77	.00	-290,512.77	-18.8%*
1040410 4105 SURCHARGES TOTAL R	-186,368	0	-186,368	27,664.00	.00	-214,032.00	-14.8%*
TOTAL REVENUE-SEWER	-15,152,692	0	-15,152,692	76,199.49	.00	-15,228,891.49	-.5%
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1040420 REVENUE-SOLIDS	<hr/>						
1040420 4201 N5001 NONTAXABLE	-45,000	0	-45,000	-150.00	.00	-44,850.00	.3%*
1040420 4201 N5002 TAXABLE COMPO	-6,000	0	-6,000	.00	.00	-6,000.00	.0%*
1040420 4203 SLUDGE DISPOSAL	-23,000	0	-23,000	-516.44	.00	-22,483.56	2.2%*
TOTAL REVENUE-SOLIDS	-74,000	0	-74,000	-666.44	.00	-73,333.56	.9%
<hr/>							
1040425 REVENUE-BU WATER	<hr/>						
1040425 4251 REVENUE-BU WATER	-25,000	0	-25,000	.00	.00	-25,000.00	.0%*
TOTAL REVENUE-BU WATER	-25,000	0	-25,000	.00	.00	-25,000.00	.0%
<hr/>							
1040430 MAINTENANCE	<hr/>						
1040430 4301 REVENUE-MAINT BORO	-56,631	0	-56,631	-68,150.66	.00	11,519.66	120.3%
TOTAL MAINTENANCE	-56,631	0	-56,631	-68,150.66	.00	11,519.66	120.3%
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1040440 REVENUE-PERMIT/TAP FEES	<hr/>						
1040440 4401 PERMIT/CONNECTION	-22,050	0	-22,050	-3,350.00	.00	-18,700.00	15.2%*
1040440 4402 TAP FEE-TREATMENT	-1,196,800	0	-1,196,800	-114,170.00	.00	-1,082,630.00	9.5%*

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1040440 4403 GHANER TAP FEE	-3,010	0	-3,010	-3,010.00	.00	.00	100.0%
1040440 4404 TAP FEE-PGM COLLEC	-6,642	0	-6,642	.00	.00	-6,642.00	.0%*
1040440 4405 IPP USER FEES	-5,700	0	-5,700	.00	.00	-5,700.00	.0%*
1040440 4409 WATER QUALITY MNGT	-500	0	-500	.00	.00	-500.00	.0%*
1040440 4410 REPAIR PERMIT	-1,550	0	-1,550	-175.00	.00	-1,375.00	11.3%*
1040440 4411 TAP FEE - ROUTE 26	-14,125	0	-14,125	-5,650.00	.00	-8,475.00	40.0%*
1040440 4412 CIRCLEVILLE TAP FE	-40,800	0	-40,800	-1,019.46	.00	-39,780.54	2.5%*
1040440 4413 VALLEY VISTA TAP F	-5,850	0	-5,850	-5,849.00	.00	-1.00	100.0%*
TOTAL REVENUE-PERMIT/TAP FEES	-1,297,027	0	-1,297,027	-133,223.46	.00	-1,163,803.54	10.3%
1040450 REVENUE-ADVCD. CONSTRC FEE							
1040450 4407 INSPECTION FEES	-40,000	0	-40,000	.00	.00	-40,000.00	.0%*
1040450 4407 B5026 GRAYSWOOD BRY	0	0	0	-6,631.14	.00	6,631.14	100.0%
1040450 4407 B5458 OAKRIDGE AVE	0	0	0	-3,340.76	.00	3,340.76	100.0%
1040450 4407 B5460 MORNINGSIDE @	0	0	0	-1,893.93	.00	1,893.93	100.0%
TOTAL REVENUE-ADVCD. CONSTRC FEE	-40,000	0	-40,000	-11,865.83	.00	-28,134.17	29.7%
1040451 REVENUE-MISC. REIMBURSEMNT							
1040451 4501 EQUIPMENT USE	-1,000	0	-1,000	.00	.00	-1,000.00	.0%*
1040451 4502 ASSESSMENT	-1,000	0	-1,000	.00	.00	-1,000.00	.0%*
1040451 4503 EMPLOYEE GROUP INS	-6,300	0	-6,300	-892.79	.00	-5,407.21	14.2%*
1040451 4514 EMPLOYEE SHARE HEA	-119,058	0	-119,058	.00	.00	-119,058.00	.0%*
TOTAL REVENUE-MISC. REIMBURSEMNT	-127,358	0	-127,358	-892.79	.00	-126,465.21	.7%
1040470 INTEREST EARNINGS-CASH ACCTS							
1040470 4701 GENERAL CHECKING-I	-10	0	-10	.00	.00	-10.00	.0%*
1040470 4702 PAYROLL-INTEREST E	-400	0	-400	-29.31	.00	-370.69	7.3%*
1040470 4717 SWEEP CHECKING-INT	-1,380	0	-1,380	-125.29	.00	-1,254.71	9.1%*
TOTAL INTEREST EARNINGS-CASH ACCTS	-1,790	0	-1,790	-154.60	.00	-1,635.40	8.6%
1040472 INTEREST EARNINGS-PLIGIT							
1040472 4703 PLIGIT-INTEREST EA	-30	0	-30	-1.91	.00	-28.09	6.4%*

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1040472 4711 PLIGIT-EMMAUS-INTE	-200	0	-200	-4.00	.00	-196.00	2.0%*
1040472 4719 PLIGIT PLUS - INTE	-145	0	-145	.00	.00	-145.00	.0%*
TOTAL INTEREST EARNINGS-PLIGIT	-375	0	-375	-5.91	.00	-369.09	1.6%
1040474 INTEREST EARNINGS - TRUSTEE							
1040474 4706 BOND REMP/IMP-INTE	-45,750	0	-45,750	4,478.85	.00	-50,228.85	-9.8%*
1040474 4707 BRIF/EMMAUS-INTERE	-555	0	-555	-27.64	.00	-527.36	5.0%*
1040474 4724 INTEREST 93 DEBT S	-62,000	0	-62,000	10,500.79	.00	-72,500.79	-16.9%*
1040474 4725 INT 93 OPERATING E	-3,000	0	-3,000	517.59	.00	-3,517.59	-17.3%*
1040474 4726 INT 93 DEBT SERVIC	-4,320	0	-4,320	-.34	.00	-4,319.66	.0%*
1040474 4727 INT REVENUE FUND	-3,975	0	-3,975	-71.03	.00	-3,903.97	1.8%*
1040474 4732 2018 CONSTRUCTION	0	0	0	-1,481.86	.00	1,481.86	100.0%
TOTAL INTEREST EARNINGS - TRUSTEE	-119,600	0	-119,600	13,916.36	.00	-133,516.36	-11.6%
1040480 REVENUES-MISCELLANEOUS							
1040480 4899 MISCELLANEOUS RECE	-50,000	0	-50,000	-3,774.61	.00	-46,225.39	7.5%*
1040480 4902 MAYLIE FARM RENT	-5,400	0	-5,400	.00	.00	-5,400.00	.0%*
1040480 4909 SOLAR MAINTENANCE	-30,000	0	-30,000	.00	.00	-30,000.00	.0%*
TOTAL REVENUES-MISCELLANEOUS	-85,400	0	-85,400	-3,774.61	.00	-81,625.39	4.4%
1045921 CIP-COLLECTION MAINT I&I							
1045921 0021 I & I COLLECTION	1,000	0	1,000	.00	.00	1,000.00	.0%
1045921 0021 6250 N ATHERTON PAD	150,000	0	150,000	.00	.00	150,000.00	.0%
1045921 0021 6268 PRINCETON BACK	20,000	0	20,000	.00	.00	20,000.00	.0%
1045921 0021 6271 SHILOH RELOCAT	413,000	0	413,000	.00	.00	413,000.00	.0%
1045921 0021 6272 GREENBRIAR ENG	100,000	0	100,000	9,649.33	.00	90,350.67	9.6%
1045921 5405 6235 GRAYSWOODS ENG	35,000	0	35,000	1,035.00	.00	33,965.00	3.0%
1045921 5405 6271 SHILOH RELOCAT	7,500	0	7,500	10,846.00	.00	-3,346.00	144.6%*
1045921 5405 6272 GREENBRIAR ENG	10,000	0	10,000	.00	.00	10,000.00	.0%
1045921 5405 6300 SCOTT ROAD UPG	175,000	0	175,000	24,000.00	.00	151,000.00	13.7%
1045921 5405 6301 FUTURE SEPTIC	35,000	0	35,000	.00	.00	35,000.00	.0%
1045921 ER01 6271 SHILOH RELOCAT	5,000	0	5,000	.00	.00	5,000.00	.0%

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1045921 PV01 6271 SHILOH TRENCH	25,000	0	25,000	.00	.00	25,000.00	.0%
1045921 PV01 6272 PAVING CONTRAC	35,000	0	35,000	.00	.00	35,000.00	.0%
1045921 PV02 6271 SHILOH BIKE PA	50,000	0	50,000	.00	.00	50,000.00	.0%
TOTAL CIP-COLLECTION MAINT I&I	1,061,500	0	1,061,500	45,530.33	.00	1,015,969.67	4.3%
1045922 CIP-COLLECTION-CONST. EQUIPM							
1045922 0021 6288 NEW COLLECTION	20,000	0	20,000	20,000.00	.00	.00	100.0%
1045922 0021 6289 NEW COLLECTION	15,900	0	15,900	16,402.86	.00	-502.86	103.2%*
1045922 0021 6290 NEW UNIT 4	15,900	0	15,900	16,393.49	.00	-493.49	103.1%*
1045922 0021 6302 BROOM SKID STE	7,500	0	7,500	.00	.00	7,500.00	.0%
1045922 0021 6303 LATERAL CAMERA	9,000	0	9,000	.00	.00	9,000.00	.0%
TOTAL CIP-COLLECTION-CONST. EQUIPM	68,300	0	68,300	52,796.35	.00	15,503.65	77.3%
1045924 CIP-WWTP-PHYSICAL PLANT							
1045924 0024 6291 ENR/AWT SCADA	0	0	0	3,222.25	.00	-3,222.25	100.0%*
1045924 0024 6294 NEW TRUCK PLAN	15,300	0	15,300	15,300.00	.00	.00	100.0%
1045924 0024 6304 AERATION SYSTE	300,000	0	300,000	2,170.65	.00	297,829.35	.7%
1045924 0024 6305 SCISSORS LIFT	20,000	0	20,000	.00	.00	20,000.00	.0%
1045924 0024 6306 HEADWORKS HEAT	7,500	0	7,500	.00	.00	7,500.00	.0%
1045924 0024 6307 VFD'S DRAIN ST	23,000	0	23,000	.00	.00	23,000.00	.0%
1045924 5405 6256 ENR/AWT ENGINE	0	0	0	1,780.44	.00	-1,780.44	100.0%*
TOTAL CIP-WWTP-PHYSICAL PLANT	365,800	0	365,800	22,473.34	.00	343,326.66	6.1%
1045928 CIP-BENEFICIAL REUSE							
1045928 0028 6239 MF MEMBRANE RE	81,000	0	81,000	.00	.00	81,000.00	.0%
1045928 0028 6262 WATERLINE PH 2	1,000,000	0	1,000,000	8,353.97	.00	991,646.03	.8%
1045928 0028 6299 GDK INSTRUMENT	0	0	0	10,310.57	.00	-10,310.57	100.0%*
1045928 0028 6308 AWT CHEMICAL P	12,000	0	12,000	.00	.00	12,000.00	.0%
1045928 5405 6261 WATERLINE PH 2	45,000	0	45,000	358.00	.00	44,642.00	.8%
1045928 ER05 6262 HARRIS REUSE T	85,000	0	85,000	9,562.50	.00	75,437.50	11.3%
TOTAL CIP-BENEFICIAL REUSE	1,223,000	0	1,223,000	28,585.04	.00	1,194,414.96	2.3%
1045929 CIP-WWTP-DEWATERING FACILITY							

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1045929 0029 6309 BIG BERTHA MIX	95,000	0	95,000	.00	.00	95,000.00	.0%
TOTAL CIP-WWTP-DEWATERING FACILITY	95,000	0	95,000	.00	.00	95,000.00	.0%
1045930 CIP-WWTP-COMPOST FACILITY							
1045930 0030 6245 ODOR CONTROL	500,000	0	500,000	57,204.25	.00	442,795.75	11.4%
1045930 0030 6295 NEW COMPOST LO	40,000	0	40,000	40,000.00	.00	.00	100.0%
1045930 5405 6245 ODOR CONTROL E	20,000	0	20,000	4,200.00	.00	15,800.00	21.0%
TOTAL CIP-WWTP-COMPOST FACILITY	560,000	0	560,000	101,404.25	.00	458,595.75	18.1%
1050050 GENERAL & ADMINISTRATIVE							
1050050 5001 SUPERVISOR LABOR	263,347	0	263,347	27,653.00	.00	235,694.00	10.5%
1050050 5002 REGULAR LABOR	442,013	0	442,013	38,725.85	.00	403,287.15	8.8%
1050050 5006 VACATION	0	0	0	4,628.56	.00	-4,628.56	100.0%*
1050050 5007 SICK	0	0	0	1,673.29	.00	-1,673.29	100.0%*
1050050 5008 PERSONAL	0	0	0	391.92	.00	-391.92	100.0%*
1050050 5010 HOLIDAY	0	0	0	8,119.19	.00	-8,119.19	100.0%*
1050050 5101 FICA EXPENSE	43,733	0	43,733	5,033.94	.00	38,699.06	11.5%
1050050 5102 MEDICARE EXPENSE	10,228	0	10,228	1,177.32	.00	9,050.68	11.5%
1050050 5201 UNEMPLOYMENT EXPEN	19,000	0	19,000	644.75	.00	18,355.25	3.4%
1050050 5202 GROUP HEALTH INSUR	118,743	0	118,743	15,596.82	.00	103,146.18	13.1%
1050050 5203 PENSION (401) UAJA	70,536	0	70,536	8,119.24	.00	62,416.76	11.5%
1050050 5205 COBRA EMPLOYEE INS	6,300	0	6,300	48.51	.00	6,251.49	.8%
1050050 5207 GROUP LIFE INSURAN	63,500	0	63,500	6,544.88	.00	56,955.12	10.3%
1050050 5208 HEALTH DEDUCTIBLE	175,000	0	175,000	19,856.62	.00	155,143.38	11.3%
1050050 5301 OFFICE SUPPLIES	15,000	0	15,000	3,249.57	.00	11,750.43	21.7%
1050050 5302 POSTAGE/SHIPPING	30,000	0	30,000	6,473.61	.00	23,526.39	21.6%
1050050 5303 JANITORIAL SUPPLIE	7,000	0	7,000	49.51	.00	6,950.49	.7%
1050050 5307 PETTY CASH EXPENDI	200	0	200	23.31	.00	176.69	11.7%
1050050 5401 ADVERTISING	3,000	0	3,000	.00	.00	3,000.00	.0%
1050050 5402 AUDIT	22,000	0	22,000	.00	.00	22,000.00	.0%
1050050 5403 6107 MAYLIE PROPERT	3,000	0	3,000	.00	.00	3,000.00	.0%
1050050 5405 ENGINEERING-RETAIN	15,000	0	15,000	.00	.00	15,000.00	.0%
1050050 5406 LEGAL	25,000	0	25,000	4,025.00	.00	20,975.00	16.1%
1050050 5408 INSURANCE - COMMER	253,000	0	253,000	74,750.00	.00	178,250.00	29.5%
1050050 5499 MISCELLANEOUS OUTS	15,000	0	15,000	4,528.50	.00	10,471.50	30.2%

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1050050 5501 1054 O & M - COPIER	8,850	0	8,850	3,007.09	.00	5,842.91	34.0%
1050050 5601 COMMUNICATIONS	40,000	0	40,000	11,145.75	.00	28,854.25	27.9%
1050050 5701 TRAINING, SEMINARS	5,000	0	5,000	750.00	.00	4,250.00	15.0%
1050050 5702 MEMBERSHIPS, SUBSC	6,500	0	6,500	1,072.00	.00	5,428.00	16.5%
1050050 5703 UNIFORMS-BOOTS-GLO	18,000	0	18,000	1,275.59	.00	16,724.41	7.1%
1050050 5704 VACCINATIONS	3,000	0	3,000	.00	.00	3,000.00	.0%
1050050 5705 RECRUITING EXPENSE	100	0	100	.00	.00	100.00	.0%
1050050 5706 EMPLOYEE/EMPLOYER	1,000	0	1,000	93.90	.00	906.10	9.4%
1050050 5707 MEAL ALLOWANCE	500	0	500	.00	.00	500.00	.0%
1050050 5708 SAFETY EQUIPMENT	7,500	0	7,500	225.00	.00	7,275.00	3.0%
1050050 5709 SAFETY TRAINING	3,000	0	3,000	.00	.00	3,000.00	.0%
1050050 5710 DRUG/ALCOHOL TESTI	500	0	500	.00	.00	500.00	.0%
1050050 6006 MISCELLANEOUS EXPE	1,000	0	1,000	.00	.00	1,000.00	.0%
1050050 6007 BANK FEES/CHARGES	100	0	100	.00	.00	100.00	.0%
1050050 6008 BAD DEBT/WRITE OFF	100	0	100	.00	.00	100.00	.0%
1050050 6015 WATER-CTWA	5,000	0	5,000	1,097.38	.00	3,902.62	21.9%
1050050 6017 GARBAGE	10,000	0	10,000	942.42	.00	9,057.58	9.4%
1050050 6019 CNET	8,570	0	8,570	.00	.00	8,570.00	.0%
TOTAL GENERAL & ADMINISTRATIVE	1,719,320	0	1,719,320	250,922.52	.00	1,468,397.48	14.6%
1050053 G & A - INFORMATION TECHNOLOGY							
1050053 IT71 INTERNET SERVICE	5,000	0	5,000	300.69	.00	4,699.31	6.0%
1050053 IT72 HARDWARE-DATA PROC	5,000	0	5,000	.00	.00	5,000.00	.0%
1050053 IT73 SOFTWARE-DATA PROC	60,000	0	60,000	1,435.82	.00	58,564.18	2.4%
1050053 IT74 TRAINING-DATA PROC	1,000	0	1,000	.00	.00	1,000.00	.0%
TOTAL G & A - INFORMATION TECHNOLOGY	71,000	0	71,000	1,736.51	.00	69,263.49	2.4%
1050054 G & A - FLEET/FUEL							
1050054 5502 VEHICLE MAINTENANC	45,000	0	45,000	3,701.38	.00	41,298.62	8.2%
1050054 5603 1006 GASOLINE.	49,500	0	49,500	2,645.03	.00	46,854.97	5.3%
1050054 5603 1008 DIESEL FUEL	66,000	0	66,000	6,250.37	.00	59,749.63	9.5%
TOTAL G & A - FLEET/FUEL	160,500	0	160,500	12,596.78	.00	147,903.22	7.8%
1052052 DEBT SERVICE							
1052052 5801 INTEREST PAID-1993	2,261,980	0	2,261,980	.00	.00	2,261,980.00	.0%

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1052052 5802 INTEREST PAID - EM	5,000	0	5,000	420.84	.00	4,579.16	8.4%
1052052 5901 PRINCIPAL PAID-199	4,003,000	0	4,003,000	.00	.00	4,003,000.00	.0%
1052052 5903 PRINCIPAL PAID-EMM	90,000	0	90,000	.00	.00	90,000.00	.0%
1052052 6106 TRUSTEE FEES EMMAU	1,800	0	1,800	.00	.00	1,800.00	.0%
1052052 6120 TRUSTEE FEE 12	1,778	0	1,778	.00	.00	1,778.00	.0%
1052052 6122 2015 TRUSTEE FEES	1,650	0	1,650	.00	.00	1,650.00	.0%
1052052 6123 TRUSTEE FEE 2016	1,650	0	1,650	.00	.00	1,650.00	.0%
1052052 6124 TRUSTEE FEE 2017	1,650	0	1,650	.00	.00	1,650.00	.0%
1052052 6125 TRUSTEE FESS 2017A	1,650	0	1,650	.00	.00	1,650.00	.0%
1052052 6126 TRUSTEE FEE 2017B	1,650	0	1,650	.00	.00	1,650.00	.0%
1052052 6127 TRUSTEE FEE 2018	1,650	0	1,650	.00	.00	1,650.00	.0%
TOTAL DEBT SERVICE	6,373,458	0	6,373,458	420.84	.00	6,373,037.16	.0%
1060019 WWTP - LABORATORY							
1060019 5001 SUPERVISOR LABOR	79,088	0	79,088	8,673.21	.00	70,414.79	11.0%
1060019 5002 REGULAR LABOR	137,233	0	137,233	11,169.39	.00	126,063.61	8.1%
1060019 5003 OVERTIME LABOR	500	0	500	388.78	.00	111.22	77.8%
1060019 5006 VACATION	0	0	0	1,667.29	.00	-1,667.29	100.0%*
1060019 5007 SICK	0	0	0	745.46	.00	-745.46	100.0%*
1060019 5009 JURY/CIVIL/VOLUNTE	0	0	0	583.17	.00	-583.17	100.0%*
1060019 5010 HOLIDAY	0	0	0	1,860.33	.00	-1,860.33	100.0%*
1060019 5101 FICA EXPENSE	13,442	0	13,442	1,583.76	.00	11,858.24	11.8%
1060019 5102 MEDICARE EXPENSE	3,144	0	3,144	370.49	.00	2,773.51	11.8%
1060019 5202 GROUP HEALTH INSUR	28,692	0	28,692	3,986.95	.00	24,705.05	13.9%
1060019 5203 PENSION (401) UAJA	14,771	0	14,771	1,713.68	.00	13,057.32	11.6%
1060019 5305 SMALL EQUIPMT/TOOL	250	0	250	.00	.00	250.00	.0%
1060019 5306 LAB SUPPLIES	23,000	0	23,000	2,696.92	.00	20,303.08	11.7%
1060019 5501 EQUIPMENT MAINTENA	3,500	0	3,500	.00	.00	3,500.00	.0%
TOTAL WWTP - LABORATORY	303,620	0	303,620	35,439.43	.00	268,180.57	11.7%
1060022 TREATMENT PLANT MAINTENANCE							
1060022 5001 SUPERVISOR LABOR	36,895	0	36,895	3,851.88	.00	33,043.12	10.4%
1060022 5002 REGULAR LABOR	448,768	0	448,768	35,952.63	.00	412,815.37	8.0%
1060022 5003 OVERTIME LABOR	4,000	0	4,000	71.77	.00	3,928.23	1.8%
1060022 5006 VACATION	0	0	0	5,602.95	.00	-5,602.95	100.0%*
1060022 5007 SICK	0	0	0	1,539.29	.00	-1,539.29	100.0%*

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1060022 5008 PERSONAL DAY	0	0	0	590.28	.00	-590.28	100.0%*
1060022 5009 JURY/CIVIL/VOLUNTE	0	0	0	245.90	.00	-245.90	100.0%*
1060022 5010 HOLIDAY	0	0	0	4,116.29	.00	-4,116.29	100.0%*
1060022 5101 FICA EXPENSE	30,111	0	30,111	3,293.28	.00	26,817.72	10.9%
1060022 5102 MEDICARE EXPENSE	7,042	0	7,042	770.19	.00	6,271.81	10.9%
1060022 5202 GROUP HEALTH INSUR	88,937	0	88,937	9,285.88	.00	79,651.12	10.4%
1060022 5203 PENSION (401) UAJA	26,128	0	26,128	2,544.78	.00	23,583.22	9.7%
1060022 5304 OPERATIONAL SUPPLI	5,500	0	5,500	11,429.66	.00	-5,929.66	207.8%*
1060022 5305 SMALL EQUIPMT/TOOL	14,000	0	14,000	3,873.27	.00	10,126.73	27.7%
1060022 5501 EQUIPMENT MAINTENA	190,000	0	190,000	8,322.04	.00	181,677.96	4.4%
1060022 5501 6174 SCADIA MAINT	40,000	0	40,000	.00	.00	40,000.00	.0%
1060022 5501 6175 UV MAINT	40,000	0	40,000	1,388.73	.00	38,611.27	3.5%
1060022 5501 6283 SOLAR MAINTENA	30,000	0	30,000	.00	.00	30,000.00	.0%
1060022 5503 BUILDING & GROUND	40,000	0	40,000	4,147.83	.00	35,852.17	10.4%
1060022 5508 GRIT REMOVAL-PLANT	20,000	0	20,000	976.70	.00	19,023.30	4.9%
1060022 5603 FUEL, OIL, LUBRICA	15,000	0	15,000	27.98	.00	14,972.02	.2%
1060022 7511 LANDSCAPE	35,000	0	35,000	.00	.00	35,000.00	.0%
TOTAL TREATMENT PLANT MAINTENANCE	1,071,381	0	1,071,381	98,031.33	.00	973,349.67	9.1%
1060023 MAIN STATION							
1060023 5002 B5001 REGULAR LABOR	0	0	0	2,500.25	.00	-2,500.25	100.0%*
1060023 5101 B5001 FICA EXPENSE	0	0	0	155.03	.00	-155.03	100.0%*
1060023 5102 B5001 MEDICARE EXPE	0	0	0	36.28	.00	-36.28	100.0%*
1060023 5202 B5001 GROUP HEALTH	0	0	0	369.74	.00	-369.74	100.0%*
1060023 5203 B5001 PENSION (401)	0	0	0	122.63	.00	-122.63	100.0%*
1060023 5505 B5001 PUMP STATION	7,500	0	7,500	81.06	.00	7,418.94	1.1%
1060023 5602 B5001 O&M MAIN STAT	39,317	0	39,317	3,044.44	.00	36,272.56	7.7%
TOTAL MAIN STATION	46,817	0	46,817	6,309.43	.00	40,507.57	13.5%
1060025 WWTP - IPP							
1060025 5001 SUPERVISOR LABOR	79,088	0	79,088	8,666.18	.00	70,421.82	11.0%
1060025 5006 VACATION	0	0	0	104.75	.00	-104.75	100.0%*
1060025 5010 HOLIDAY	0	0	0	297.21	.00	-297.21	100.0%*
1060025 5101 FICA EXPENSE	4,903	0	4,903	562.23	.00	4,340.77	11.5%
1060025 5102 MEDICARE EXPENSE	1,147	0	1,147	131.47	.00	1,015.53	11.5%
1060025 5202 GROUP HEALTH INSUR	14,740	0	14,740	1,703.21	.00	13,036.79	11.6%

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1060025 5203 PENSION (401) UAJA	7,909	0	7,909	906.85	.00	7,002.15	11.5%
1060025 5305 SMALL EQUIPMT/TOOL	200	0	200	.00	.00	200.00	.0%
1060025 5410 ANALYSIS	3,500	0	3,500	.00	.00	3,500.00	.0%
1060025 5501 EQUIPMENT MAINTENA	500	0	500	.00	.00	500.00	.0%
TOTAL WWTP - IPP	111,987	0	111,987	12,371.90	.00	99,615.10	11.0%
1060028 WWTP - BENEFICIAL REUSE							
1060028 5001 SUPERVISOR LABOR	36,895	0	36,895	3,851.88	.00	33,043.12	10.4%
1060028 5006 VACATION	0	0	0	104.75	.00	-104.75	100.0%*
1060028 5010 HOLIDAY	0	0	0	297.21	.00	-297.21	100.0%*
1060028 5101 FICA EXPENSE	2,287	0	2,287	263.73	.00	2,023.27	11.5%
1060028 5102 MEDICARE EXPENSE	535	0	535	61.66	.00	473.34	11.5%
1060028 5202 GROUP HEALTH INSUR	5,398	0	5,398	804.99	.00	4,593.01	14.9%
1060028 5203 PENSION (401) UAJA	3,690	0	3,690	425.41	.00	3,264.59	11.5%
1060028 5304 OPERATIONAL SUPPLI	15,000	0	15,000	4,162.95	.00	10,837.05	27.8%
1060028 5304 1065 OPERATIONAL SU	325,000	0	325,000	54,453.87	.00	270,546.13	16.8%
1060028 5305 SMALL EQUIPMT/TOOL	1,000	0	1,000	.00	.00	1,000.00	.0%
1060028 5410 LAB ANALYSIS	15,000	0	15,000	2,050.41	.00	12,949.59	13.7%
1060028 5501 EQUIPMENT MAINTENA	125,000	0	125,000	10,142.31	.00	114,857.69	8.1%
1060028 5602 1064 POWER	200,625	0	200,625	13,809.14	.00	186,815.86	6.9%
1060028 5605 CTWA REIMBURSE	65,000	0	65,000	.00	.00	65,000.00	.0%
TOTAL WWTP - BENEFICIAL REUSE	795,430	0	795,430	90,428.31	.00	705,001.69	11.4%
1060029 WWTP - DEWATERING							
1060029 5001 SUPERVISOR LABOR	36,895	0	36,895	3,850.98	.00	33,044.02	10.4%
1060029 5002 REGULAR LABOR	114,000	0	114,000	4,857.76	.00	109,142.24	4.3%
1060029 5003 OVERTIME LABOR	2,000	0	2,000	660.35	.00	1,339.65	33.0%
1060029 5006 VACATION	0	0	0	1,804.97	.00	-1,804.97	100.0%*
1060029 5010 HOLIDAY	0	0	0	1,025.88	.00	-1,025.88	100.0%*
1060029 5101 FICA EXPENSE	9,479	0	9,479	767.73	.00	8,711.27	8.1%
1060029 5102 MEDICARE EXPENSE	2,217	0	2,217	179.55	.00	2,037.45	8.1%
1060029 5202 GROUP HEALTH INSUR	27,412	0	27,412	1,716.34	.00	25,695.66	6.3%
1060029 5203 PENSION (401) UAJA	9,390	0	9,390	789.64	.00	8,600.36	8.4%
1060029 5304 OPERATIONAL SUPPLI	500	0	500	8.47	.00	491.53	1.7%
1060029 5304 1036 POLYMER	53,000	0	53,000	.00	.00	53,000.00	.0%
1060029 5501 EQUIPMENT MAINTENA	75,000	0	75,000	4,549.53	.00	70,450.47	6.1%

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1060029 5602 1042 POWER-DEWATERI	72,954	0	72,954	6,276.88	.00	66,677.12	8.6%
TOTAL WWTP - DEWATERING	402,847	0	402,847	26,488.08	.00	376,358.92	6.6%
1060030 WWTP - COMPOST							
1060030 5001 SUPERVISOR LABOR	36,895	0	36,895	3,850.98	.00	33,044.02	10.4%
1060030 5002 REGULAR LABOR	256,590	0	256,590	23,326.45	.00	233,263.55	9.1%
1060030 5003 OVERTIME LABOR	7,500	0	7,500	3,769.10	.00	3,730.90	50.3%
1060030 5006 VACATION	0	0	0	1,812.42	.00	-1,812.42	100.0%*
1060030 5007 SICK	0	0	0	261.56	.00	-261.56	100.0%*
1060030 5008 PERSONAL	0	0	0	701.97	.00	-701.97	100.0%*
1060030 5009 JURY/CIVIL/VOLUNTE	0	0	0	261.56	.00	-261.56	100.0%*
1060030 5010 HOLIDAY	0	0	0	3,214.89	.00	-3,214.89	100.0%*
1060030 5101 FICA EXPENSE	18,661	0	18,661	2,306.30	.00	16,354.70	12.4%
1060030 5102 MEDICARE EXPENSE	4,365	0	4,365	539.38	.00	3,825.62	12.4%
1060030 5202 GROUP HEALTH INSUR	63,102	0	63,102	8,116.95	.00	54,985.05	12.9%
1060030 5203 PENSION (401) UAJA	16,519	0	16,519	1,933.00	.00	14,586.00	11.7%
1060030 5304 OPERATIONAL SUPPLI	1,000	0	1,000	165.84	.00	834.16	16.6%
1060030 5304 1038 COMPOST AMEND	120,000	0	120,000	.00	.00	120,000.00	.0%
1060030 5305 SMALL EQUIPMT/TOOL	2,500	0	2,500	525.56	.00	1,974.44	21.0%
1060030 5409 LICENSE & FEES	5,500	0	5,500	274.95	.00	5,225.05	5.0%
1060030 5410 LAB ANALYSIS	11,500	0	11,500	916.00	.00	10,584.00	8.0%
1060030 5413 MARKETING	1,000	0	1,000	.00	.00	1,000.00	.0%
1060030 5415 VECTOR CONTROL	5,843	0	5,843	5,842.59	.00	.41	100.0%
1060030 5501 EQUIPMENT MAINTENA	50,000	0	50,000	-21.61	.00	50,021.61	.0%
1060030 5506 1032 SKID STEER 184	5,000	0	5,000	.00	.00	5,000.00	.0%
1060030 5506 1055 STREET SWEEPER	4,000	0	4,000	172.79	.00	3,827.21	4.3%
1060030 5506 1062 CAT SKID STEER	5,000	0	5,000	.00	.00	5,000.00	.0%
1060030 5506 1071 LOADER MAINT 6	10,000	0	10,000	.00	.00	10,000.00	.0%
1060030 5506 1072 TROMMEL	7,000	0	7,000	55.32	.00	6,944.68	.8%
1060030 5602 1041 POWER-COMPOST	131,319	0	131,319	11,298.38	.00	120,020.62	8.6%
1060030 5603 1007 NATURAL GAS -	120,000	0	120,000	22,675.28	.00	97,324.72	18.9%
TOTAL WWTP - COMPOST	883,294	0	883,294	91,999.66	.00	791,294.34	10.4%
1060032 TREATMENT PLANT OPERATION							
1060032 5001 SUPERVISOR LABOR	36,895	0	36,895	3,850.98	.00	33,044.02	10.4%
1060032 5002 REGULAR LABOR	627,336	0	627,336	58,144.78	.00	569,191.22	9.3%

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1060032 5003 OVERTIME LABOR	60,000	0	60,000	7,020.71	.00	52,979.29	11.7%
1060032 5004 SHIFT LABOR	12,000	0	12,000	1,323.12	.00	10,676.88	11.0%
1060032 5006 VACATION	0	0	0	3,819.47	.00	-3,819.47	100.0%*
1060032 5007 SICK	0	0	0	2,720.23	.00	-2,720.23	100.0%*
1060032 5008 PERSONAL DAY	0	0	0	693.48	.00	-693.48	100.0%*
1060032 5010 HOLIDAY	0	0	0	7,830.30	.00	-7,830.30	100.0%*
1060032 5101 FICA EXPENSE	45,646	0	45,646	5,332.14	.00	40,313.86	11.7%
1060032 5102 MEDICARE EXPENSE	10,675	0	10,675	1,247.01	.00	9,427.99	11.7%
1060032 5202 GROUP HEALTH INSUR	145,634	0	145,634	17,902.03	.00	127,731.97	12.3%
1060032 5203 PENSION (401) UAJA	35,057	0	35,057	3,106.91	.00	31,950.09	8.9%
1060032 5304 OPERATION SUPPLIES	500	0	500	.00	.00	500.00	.0%
1060032 5304 1034 ALUM	160,000	0	160,000	30,398.43	.00	129,601.57	19.0%
1060032 5304 1070 CARBON SUPPLEM	225,000	0	225,000	6,211.05	.00	218,788.95	2.8%
1060032 5405 1053 STREAM MONITOR	14,250	0	14,250	.00	.00	14,250.00	.0%
1060032 5409 LICENSE & FEES	9,000	0	9,000	.00	.00	9,000.00	.0%
1060032 5410 ANALYSIS	10,000	0	10,000	5,869.00	.00	4,131.00	58.7%
1060032 5499 MISCELLANEOUS OUTS	40,000	0	40,000	4,801.25	.00	35,198.75	12.0%
1060032 5602 1043 POWER-PLANT	364,773	0	364,773	31,384.40	.00	333,388.60	8.6%
TOTAL TREATMENT PLANT OPERATION	1,796,766	0	1,796,766	191,655.29	.00	1,605,110.71	10.7%
1070021 COLLECTION-MAINTENANCE							
1070021 5001 SUPERVISOR LABOR	130,130	0	130,130	11,390.03	.00	118,739.97	8.8%
1070021 5002 REGULAR LABOR	973,383	0	973,383	11,103.40	.00	962,279.60	1.1%
1070021 5002 6172 REGULAR LABOR	0	0	0	8,598.88	.00	-8,598.88	100.0%*
1070021 5002 6262 WATERLINE PH 2	0	0	0	33,724.87	.00	-33,724.87	100.0%*
1070021 5002 6272 REGULAR LABOR	0	0	0	33,175.88	.00	-33,175.88	100.0%*
1070021 5002 B5002 REGULAR LABOR	0	0	0	797.92	.00	-797.92	100.0%*
1070021 5002 B5003 REGULAR LABOR	0	0	0	797.92	.00	-797.92	100.0%*
1070021 5002 B5004 REGULAR LABOR	0	0	0	797.92	.00	-797.92	100.0%*
1070021 5003 OVERTIME LABOR	15,000	0	15,000	2,326.15	.00	12,673.85	15.5%
1070021 5003 6172 OVERTIME LABOR	0	0	0	68.20	.00	-68.20	100.0%*
1070021 5003 6262 WATERLINE PH 2	0	0	0	42.93	.00	-42.93	100.0%*
1070021 5003 6272 OVERTIME LABOR	0	0	0	206.09	.00	-206.09	100.0%*
1070021 5006 VACATION	0	0	0	10,457.90	.00	-10,457.90	100.0%*
1070021 5007 SICK	0	0	0	4,461.13	.00	-4,461.13	100.0%*
1070021 5008 PERSONAL	0	0	0	2,642.83	.00	-2,642.83	100.0%*
1070021 5010 HOLIDAY	0	0	0	14,157.73	.00	-14,157.73	100.0%*
1070021 5101 FICA EXPENSE	68,418	0	68,418	7,897.56	.00	60,520.44	11.5%
1070021 5101 6172 FICA EXPENSE	0	0	0	537.36	.00	-537.36	100.0%*
1070021 5102 MEDICARE EXPENSE	16,001	0	16,001	1,847.02	.00	14,153.98	11.5%

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1070021 5102 6172 MEDICARE EXPEN	0	0	0	125.66	.00	-125.66	100.0%*
1070021 5202 GROUP HEALTH INSUR	287,396	0	287,396	32,651.66	.00	254,744.34	11.4%
1070021 5202 6172 GROUP HEALTH I	0	0	0	2,965.03	.00	-2,965.03	100.0%*
1070021 5203 PENSION (401) UAJA	61,682	0	61,682	5,887.08	.00	55,794.92	9.5%
1070021 5203 6172 PENSION (401)	0	0	0	257.20	.00	-257.20	100.0%*
1070021 5304 OPERATION SUPPLIES	0	0	0	53.50	.00	-53.50	100.0%*
1070021 5305 SMALL EQUIPMT/TOOL	16,000	0	16,000	262.80	.00	15,737.20	1.6%
1070021 5504 SEWER LINE MAINTEN	120,000	0	120,000	2,810.78	.00	117,189.22	2.3%
1070021 ER01 RENTAL OF EQUIPMEN	1,000	0	1,000	.00	.00	1,000.00	.0%
1070021 ER14 RENTAL LOWBOY	2,500	0	2,500	.00	.00	2,500.00	.0%
1070021 PV01 TRENCH PAVING-CONT	20,000	0	20,000	.00	.00	20,000.00	.0%
TOTAL COLLECTION-MAINTENANCE	1,711,510	0	1,711,510	190,045.43	.00	1,521,464.57	11.1%
1070022 CONSTRUCT EQUIP MAINTENANCE							
1070022 5501 SMALL EQUIPMENT MA	5,500	0	5,500	223.94	.00	5,276.06	4.1%
1070022 5506 LG. CONSTR. EQUIP	40,000	0	40,000	855.93	.00	39,144.07	2.1%
TOTAL CONSTRUCT EQUIP MAINTENANCE	45,500	0	45,500	1,079.87	.00	44,420.13	2.4%
1070034 COLLECTION-INSPECTION							
1070034 5001 SUPERVISOR LABOR	130,130	0	130,130	11,390.07	.00	118,739.93	8.8%
1070034 5002 REGULAR LABOR	203,504	0	203,504	16,377.92	.00	187,126.08	8.0%
1070034 5002 B5422 REGULAR LABOR	0	0	0	113.39	.00	-113.39	100.0%*
1070034 5003 OVERTIME LABOR	10,000	0	10,000	1,635.73	.00	8,364.27	16.4%
1070034 5006 VACATION	0	0	0	4,004.16	.00	-4,004.16	100.0%*
1070034 5007 SICK	0	0	0	388.78	.00	-388.78	100.0%*
1070034 5008 PERSONAL	0	0	0	421.17	.00	-421.17	100.0%*
1070034 5010 HOLIDAY	0	0	0	2,888.85	.00	-2,888.85	100.0%*
1070034 5101 FICA EXPENSE	20,685	0	20,685	2,330.37	.00	18,354.63	11.3%
1070034 5102 MEDICARE EXPENSE	4,838	0	4,838	545.00	.00	4,293.00	11.3%
1070034 5202 GROUP HEALTH INSUR	35,834	0	35,834	4,057.74	.00	31,776.26	11.3%
1070034 5203 PENSION (401) UAJA	23,188	0	23,188	2,395.65	.00	20,792.35	10.3%
1070034 5304 OPERATIONAL SUPPLI	1,500	0	1,500	42.00	.00	1,458.00	2.8%
1070034 5305 SMALL EQUIPMT/TOOL	500	0	500	.00	.00	500.00	.0%
1070034 5507 SEWER LINE INSPEC/	0	0	0	204.47	.00	-204.47	100.0%*
1070034 5507 B5192 VILLAGE AT PE	0	0	0	933.10	.00	-933.10	100.0%*
1070034 5507 B5444 INSPECTION EN	0	0	0	696.70	.00	-696.70	100.0%*

02/06/2020 14:47
kwheeler

UNIVERSITY AREA JOINT AUTHORITY - LIVE
YEAR-TO-DATE BUDGET REPORT

P 13
glytdbud

FOR 2020 01

ACCOUNTS FOR: 10 OPERATING FUND	ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USED
1070034 5507 B5460 MORNINGSIDE @	0	0	0	627.05	.00	-627.05	100.0%*
1070034 5507 B5464 RHODES LANE	0	0	0	533.10	.00	-533.10	100.0%*
TOTAL COLLECTION-INSPECTION	430,179	0	430,179	49,585.25	.00	380,593.75	11.5%
1070036 COLLECTION-PUMP STATION							
1070036 5305 SMALL EQUIPMT/TOOL	1,000	0	1,000	.00	.00	1,000.00	.0%
1070036 5501 EQUIPMENT MAINTENA	12,000	0	12,000	.00	.00	12,000.00	.0%
1070036 5505 O & M PUMP STATION	70,000	0	70,000	12,833.87	.00	57,166.13	18.3%
1070036 5505 B5002 O & M CLASTER	200	0	200	.00	.00	200.00	.0%
1070036 5505 B5003 O & M NORTH M	200	0	200	.00	.00	200.00	.0%
1070036 5505 B5004 O & M SOUTH M	200	0	200	.00	.00	200.00	.0%
1070036 5602 POWER	50,000	0	50,000	7,188.43	.00	42,811.57	14.4%
1070036 5602 B5002 POWER-CLASTER	500	0	500	.00	.00	500.00	.0%
1070036 5602 B5004 POWER-SOUTH M	150	0	150	68.88	.00	81.12	45.9%
1070036 5603 PUMP STATION PROPA	1,000	0	1,000	74.41	.00	925.59	7.4%
TOTAL COLLECTION-PUMP STATION	135,250	0	135,250	20,165.59	.00	115,084.41	14.9%
TOTAL OPERATING FUND	2,452,586	0	2,452,586	1,201,447.08	.00	1,251,138.92	49.0%
TOTAL REVENUES	-16,979,873	0	-16,979,873	-128,618.45	.00	-16,851,254.55	
TOTAL EXPENSES	19,432,459	0	19,432,459	1,330,065.53	.00	18,102,393.47	



UNIVERSITY AREA JOINT AUTHORITY

To: UAJA Board
From: Dave Smith
Re: Financial Report - End of January 31, 2020

Cash Accounts

General Checking	\$469,922.47
Payroll Checking	\$9,007.95
PLIGIT Checking	\$1,515.56
Petty Cash	\$79.78

Revenue Fund Accounts

Revenue Sweep	\$664,831.49
Revenue Trustee	\$1,379,829.98

Savings Accounts

PLIGIT Plus	\$8,437.64
93 BRIF	\$9,240,046.07
Emmaus BRIF	\$217,047.54

TOTAL LIQUID ASSETS

\$12,000,942.18

Dedicated Accounts

PLIGIT Emmaus	\$3,152.84
2012 DSF	\$998.73
2015 DSF	\$236.63
2016 DSF	\$37.37
2017 DSF	\$155.21
2017A DSF	\$149.61
2017 B & C DSF	\$729.95
2018 DSF	\$295.64
2018 Construction Fund	\$1,245,935.42

TOTAL DEDICATED ASSETS

\$1,251,691.40

Restricted Accounts

93 Oper. Expense Reserve	\$300,391.44
93 Debt Service Reserve	\$6,591,209.59

\$6,891,601.03

Receivables Outstanding (3rd quarter 2019)

UAJA Sewer	\$1,652,137.65
UAJA Surcharge	\$22,048.00
Borough Sewer	\$0.00
PGM Sewer	\$60,618.70
PSU Sewer	\$27,174.72

TOTAL OUTSTANDING

\$1,761,979.07



COMPOST & SEPTAGE OPERATIONS REPORT
January, 2020
Jason D. Brown, Project Manager

COMPOST PRODUCTION AND DISTRIBUTION

	<u>Aug. 2019</u>	<u>Sep. 2019</u>	<u>Oct. 2019</u>	<u>Nov. 2019</u>	<u>Dec. 2019</u>	<u>Jan. 2020</u>
Production	954 cu/yds.	940 cu/yds.	1,190 cu/yds.	988 cu/yds.	1,188 cu/yds.	1,156 cu/yds.
YTD. Production	3,903 cu/yds.	4,843 cu/yds.	6,033 cu/yds.	7,021 cu/yds.	8,209 cu/yds.	1,156 cu/yds.
Distribution	223 cu/yds.	1,292 cu/yds.	861 cu/yds.	1,823 cu/yds.	328 cu/yds.	133 cu/yds.
YTD. Distribution	3,890 cu/yds.	5,182 cu/yds.	6,043 cu/yds.	7,866 cu/yds.	8,194 cu/yds.	133 cu/yds.
Immediate Sale	2,239 cu/yds.	1,909 cu/yds.	2,108 cu/yds.	1,475 cu/yds.	2,135 cu/yds.	3,177 cu/yds.
Currently in Storage	3,193 cu/yds.	2,849 cu/yds.	3,298 cu/yds.	2,463 cu/yds.	3,323 cu/yds.	4,333 cu/yds.

SEPTAGE OPERATIONS

	<u>Aug. 2019</u>	<u>Sep. 2019</u>	<u>Oct. 2019</u>	<u>Nov. 2019</u>	<u>Dec. 2019</u>	<u>Jan. 2020</u>
Res./Comm.	23,050 gals.	20,730 gals.	19,200 gals.	17,150 gals.	4,050 gals.	7,800 gals.
CH/Potter	2,710.50 lbs/solids	3,361.02 lbs/solids	5,204.16 lbs/solids	4,553.64 lbs/solids	4,374.33 lbs/solids	7,948.02 lbs/solids
Port Matilda	914.40 lbs/solids	1,317.72 lbs/solids	166.80 lbs/solids	767.28 lbs/solids	1,017.48 lbs/solids	1,551.24 lbs/solids
Huston Twp.	667.20 lbs/solids	834.00 lbs/solids	366.96 lbs/solids	650.52 lbs/solids	517.08 lbs/solids	483.72 lbs/solids
Total Flow	52,050 gals.	60,230 gals.	61,700 gals.	63,650 gals.	51,550 gals.	87,800 gals.

I am available to answer any questions you may have concerning the operation of the compost or septage receival facility.



SUPERINTENDENT'S REPORT

February 11, 2020

Arthur G. Brant

PLANT OPERATION

The treatment plant is operating well with no exceptions for the month of January 2020. The 12-month rolling average flow for January was 3.88mgd with the average for the month being 3.24mgd. The average monthly **influent** flow was 5.03mgd.

Treatment units on line are as follows: primary clarifiers #2, #5 and #6; aeration basins #1 and #3; secondary clarifiers #1, #2, and #3; four of eight tertiary filters are on line.

Below is the chart for Reuse Distribution and Temperature Data:

	Jan-20	YTD	Plant Effl. Temp	Wetland Effl. Temp.
Best Western	30,000	30,000		
Centre Hills	0	0	Jan-20	Jan-20
Cintas	499,000	499,000	56.0	54.3
Red Line	466,000	466,000		
Uaja Wetland	6,266,000	6,266,000		
GDK Vault	38,789,000	38,789,000		
Kissingers	1,303,000	1,303,000		
Stewarts/M.C.	2,000	2,000		
TOTAL				
REUSE TOTALS				
2019		394,565,500		
2018		312,320,449		
2017		328,702,910		
2016		282,887,396		
2015		248,280,380		
2014		148,000,120		
2013		89,951,200		
2012		102,301,500		
2011		88,411,500		
2010		54,069,500		
2009		42,818,000		
2008		66,411,900		
TOTAL		2,158,727,355		

PLANT MAINTENANCE

- Rebuilt 2.4 hp Aeration train mixers.
- Unplugged Main Station pumps.
- Repaired water leak in Admin custodial closet.

- Replaced long belt scraper and started cleaning under the belt.
- Serviced VFD's plant wide(filters).
- Replaced belts on MAU 1304, repaired motor mounts, and cleaned flame rod on MAU 1302.
- Collections assisted plant personnel in cleaning rags out of #4 Primary Tank at D/W.
- Replaced transducer in #4 Primary Tank.
- Recalibrated Septage receiving tank level transducers.
- Replaced actuator AV15 and a collar on AV13 on MF#1.
- The heaters have been replaced in both CIP tanks.
- SWF Industrial was in to reweld stainless steel tank in AWT.



COLLECTION SYSTEM SUPERINTENDENT'S REPORT
Activities for the month of January 2020
Mark Harter, Superintendent

MAINLINE MAINTENANCE:

New Construction – Greenbriar – Installed (1,500 ft) of mainline – (480 ft) of lateral pipe – (1) Air Release.
Harris Reuse Project – Installed (840 ft) of 12" main, (32 ft) of 6" pipe.
Mainline Televising – (237 ft) televised – (2) manholes inspected.
Equipment maintenance.

LIFT STATION MAINTENANCE:

Cleaned (4) lift station wet wells.
Replaced block heater at Graysdale 2B station.
Replaced telemetry radio at Outer station.
Ghaner station is now communicating through SCADA.
Routine maintenance.

NEXT MONTH PROJECTS:

Continue Greenbriar project.
Continue Harris Reuse project.
Cleaning wet wells.
Flushing mains.
New lateral on Kennard Rd and Trout Rd.

INSPECTION: Final As-Built Approved: a. Village of Penn State phase 9&10.
b. Dreibelbis Street Hotel.

Mainline Construction:
a. The Cottages at State College – Awaiting As-Built.

New Connections:					
a.	Single-Family Residential	9	c.	Commercial	1
b.	Multi-Family Residential	0	d.	Non-Residential	0
				TOTAL	10

PA One-Calls Responded to 1/1-31/20: 251



AN EMPLOYEE-OWNED COMPANY

2568 Park Center Boulevard
State College, PA 16801
814.238.7117
Fax 814.238.7126
www.hrg-inc.com

February 19, 2020

Cory R. Miller, Executive Director
University Area Joint Authority
1576 Spring Valley Road
State College, PA 16801-8499

Re: ENGINEER'S REPORT

Dear Mr. Miller:

The following summarizes our recent activities on behalf of the University Area Joint Authority.

Consulting Engineer Services (1178.0676)

- The annual pump state capacity tables and sewer extension map are being prepared for the Chapter 94 Report.
- HRG is preparing an application for renewal of the Solid Waste Disposal and/or Processing Facility Permit.

Odor Control System Upgrades (1178.0597)

Contract Times								
Contract No.	Notice to Proceed	Contract Time	Substantial Completion Date	Days Used*	Days Remaining	Final Completion	Percent of Time Remaining	Time Used
17-03	9/4/2018	320	7/21/2019	470	-213	9/4/2019	0%	100%
17-04	9/4/2018	320	7/21/2019	470	-213	9/4/2019	0%	100%

*As of date of board meeting (02/19/2020).

- The Contactor has scheduled the biofilter manufacturer to be on-site between February 18th-20th for partial start-up.
- Progress Meeting No. 17 was held on February 5, 2020. Minutes have been prepared.
- Applications for Payment submitted by the Contractors are summarized in the following table.

Applications for Payment						
Contract No.	Application for Payment No.	Amount Due	Current Contract Price	Total Completed and Stored	% Monetary Complete	Balance to Finish Plus Retainage
17-03	16	\$93,318.50	\$8,358,000.00	\$8,276,156.00	99.0	\$495,643.25
17-04	11	\$14,286.72	\$587,890.00	\$579,668	98.6	\$37,205.40

- The Contracts are 213 days beyond the date of Substantial Completion. Liquidated Damages in the amount of \$276,900.00 (\$1,300/day x 213 days) have accrued. The Owner is entitled to impose a set-off against payment to the Contractor for liquidated damages that have accrued. If a set-off is imposed, immediate notification must be provided stating the reason. Additional discussion will be provided at the meeting. Any imposed off-sets are not reflected in the aforementioned table.

Greenbriar Sanitary Sewer Design

- HRG is assisting with construction phase services as needed.

Shiloh Road Pump Station Upgrades (1178.0632)

- The drawings and permit applications have been updated to reflect the changes to the pump station location and force main upgrades. A meeting is being scheduled with College Township to review the drawings prior to the submission of the planning module and permit applications.

Extension of Beneficial Reuse Water to Harris Township (1178.0637)

- Bidders were notified of the Authority's rejection of all bids.
- HRG is providing alignment and appurtenance stakeout for the project as needed.
- The drawings have been updated to illustrate open trench construction for three of the four highway crossings. The applications for permit amendments are ready to be submitted.

Scott Road Pump Station and Bristol Interceptor – Act 537 Plan Special Study (1178.0661)

- A draft of the special study was submitted to staff for review.

Meeks Lane Pump Station – Act 537 Plan Special Study (1178.0663)

- HRG is working to complete the study.

Developer Plan Reviews:

- The Developer's as-built drawings for the Cottages by Toll Brothers were received on February 7, 2020 and are under review (1178.0678).

Very truly yours,
Herbert, Rowland & Grubic, Inc.



Benjamin R. Burns, P.E.
Water and Wastewater

PROGRESS MEETING MINUTES

Project: Biological Odor Control
Contract No. 17-03 and Contract No. 17-04
Owner: University Area Joint Authority (UAJA)
Re: Progress Meeting

Report Number: 17
HRG Project Number: R001178.0597
Meeting Location: Site
Meeting Date: February 5, 2020 Time: 9AM

This confirms and records our interpretation of the discussions that occurred and our understanding reached during this meeting.

ATTENDEES:

Ben Burns - HRG
Jason Brown - UAJA
Manny Criado – The Howard Company (17-04)
Tony Curreri - The Howard Company (17-04)
Jere Northridge – College Township
Andy Breon – UAJA

Art Brant – UAJA
Mike Webb - Global Heavy Corp. (17-03)
Jeff Garrigan - HRG
Dave Smith – UAJA
Greg Maynard – Global Heavy Corp. (17-03)

Note: All attendees were reminded to sign in. All attendees were advised the meeting was being recorded.

Contract Times								
Contract No.	Notice to Proceed	Contract Time	Substantial Completion Date	Days Used*	Days Remaining	Final Completion	Percent of Time Remaining	Time Used
17-03	9/4/2018	320	7/21/2019	456	-199	9/4/2019	0%	100%
17-04	9/4/2018	320	7/21/2019	456	-199	9/4/2019	0%	100%

*As of date of Progress Meeting.

1. PREVIOUS MEETING

The previous meeting was Progress Meeting No. 16 held on January 8, 2020. Meeting minutes were distributed prior to Progress Meeting No. 17 and the attendees offered no corrections or outstanding issues from that meeting.

2. REVIEW OF WORK PROGRESS

Contract No. 17-03

Mr. Webb summarized the work progress for Contract 17-03.

- Installed Pre-Conditioning Chamber exhaust plenum
- Installed intake manifold
- Connected CF-101 and CF-102 to the Exhaust Stack
- Connected compost building duct (demolished Fan No. 2) to intake manifold
- Started installation of insulation on inlet ducts
- Installed two (2) dampers and (2) actuators

Upcoming work was stated to include:

- Remaining fiberglass duct components scheduled for delivery tomorrow [Thursday, February 6th]
- Partial start-up on February 18-20
- Existing (to be demolished), Fan No. 1 will be taken off-line on Tuesday, February 11th.

The start-up schedule was discussed and the Authority's frustration with the excessive delays and continually changing delivery dates was re-iterated. In summary, it was reviewed that due to the delays, the Authority was receiving a significant amount of pressure from the community, local government and regulatory agencies. It was repeated that Contract No. 17-03 needs to complete the work as quickly as possible and begin to odorless air.

Mr. Webb asked if UAJA wanted to retain the demolished fans. UAJA representatives responded that they do not want the fans.

Global Heavy stated that they will be working on February 17th [Presidents Day]

Subsequent to the Progress Meeting, it was discussed with Mike Webb that, in accordance with the Contract, three (3) ventilation fans must be operated at all times to maintain suitable compost building conditions. It was reviewed with UAJA staff and discussed with Mr. Webb that temporary ventilation fans could be placed in a partially opened overhead door of the compost building. Mr. Webb acknowledged that he had three "barn" fans that collectively had comparable airflow as one of the existing exhaust fans.

Contract No. 17-04

Mr. Curreri, the on-site lead for Contract No. 17-04 summarized work completed:

- Conduits for lights and wires pulled
- Fiber is pulled

Upcoming work was stated to include:

- Fiber testing to occur next week [week of February 10-14]
- Conduits to dampers

3. SCHEDULES

It was discussed that BIOREM will be onsite February 18-20 for system readiness verification and start-up. Mr. Webb clarified that this will be the start-up of the exhaust fans pulling air from the compost building through the two north side building exhaust ducts.

Mr. Burns passed around a copy of Submittal No. 44 31 21-06 Biofiltration System Partial Startup and Pre-Conditioning Checklist. All Contracts were reminded that they have access to the submittal through the document exchange website. All attendees were asked to review the submittal and provide any comments or concerns.

It was asked if Contract No. 17-04 was prepared and representatives acknowledged in the affirmative.

Mr. Webb stated that shutdown will be required to connect new Fan CF-103 (4 hours) and the south die intake manifold (1 day).

Contract No. 17-04 stated that complete start-up will occur 3-4 weeks after the initial partial start-up.

4. FIELD OBSERVATIONS, PROBLEMS, AND DECISIONS

Mr. Burns explained that Contract No. 17-04 had brought it to the Engineer's and Owner's attention that lighting may be inadequate in the mechanical room. It was discussed that after the fourth light was installed, lighting was notably improved. Mr. Breon with UAJA was going to evaluate the conditions.

5. IDENTIFICATION OF PROBLEMS

There was nothing discussed.

RFI – Clarifications

A response was provided to all RFIs. The only RFI was one regarding the use of the existing duct supports and the need to provide a support extension and top plate.

Field Orders (FO) - Work Change Directives (WCD)

None

Change Orders/Change Proposals

Nothing new to discuss since the last meeting.

Claims

Contract No. 17-03 suggested that they would be submitting a requested for change resulting from the inability to reuse the existing duct supports (ducts existing the Compost Building).

6. SUBMITTALS

It was discussed that HRG was reviewing a submittal for the Louver Control Panel in the Dewatering Building. It was discussed that this would not affect the pending start-up.

7. COORDINATION

Mr. Burns commended the Contractors for their coordination efforts and encouraged this to continue as work progresses and a heightened level of coordination will be beneficial.

It was re-stated that the Contractors need to coordinate for start-up and ensure that all items required had been installed and ready. Moreover, Thursday needs to be Thursday. That is to say that when a date is given, the Contractor needs to adhere to that date.

8. MAINTENANCE OF QUALITY AND WORK STANDARDS

It was discussed that the Contractors should review quality of work standards, specifically testing requirements. Mr. Webb stated that a Centre Region Code inspector was onsite.

9. APPLICATIONS FOR PAYMENT

It was discussed that:

Contract No. 17-03 submitted Application for Payment No. 16 and wanted to discuss comments provided by the Engineer after the meeting.

Contract No. 17-04 would be submitting an application for payment.

10. CERTIFIED PAYROLL

Mr. Burns reminded all Contractors that certified payrolls were required and commended each for their efforts to keep them updated. No work certifications will be required.

11. COMMENTS

Mr. Breon – wants to ensure that certified results for fiber testing submitted.

Mr. Brown – 57 odor complaints and increase customer complaints through visits to the site. DEP now requires weekly updates.

12. NEXT MEETING:

The next meeting is scheduled for 9:00 AM, Wednesday, March 11, 2020 at the UAJA Conference Room. All attendees indicated that this date and time was acceptable.

☒ Attachments

- Sign-in Sheet
- Agenda and Attachments

Submitted by: Benjamin R. Burns



Date: 02/12/20

Copies: ☒ Participants ☒ OWNER ☐ ☐ ☒ File ☐ ☐

SIGN-IN SHEET

PROGRESS MEETING NO. 17

FEBRUARY 5, 2020

BIOLOGICAL ODOR CONTROL PROJECT

NAME (Please Print)	COMPANY	CONTACT INFORMATION
Ben Burns	Hag	Phone: 814 238-7117 Fax: 814 238-7126 E-Mail: bburns@hag.com
Giz Maynard	Global	Phone: 724-277-8203 Fax: E-Mail: gmaynard@globalhoney.com
Mike Webb	Global	Phone: 814-659-6350 Fax: E-Mail: mwebb@GlobalHoney.com
Manny Crieder	Hayden Power Group	Phone: Fax: E-Mail: ManuelC@haydenpower.com
Tony Curren	Hayden Power Group	Phone: 410-382-5603 Fax: E-Mail:
Jer Northridge	College Township	Phone: 231-3621 Fax: E-Mail: jnorthridge@collegetownship.org
Andy Breon	UAJA	Phone: 814-238-5361 Fax: E-Mail: abreon@UAJA.org
Art Brant	UAJA	Phone: 814-238-5361 Fax: E-Mail: aBrant@UAJA.org
Jason Brown	UAJA	Phone: Fax: E-Mail: jbrown@uaja.org

SIGN-IN SHEET
PROGRESS MEETING NO. 17
FEBRUARY 5, 2020
BIOLOGICAL ODOR CONTROL PROJECT

NAME (Please Print)	COMPANY	CONTACT INFORMATION
JEFF GARRIGAN	HRG	Phone: Fax: E-Mail jgarrigan@hrg-inc.com
DA SMITH	UVA	Phone: Fax: E-Mail
		Phone: Fax: E-Mail
		Phone: Fax: E-Mail
		Phone: Fax: E-Mail
		Phone: Fax: E-Mail
		Phone: Fax: E-Mail
		Phone: Fax: E-Mail
		Phone: Fax: E-Mail

**AGENDA
PROGRESS MEETING No. 17**

OWNER: University Area Joint Authority
PROJECT: Biological Odor Control Project

CONTRACTS: Contract 17-03 – General Construction
 Contract 17-04 – Electrical Construction

JOB No. R001178.0597

DATE: February 5, 2020
TIME: 9:00 AM

OFFICE OF RECORD: HRG State College
PROJECT MANAGER: Benjamin R. Burns

1. Previous Meeting Minutes
2. Review of Work Progress
3. Schedule

Contract Times								
Contract No.	Notice to Proceed	Contract Time	Substantial Completion Date	Days Used*	Days Remaining	Final Completion	Percent of Time Remaining	Time Used
17-03	9/4/2018	320	7/21/2019	519	-199	9/4/2019	0%	100%
17-04	9/4/2018	320	7/21/2019	519	-199	9/4/2019	0%	100%

*As of Progress Meeting date

4. Field observations, problems, and decisions
5. Identification of problems
6. Submittals
7. Coordination
8. Maintenance of quality and work standards
9. Applications for Payment
10. Certified Payroll
11. Comments
12. Next Meeting

**University Area Joint Authority
Summation of Project Activities****February 2020**General Services (094612024)

General Services Items Completed for the Authority:

Pump Station SCADA Integration

- RETTEW is currently transitioning the pump stations from the old SCADA to the new SCADA network. Scenery Park, Outer Drive, Harris Drive, and Scott Road are in process.

WWTP NPDES Permit – Phosphorus Study

- Comments have been received from the PA DEP on the proposed Plan of Study, the majority relating to the data collection effort. We are addressing their comments and will provide a revised Plan of Study incorporating any needed changes to the data collection.

Sludge Storage Tank Mixer

- RETTEW has prepared contract documents for the installation of a new submersible mixer in the Sludge Storage Tank, as well as modifications to the aeration system. We anticipate receiving bids for the Board's consideration in March.

Aeration System Leaks

- Recent investigations have uncovered several significant leaks in the underground aeration piping between the Administration Building and the Aeration Tanks. We are preparing recommendations to address this air loss, which will lead to decreased operation of the aeration blowers.

Nutrient Credit Offsets – Solar Installation

- The PA DEP has provided an initial response denying the Authority's request for approval of nutrient offsets generated by reductions in nitrous oxide emissions through the transition to solar power. However, we feel that there is strong case yet to be made in the Authority's favor and have appealed this decision. The PA DEP has suggested a meeting with the EPA's Chesapeake Bay Office to continue this discussion.

ENR/AWT Upgrade Project (094612009)

- Both contractors, Contract UAJA 2017-06 (HRI) and Contract UAJA 2017-08 (Biter), are in the process of completing all punchlist items.
- We recommend execution of Change Order No. 4 (Final) to Contract UAJA 2017-08 (Biter) in the amount of \$23,711.84. Change Order encompasses all remaining Work Change Directives and required Contract adjustments.
- We recommend payment of Application for Payment No. 11-Final for Contract UAJA 2017-08 (Biter) in the amount of \$85,686.74. This final application for payment includes the work associated with Change Order No. 4 as well as release of retainage.

Solar System (Phase I/II)

- The Interconnection Application for the Phase II Solar Array is being prepared for submission to First Energy/West Penn Power. RETTEW has begun regulatory design packages (such as zoning and land development).

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EXECUTIVE DIRECTOR'S REPORT

February 19, 2020

INFORMATION ITEMS

ACTION ITEMS

3. Public Comment

3.1 Other items not on the agenda

4. Old Business

4.1 Results of RFP – 2020 Bond Issue

PFM, our Financial Advisor, issued an RFP seeking underwriter services for our 2020 Bond Issue. Six firms responded to the RFP with RBC Capital Markets providing the winning proposal. The RFP results are included in your packet. On January 23, 2020 the bonds went to market and the result of the sale was a net savings to UAJA of \$576,712.17. The Bond Sale Document is included in your packet. See Page 12 for the savings summary. Closing on the transaction is set for February 24, 2020.

Recommendation: No action, information only

4.2 2020 Rate Resolution

This item is an administrative requirement, since tapping fee rates were changed from 2019. Those rates were approved in the budget process. The 2020 Rate Resolution with the Act 57 Tapping Fee Study attached is included in your packet.

Recommendation: Adopt the 2020 Rate Resolution as presented.

4.3 Contract 2017-08 Biter Electrical Enterprises, Inc. Change Order #4 (FINAL)

This Change Order is the Final Change Order for this contract and will close the contract. It increases the contract price by \$23,711.84. Work completed is as follows:

- Completion of Work Change Directive #6 – valving on RO Skid #1 - **\$1,063.14**
- Completion of Work Change Directive #8 – elect. manhole MVH-1 modifications-**\$9,820.58**
- Additional light at Aeration Tanks (EC-013) - **\$2,394.86**
- Relocation of Chemical Feed Pumps per UAJA (EC-019) - **\$5,696.32**
- Remove conduit and reconnect to Ozone Unit (EC-022) - **\$4,736.94**

Recommendation: Approve Change Order #4 (FINAL) for Contract 2017-04 Biter Electrical Enterprises for \$23,711.84

5. New Business

5.1 Requisitions

Construction Fund #195	S & C Operations Harris Reuse trucking	\$5,163.75
Construction Fund #196	Pinnacle Erosion Control Harris Reuse Silt Sock	\$8,178.00
Construction Fund #197	Stitzer Crane Service Crane Rental Harris Reuse	\$3,175.00
Construction Fund #198	Rettew ENR/AWT Engineering	\$1,330.00
Construction Fund #199	Rettew ENR/AWT SCADA	\$5,128.75
Construction Fund #200	Bob Biter Electrical Enterprises ENR/AWT Electrical Pay App #13	\$85,686.74
Construction Fund #201	Hayden Power Group Odor Control Electrical Pay App #11	\$14,286.72
	Subtotal #195-201	\$122,948.96
Construction Fund #202	Global Heavy Corporation Odor Control Gen Pay App #16	\$93,318.50
TOTAL CONSTRUCTION FUND		\$216,267.46
BRIF #405	Rettew Associates Sludge Storage Tank Mixer Proj.	\$624.00
BRIF #406	University Area Joint Authority Reimburse Revenue Fund for Capital Purchases made through AP in 2019	\$324,544.34
BRIF #407	Groff Tractor and Equipment Broom for Skid Steer – Collection	\$7,300.00
TOTAL BRIF		\$332,468.34

Revenue Fund #167	Debt Service, Operation and Maintenance Expenses	\$1,000,000
TOTAL REVENUE		\$1,000,000

6. Reports of Officers

7. Other Business

7.1 Executive Session to Discuss the Odor Control Project Contract

8. Adjournment

UNIVERSITY AREA JOINT AUTHORITY
Series of 2020 Bonds

TRUE INTEREST COST

	1	2	3	4	5	6
	RBC Capital Markets	PNC Capital Markets	Janney Montgomery Scott	Stifel Nicolaus	Stifel Nicolaus (Alternative)	Boenning & Scattergood Inc
RANK	1.877224%	1.907394%	1.954583%	1.963657%	2.174207%	2.186860%
Primary Contact	1	2	3	4	5	6
Location	Lou Verdelli Lancaster, PA	David M. Payne Jr. Wilkes Barre, PA	Tim Frenz Pittsburgh, PA	Chris Hoffert and Mark Quinn Lebanon and Philadelphia, PA	Chris Hoffert and Mark Quinn Lebanon and Philadelphia, PA	John McShane Pittsburgh, PA

EXPERIENCE

	7	8	9	10	11	12
Relevant Rankings	RBCM has served as senior or sole manager on over 1,250 negotiated issues totaling over \$22.3 billion since 2010 in PA. This represents 18% of all negotiated issues in PA during that time.	PNCCM has ranked as the #2 underwriter in PA negotiated financings by number of issues for 2019. PNCCM was the senior or sole manager in 77 transactions, totaling over \$1.19 billion in total par.	Janney ranked #3 in PA for senior managed underwritings in 2019. And in 2018, Janney was ranked #2 in the same category.	Stifel is ranked the #1 underwriter by number of negotiated lead-managed deals across the Country. Since 2014, Stifel has been top 5 in negotiated lead-managed water and sewer revenue deals.	Stifel is ranked the #1 underwriter by number of negotiated lead-managed deals across the Country. Since 2014, Stifel has been top 5 in negotiated lead-managed water and sewer revenue deals.	Boenning & Scattergood ranked #3 in number of negotiated transactions in PA as the senior manager from 2011-2015.
Firm's Experience	Since 2010, RBCM was the lead manager of 127 water and sewer authority negotiated transactions in PA totaling over \$1.4 billion in total par amount. RBCM was the sole manager of UAJA's Sewer Revenue Bonds, Series of 2014.	PNCCM served as the Authority's sole managing underwriter for UAJA's past issues. PNCCM has been the senior or sole manager on 31 negotiated PA Water Authority bond issues since 2016, representing over \$540 million in aggregate par amounts.	Janney has served as either the sole manager or senior book-running manager on five series of bonds for the Authority over the past 10 years. Those five transactions totaled over \$42 million in aggregated par.	Stifel has executed over 8,900 trades totaling \$958 million of par in bonds for PA issuers in 2019. Stifel has conducted over 80 trades totaling over \$5.8 million of UAJA's bonds and currently holds \$1.51 million in par.	Stifel has executed over 8,900 trades totaling \$958 million of par in bonds for PA issuers in 2019. Stifel has conducted over 80 trades totaling over \$5.8 million of UAJA's bonds and currently holds \$1.51 million in par.	Boenning & Scattergood has been the senior manager on 372 negotiated deals in PA from 2011-2015, which total over \$4.2 billion in aggregate par amount.
Approach to Local Retail	RBCM has a municipal sales and trading hub in West Conshohocken, PA. As well as 13 other retail offices in PA.	PNCCM has a large footprint in PA and is able to distribute the bonds to local retail investors across all regional and geographic areas.	Janney has offices all over PA, and with its size as the 12th largest broker dealer in the country, Janney is able to market the securities to 1,000 institutional buyers.	Stifel's Altoona and Bloomsburg offices bookend the Authority and are on stand by for assistance in the retail marketing efforts of the Authority's bonds to local residents.	Stifel's Altoona and Bloomsburg offices bookend the Authority and are on stand by for assistance in the retail marketing efforts of the Authority's bonds to local residents.	Boenning & Scattergood has 7 PA offices, which includes 4 retail branches and 3 regional offices, to help with local retail distribution.

UNDERWRITER'S DISCOUNT

	13	14	15	16	17	18
	RBC Capital Markets	PNC Capital Markets	Janney Montgomery Scott	Stifel Nicolaus	Stifel Nicolaus (Alternative)	Boenning & Scattergood Inc
Takedown:	\$4.50	\$4.39	\$6.97	\$3.40	\$3.40	\$3.00
Management:	\$0.00	\$0.00	\$0.28	\$0.93	\$0.93	\$0.50
Expenses:	\$0.25	\$0.11	\$0.25	\$0.23	\$0.23	\$0.50
BOND DISCOUNT:	\$4.75	\$4.50	\$7.50	\$4.55	\$4.55	\$4.00

PROPOSED INTEREST RATES

	19	20	21	22	23	24
	RBC Capital Markets	PNC Capital Markets	Janney Montgomery Scott	Stifel Nicolaus	Stifel Nicolaus (Alternative)	Boenning & Scattergood Inc
	Yield Spread	Yield Spread	Yield Spread	Yield Spread	Yield Spread	Yield Spread
Date	Coupon	Coupon	Coupon	Coupon	Coupon	Coupon
11/1/2020	1.125	1.130	1.170	1.180	1.180	1.200
11/1/2021	1.125	1.130	1.170	1.180	1.180	1.200
11/1/2022	1.125	1.130	1.170	1.180	1.180	1.200
11/1/2023	1.125	1.130	1.170	1.180	1.180	1.200
11/1/2024	1.125	1.130	1.170	1.180	1.180	1.200
11/1/2025	1.125	1.130	1.170	1.180	1.180	1.200
11/1/2026	1.125	1.130	1.170	1.180	1.180	1.200
11/1/2027	1.125	1.130	1.170	1.180	1.180	1.200
11/1/2028	1.125	1.130	1.170	1.180	1.180	1.200
Total:	\$9,995,000	\$9,995,000	\$9,995,000	\$9,995,000	\$9,995,000	\$9,995,000
Average:	53.9 bps	57.8 bps	58.8 bps	64.4	57.2 bps	60.7 bps

Underwriter's Counsel

	25	26	27	28	29	30
	RBC Capital Markets	PNC Capital Markets	Janney Montgomery Scott	Stifel Nicolaus	Stifel Nicolaus (Alternative)	Boenning & Scattergood Inc
Yes/No	Yes	No	No	Yes	Yes	No

University Area Joint Authority

BOND SALE DOCUMENT Sewer Revenue Bonds Series of 2020

Results of Competitive RFP

January 23, 2020

\$9,675,000

Prepared by:
Scott Shearer
Managing Director
&
Joe Breen
Analyst

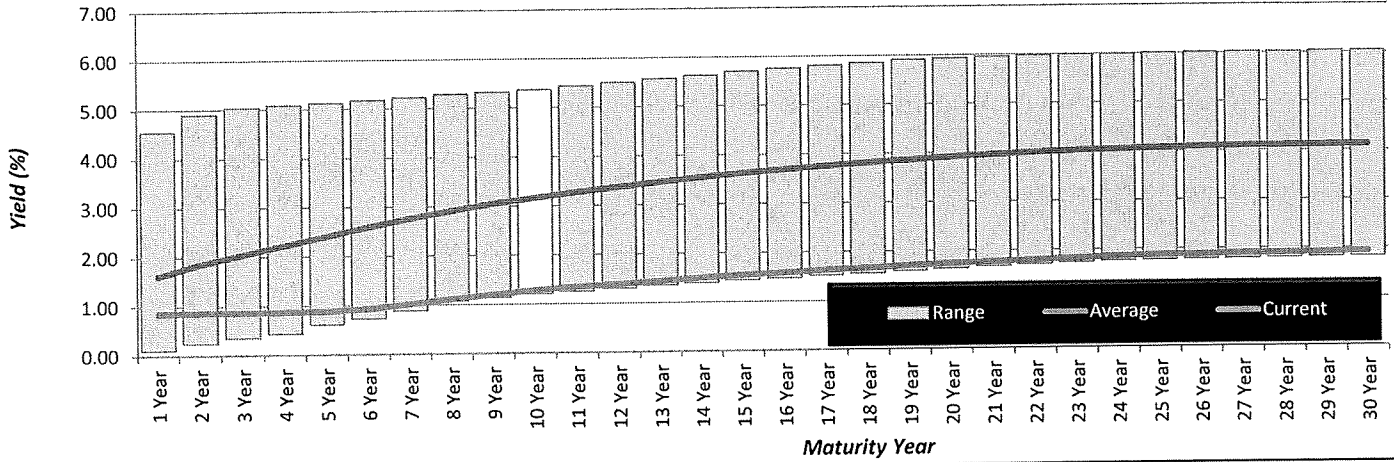


PFM Financial Advisors LLC
213 Market Street
Harrisburg, PA 17101
717.232.2723 (P)
717.232.8610 (F)
www.pfm.com

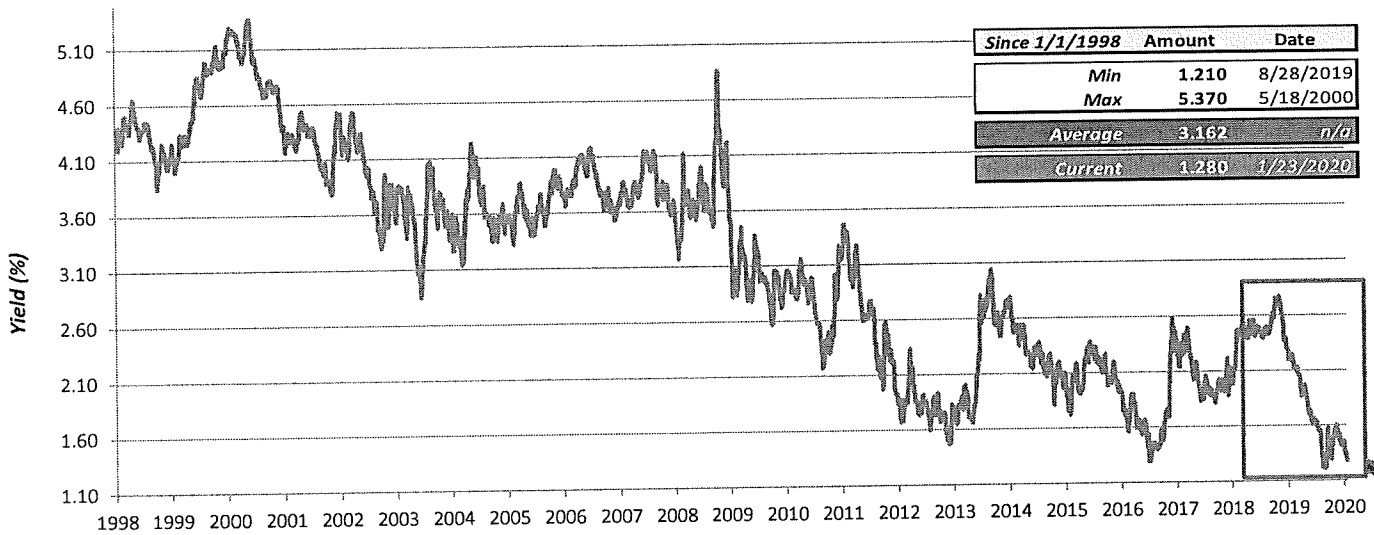
MUNICIPAL MARKET UPDATE

January 23, 2020

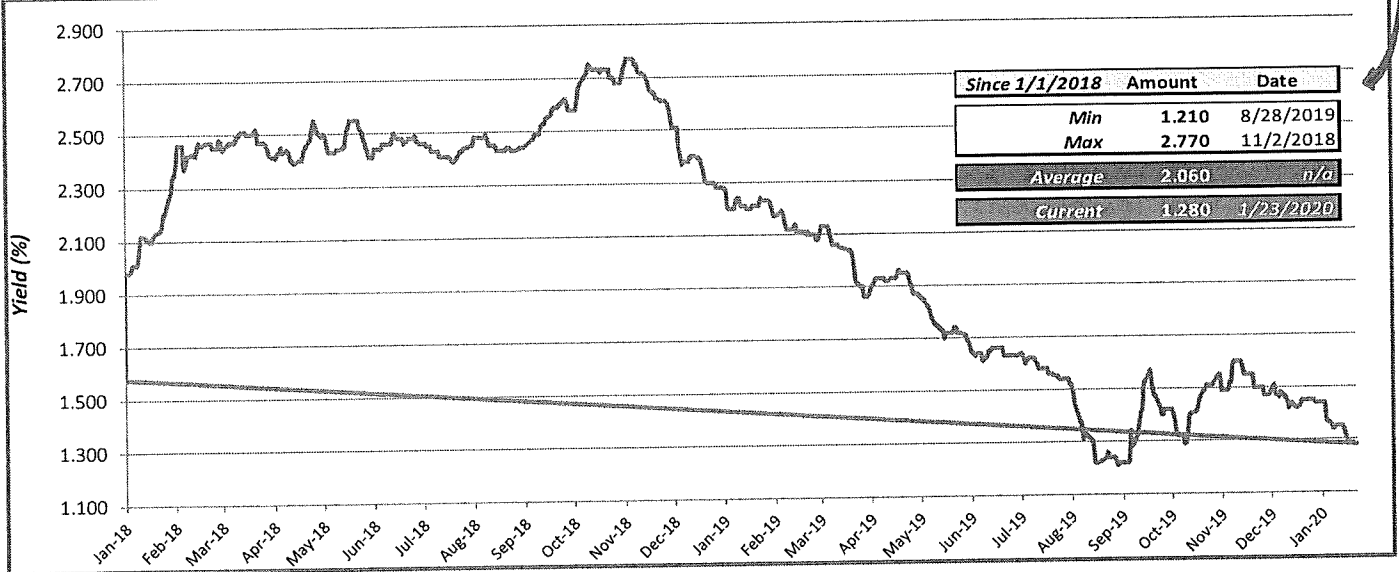
HISTORICAL MMD CURVE ILLUSTRATION - SINCE JANUARY 1, 1998



SPOT ANALYSIS - 10 YEAR MMD - SINCE JANUARY 1, 1998



SPOT ANALYSIS - 10 YEAR MMD - SINCE JANUARY 1, 2018



RatingsDirect®

Summary:

University Area Joint Authority, Pennsylvania; Water/Sewer

Primary Credit Analyst:

Erin Boeke Burke, New York + 1 (212) 438 1515; Erin.Boeke-Burke@spglobal.com

Secondary Contact:

Edward R McGlade, New York (1) 212-438-2061; edward.mcglade@spglobal.com

Table Of Contents

Rationale

Outlook

Summary:

University Area Joint Authority, Pennsylvania; Water/Sewer

Credit Profile

US\$9.995 mil swr rev bnds ser 2020 due 11/01/2028

Long Term Rating

A/Stable

New

Rationale

S&P Global Ratings has assigned its 'A' rating to the University Area Joint Authority (UAJA), Pa.'s series 2020 sewer revenue bonds. At the same time, we affirmed our 'A' rating on the authority's bonds outstanding. The rating reflects our view of UAJA's very strong enterprise and financial risk profiles, as well as a negative adjustment for the utility's reliance on one-time sources of revenue and capital planning that is relatively weak compared to peers. The outlook is stable.

Our very strong assessment of the system's enterprise risk profile reflects:

- A service base that primarily centers on Penn State University (PSU) and surrounding communities;
- Rates which we consider affordable, with a per-equivalent dwelling unit (EDU) charge equal to less than \$35 monthly; and
- Operational policies and procedures that we consider standard, with adequate system capacity but an approach to rate-setting that relies on one-time sources of revenue.

Our strong assessment of the systems' financial risk profile reflects:

- All-in coverage that has swung from 1.0x to 1.7x in the last four years due to significant volatility in tap-in fees; management relies on these one-time sources of revenue to generate all-in coverage of at least 1x, and future results are expected to continue to exhibit volatility due to the irregular timing of these receipts;
- Liquidity that we consider very strong, with \$11.1 million in available reserves at the end of fiscal 2018, equal to 459 days' operating expenses;
- Moderately high leverage, with a debt-to-capitalization ratio over 60% at the end of fiscal 2018; and
- Financial management policies and procedures that we consider good to standard, including monthly reporting on year-to-date financial results and long-term financial forecasting, although assumptions are relatively simplistic.

The bonds are a special authority obligation and are secured by, and payable from, the net receipts of the sewer system. The 2020 bonds will be used to currently refund all or a portion of the authority's series 2015 revenue bonds and pay costs of issuance. The bonds will have a rate covenant and additional bonds test (ABT) of 1.1x average annual debt service; an ABT of 1.05x annual debt service or 1.1x average annual debt service; and a debt service reserve

funded at average annual debt service.

Enterprise risk

UAJA provides municipal wastewater collection and treatment to the townships of College, Harris, Patton, and Ferguson, which surround the borough of State College in central Pennsylvania. In addition, it provides wastewater treatment to State College, which handles its own collection, through a wholesale agreement. The wholesale agreement with State College expires in September 2020, and according to management, negotiations to extend the agreement will start next month. If negotiations are not finalized prior to the end of the agreement, the authority intends to continue to provide treatment service and bill State College at current rates until a new agreement is finalized. State College accounts for about 25% of system revenues; however, we consider the customer base to be diverse as the next ten-largest customers only represented around 13% of revenues in 2018.

Centre County has experienced rapid growth in recent years, with the population increasing from approximately 146,000 in 2010 to over 160,000 in 2016. UAJA benefits from a relatively stable and highly educated regional employment base anchored by PSU. The retail service area has relatively high household income levels, with median household effective buying income (MHHEBI) over \$64,000, or 126% of the national average, although Patton is less affluent with income levels at 103% of the national average. MHHEBI for the county as a whole is lower due to the lower income levels in State College, at 100% of the national average.

Regional development has yielded steady growth in the customer base, as well as strong connection fee revenues in recent years, with the total number of EDUs increasing over 9% from 2014 to 2018. Management expects growth to continue; the budget assumes growth levels lower than those experienced in four of the past five years.

The authority increases rates as needed to meet its requirements under the indenture, although the average annual debt service nature of the rate covenant means that a single weak year may not prompt a rate change. Additionally, under the current agreement with State College, the borough must approve any rate increase not associated with an increase in debt service. The last rate increase was in 2014 and management does not expect another one for several years. Residential customers pay a quarterly rate of \$104, which is less than 1% of MHHEBI on a monthly basis, which we consider affordable.

We assess the operational management of the authority as standard. Existing system capacity is sufficient with an average treatment capacity of about 10 million gallons per day (mgd), which adequately meets average daily flow of about 5 mgd. The wastewater treatment plant will not require a new NPDES permit from the state for five years. The authority uses water reuse, primarily for environmental benefit and compliance purposes. Management views the beneficial reuse as a mitigant against the risk of lower precipitation due to climate change, as lower stream flows could result in tighter effluent requirements. There is a long-term plan to expand beneficial reuse in the region, although the authority does not expect this plan to necessitate substantial capital investment for approximately ten years at current levels of growth. The authority continuously updates its GIS system, and operators are trained as hired.

Financial risk

The authority's financial performance has been strong in recent years due to rapid growth in the service area, largely as a result of substantial tap-in fees. When excluding tap-in fees, net revenues are generally insufficient to cover annual debt service, and we view utilities that are able to meet all fixed obligations using recurring revenues as stronger than

those who rely on one-time sources of funding. The irregular timing of tap-in fee receipts can also cause higher annual volatility in net revenues as can be seen in the last three audited fiscal years: All-in coverage was 1.0x in 2016, 1.2x in 2017, and 1.7x in 2018. These ratios align with results ranging from vulnerable to extremely strong under our criteria. Based on our review of 2019 11-month results, we expect debt service coverage near the middle of that range. Without these one-time sources of revenue, coverage has been much more consistent but below sufficiency, at 0.8x to 0.9x for the last six fiscal years. Based on management's budget and projections, annual coverage is estimated at 1.1x to 1.2x (including tap-in fee projections) and will continue at insufficient levels without these fees.

That being said, the authority has, in our view, an adequate amount of liquidity on hand to handle some fluctuation in these one-time revenues. At the end of fiscal 2018, UAJA reported \$11.1 million of unrestricted cash and trustee funds, which represented 459 days' cash. Management expects to maintain coverage metrics adequate to meet the rate covenant, including one-time sources of revenue. Annual debt service declines in 2020 and, as a result, management anticipates maintaining coverage metrics at levels we consider adequate to good. We also again consider the strong reserves as a mitigating factor with coverage fluctuations.

As previously mentioned, system leverage is somewhat elevated, but management reports no additional debt plans in the near future. UAJA does have one direct placement, held by the Jersey Shore State Bank and finalized in July 2017. The bond is under the general indenture, so we do not believe it poses any exceptional liquidity risk.

We view the financial management policies of the authority as good to standard. Interim financial results are produced and shared throughout the year and audited financial statements are produced annually. Management updates its multiyear financial projections as it considers necessary; however, inflation assumptions are relatively simplistic. Management does not have cost estimates for its capital improvement plan, and does not anticipate such estimates until following completion of a Master Plan, which is likely two-to-three years out. It does maintain internal targets for liquidity.

Outlook

Given the stable customer base and consistent minimum financial results the authority has been able to achieve, both of which seem sustainable in our view, we do not expect to change the rating within the two-year outlook horizon.

Upside scenario

Even if financial performance suddenly improved significantly, it would likely not have an immediate positive effect on the rating or outlook since we would look for evidence that the trend would be sustainable over multiple fiscal years and that all fixed charges could be paid by recurring instead of one-time sources of revenue.

Downside scenario

If financial performance deteriorates and management is not able to maintain all-in coverage above sufficiency due to a decision to defer needed rate increases or a decline in tap-in fee revenues, or if the service base experiences economic stress, we could lower the rating.

Ratings Detail (As Of January 17, 2020)

Ratings Detail (As Of January 17, 2020) (cont.)

University Area Jt Auth swr		
<i>Unenhanced Rating</i>	A(SPUR)/Stable	Affirmed
University Area Jt Auth swr (AGM)		
<i>Unenhanced Rating</i>	A(SPUR)/Stable	Affirmed
University Area Jt Auth swr (AGM)		
<i>Unenhanced Rating</i>	A(SPUR)/Stable	Affirmed
University Area Jt Auth swr (AGM)		
<i>Unenhanced Rating</i>	A(SPUR)/Stable	Affirmed
University Area Jt Auth swr (BAM)		
<i>Unenhanced Rating</i>	A(SPUR)/Stable	Affirmed
University Area Jt Auth swr (BAM)		
<i>Unenhanced Rating</i>	A(SPUR)/Stable	Affirmed
University Area Jt Auth swr		
<i>Unenhanced Rating</i>	A(SPUR)/Stable	Affirmed
Many issues are enhanced by bond insurance.		

Certain terms used in this report, particularly certain adjectives used to express our view on rating relevant factors, have specific meanings ascribed to them in our criteria, and should therefore be read in conjunction with such criteria. Please see Ratings Criteria at www.standardandpoors.com for further information. Complete ratings information is available to subscribers of RatingsDirect at www.capitaliq.com. All ratings affected by this rating action can be found on S&P Global Ratings' public website at www.standardandpoors.com. Use the Ratings search box located in the left column.

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UNIVERSITY AREA JOINT AUTHORITY
SERIES OF 2015

Optional Redemption: May 1, 2020

1	2	3	4	5	6
<u>Date</u>	<u>Principal</u>	<u>Rate</u>	<u>Interest</u>	<u>Semi-Annual Debt Service</u>	<u>Fiscal Year Debt Service</u>
5/1/2020			153,659.38	153,659.38	
11/1/2020			153,659.38	153,659.38	307,318.75
5/1/2021			153,659.38	153,659.38	
11/1/2021	410,000	4.250	153,659.38	563,659.38	717,318.75
5/1/2022			144,946.88	144,946.88	
11/1/2022	605,000	4.000	144,946.88	749,946.88	894,893.75
5/1/2023			132,846.88	132,846.88	
11/1/2023	625,000	4.000	132,846.88	757,846.88	890,693.75
5/1/2024			120,346.88	120,346.88	
11/1/2024	650,000	2.375	120,346.88	770,346.88	890,693.75
5/1/2025			112,628.13	112,628.13	
11/1/2025	665,000	2.500	112,628.13	777,628.13	890,256.25
5/1/2026			104,315.63	104,315.63	
11/1/2026	685,000	2.625	104,315.63	789,315.63	893,631.25
5/1/2027			95,325.00	95,325.00	
11/1/2027	3,130,000	3.000	95,325.00	3,225,325.00	3,320,650.00
5/1/2028			48,375.00	48,375.00	
11/1/2028	3,225,000	3.000	48,375.00	3,273,375.00	3,321,750.00
TOTALS	9,995,000		2,132,206.25	12,127,206.25	12,127,206.25

UNIVERSITY AREA JOINT AUTHORITY SERIES OF 2015 Bonds to be Refunded
--

1	2	3	4	5	6
<u>Date</u>	<u>Principal</u>	<u>Rate</u>	<u>Interest</u>	<u>Semi-Annual Debt Service</u>	<u>Fiscal Year Debt Service</u>
5/1/2020			149,918.75	149,918.75	
11/1/2020			149,918.75	149,918.75	299,837.50
5/1/2021			149,918.75	149,918.75	
11/1/2021	410,000	4.250	149,918.75	559,918.75	709,837.50
5/1/2022			141,206.25	141,206.25	
11/1/2022	605,000	4.000	141,206.25	746,206.25	887,412.50
5/1/2023			129,106.25	129,106.25	
11/1/2023	625,000	4.000	129,106.25	754,106.25	883,212.50
5/1/2024			116,606.25	116,606.25	
11/1/2024	335,000	2.375	116,606.25	451,606.25	568,212.50
5/1/2025			112,628.13	112,628.13	
11/1/2025	665,000	2.500	112,628.13	777,628.13	890,256.25
5/1/2026			104,315.63	104,315.63	
11/1/2026	685,000	2.625	104,315.63	789,315.63	893,631.25
5/1/2027			95,325.00	95,325.00	
11/1/2027	3,130,000	3.000	95,325.00	3,225,325.00	3,320,650.00
5/1/2028			48,375.00	48,375.00	
11/1/2028	3,225,000	3.000	48,375.00	3,273,375.00	3,321,750.00
TOTALS	9,680,000		2,094,800.00	11,774,800.00	11,774,800.00

UNIVERSITY AREA JOINT AUTHORITY SERIES OF 2015 Bonds Remaining After Refunding

1	2	3	4	5	6
<u>Date</u>	<u>Principal</u>	<u>Rate</u>	<u>Interest</u>	<u>Semi-Annual Debt Service</u>	<u>Fiscal Year Debt Service</u>
5/1/2020			3,740.63	3,740.63	
11/1/2020			3,740.63	3,740.63	7,481.25
5/1/2021			3,740.63	3,740.63	
11/1/2021			3,740.63	3,740.63	7,481.25
5/1/2022			3,740.63	3,740.63	
11/1/2022			3,740.63	3,740.63	7,481.25
5/1/2023			3,740.63	3,740.63	
11/1/2023			3,740.63	3,740.63	7,481.25
5/1/2024			3,740.63	3,740.63	
11/1/2024	315,000	2.375	3,740.63	318,740.63	322,481.25
5/1/2025					
11/1/2025					
5/1/2026					
11/1/2026					
5/1/2027					
11/1/2027					
5/1/2028					
11/1/2028					
TOTALS	315,000		37,406.25	352,406.25	352,406.25

UNIVERSITY AREA JOINT AUTHORITY
UNRESTRICTED YIELD ESCROW

1 2 3 4 5 6 7 8 9 10

SERIES OF 2015

Optional Redemption Date: May 1, 2020

ESCROW REQUIREMENTS					ESCROW EARNINGS				
Date	Principal	Interest	Escrow Agent	Required	SETTLE 2/24/2020				
					Par	Coupon	Earnings	Cash Flow	Balance
5/1/2020	9,680,000.00	149,918.75		9,829,918.75	9,802,642.00	1.520	27,275.99	9,829,917.99	1.00
TOTALS	9,680,000.00	149,918.75	0.00	9,829,918.75	9,802,642.00		27,275.99	9,829,917.99	0.24

Actual Escrow Yield 1.498592
Actual Escrow Cost 9,802,642.00

Maximum Escrow Yield (Yield on new Bonds) 1.732738
Perfect Escrow Cost 9,798,405.44

Difference (4,236.56)

UNIVERSITY AREA JOINT AUTHORITY						Settle	2/24/2020
SERIES OF 2020						Dated	2/24/2020
REFUNDS THE SERIES OF 2015							

1	2	3	4	5	6	7	8	9
<u>Date</u>	<u>Principal</u>	<u>Coupon</u>	<u>Yield</u>	<u>Interest</u>	<u>Semi-Annual Debt Service</u>	<u>Fiscal Year Debt Service</u>	<u>Existing Debt Service</u>	<u>Savings</u>
5/1/2020				43,736.58	43,736.58			
11/1/2020	5,000	1.050	1.050	117,501.25	122,501.25	166,237.83	299,837.50	133,599.67
5/1/2021				117,475.00	117,475.00			
11/1/2021	35,000	2.000	1.100	117,475.00	152,475.00	269,950.00	709,837.50	439,887.50
5/1/2022				117,125.00	117,125.00			
11/1/2022	655,000	4.000	1.160	117,125.00	772,125.00	889,250.00	887,412.50	(1,837.50)
5/1/2023				104,025.00	104,025.00			
11/1/2023	675,000	4.000	1.210	104,025.00	779,025.00	883,050.00	883,212.50	162.50
5/1/2024				90,525.00	90,525.00			
11/1/2024	385,000	4.000	1.240	90,525.00	475,525.00	566,050.00	568,212.50	2,162.50
5/1/2025				82,825.00	82,825.00			
11/1/2025	725,000	3.000	1.340	82,825.00	807,825.00	890,650.00	890,256.25	(393.75)
5/1/2026				71,950.00	71,950.00			
11/1/2026	750,000	2.000	1.520	71,950.00	821,950.00	893,900.00	893,631.25	(268.75)
5/1/2027				64,450.00	64,450.00			
11/1/2027	3,190,000	2.000	1.700	64,450.00	3,254,450.00	3,318,900.00	3,320,650.00	1,750.00
5/1/2028				32,550.00	32,550.00			
11/1/2028	3,255,000	2.000	1.810	32,550.00	3,287,550.00	3,320,100.00	3,321,750.00	1,650.00
TOTALS	9,675,000			1,523,087.83	11,198,087.83	11,198,087.83	11,774,800.00	576,712.17

*Optional redemption date of May 1, 2025

Savings as a % of Refunded Par	5.96%
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UNIVERSITY AREA JOINT AUTHORITY SERIES OF 2020 Composition of the Issue
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SOURCES:

Bonds		9,675,000.00
Original Issue Premium		321,152.25
Accrued Interest		0.00
	Total	9,996,152.25

USES:

Cost of the Escrow		9,802,642.00
Underwriter's Discount	\$4.75	45,956.25
Bond Insurance (AGM)	\$0.19	21,276.37
Financial Advisor		42,000.00
Total Legal		31,500.00
Credit Rating (S&P A Stable)		20,500.00
OS Formatting and Financial Printing		11,000.00
Escrow Purchase and Verification		5,000.00
Trustee Fee		2,650.00
Trustee Counsel		4,000.00
Disclosure Counsel		2,500.00
DAC Research		350.00
Miscellaneous Expenses/Rounding		6,777.63
	Total	9,996,152.25

Pricing Date 1/23/2020

Dated Date 2/24/2020

Settlement Date 2/24/2020

Yield of the Issue	1.732738
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OIP/(OID) Calculations

Date	Price	(OID)/OIP
11/1/2020	100.000%	0.00
11/1/2021	101.498%	524.30
11/1/2022	107.488%	49,046.40
11/1/2023	110.027%	67,682.25
11/1/2024	112.525%	48,221.25
11/1/2025	108.288%	60,088.00
11/1/2026	102.384%	17,880.00
11/1/2027	101.482%	47,275.80
11/1/2028	100.935%	30,434.25
TOTAL		321,152.25

UNIVERSITY AREA JOINT AUTHORITY
SUMMARY OF OUTSTANDING INDEBTEDNESS

Fiscal Year Ended	Debt Service Requirements												
	1	2	3	4	5	6	7	8	9	10	11	12	13
	FIRST LIEN DEBT												
	JSSB												
	Revenue Bonds Series of 2012	Revenue Bonds Series of 2015	Revenue Bonds Series of 2016	Revenue Bonds Series of 2017	Revenue Bonds Series of 2017	Revenue Bonds Series A of 2017 ⁽¹⁾	Revenue Bonds Series B of 2017	Revenue Bonds Series C of 2017	Revenue Bonds Series of 2018	Revenue Bonds Series of 2020	Subtotal Requirements	Revenue Notes Series of 2000 ⁽²⁾	Total Debt Service
12/31/2020	510,000	7,481	143,994	340,125	340,125	584,259	3,487,950	474,881	416,419	166,238	6,131,347	94,459	6,225,806
12/31/2021		7,481	538,994	339,125	339,125	606,300	3,648,550		416,419	289,950	5,826,819	95,344	5,922,163
12/31/2022		7,481	641,094	338,125	338,125	621,707	3,446,300		416,419	889,250	6,360,376		6,360,376
12/31/2023		7,481	620,994	341,625	341,625	645,599	3,442,300		416,419	883,050	6,357,468		6,357,468
12/31/2024		322,481	596,094	335,250	335,250	662,298	3,461,800		416,419	566,050	6,360,392		6,360,392
12/31/2025			581,494	339,000	339,000	687,070	3,448,300		416,419	890,650	6,362,933		6,362,933
12/31/2026			551,994	332,350	332,350	714,970	3,448,050		416,419	893,900	6,357,683		6,357,683
12/31/2027			1,952,325	335,850	335,850		335,050		416,419	3,318,900	6,358,544		6,358,544
12/31/2028			1,955,363	334,131	334,131		330,750		416,419	3,320,100	6,356,763		6,356,763
12/31/2029				5,957,413	5,957,413				416,419		6,373,831		6,373,831
12/31/2030				2,842,813	2,842,813				3,531,419		6,374,231		6,374,231
12/31/2031									6,372,969		6,372,969		6,372,969
12/31/2032									4,418,906		4,418,906		4,418,906
12/31/2033													
12/31/2034													
12/31/2035													
12/31/2036													
Totals	510,000	352,406	7,582,344	11,835,806	11,835,806	4,522,203	25,049,050	474,881	18,487,481	11,198,088	80,012,260	189,803	80,202,063
Principal:	500,000	315,000	6,580,000	8,900,000	8,900,000	4,104,000	20,680,000	455,000	13,450,000	9,675,000	54,994,000	185,000	55,179,000
Call Date:	Non-Callable	5/1/2020	5/1/2021	5/1/2022	5/1/2022	Anytime	11/1/2025	Non-Callable	5/1/2026	5/1/2025	Anytime	Anytime	
Reset Rate:						60% WSJ Prime							
Purpose:	Cur Ref 2003A	Cur Ref 2010	Cur Ref 2010A	New Money	Cur Ref 2011A	Cur Ref 2014 FRN	Swap Termination	New Money	Cur Ref 2015	New Money			

(1) Assumes a 7-Year Fixed Rate of 1.98% through November 1, 2024, variable thereafter at the cap rate of 6.00%
(2) Assumes variable rate of 4.350%

* Outstanding as of January 23, 2020

**UNIVERSITY AREA JOINT AUTHORITY
SEWER REVENUE BONDS
SERIES OF 2020**

SUMMARY OF FINANCING

Bonds Principal: \$9,675,000

Pricing Date: 1/23/2020

Settlement Date: 2/24/2020

Credit Rating: A / Stable

Insured Rating: AA (AGM)

Overall Arbitrage Yield: 1.732738%

Use of Proceeds:

The Authority is issuing the Bonds to provide funds to be used toward: (1) the current refunding of all or a portion of the Authority's outstanding Sewer Revenue Bonds - Series of 2015 (the "2015 Bonds"); and (2) payment of the costs of issuing and insuring the Bonds. Upon issuance of the Bonds, a portion of the proceeds of the Bonds will be irrevocably deposited with the Trustee in an amount sufficient to redeem the remaining 2015 Bonds at a redemption price of 100% on May 1, 2020.

FINANCING TEAM MEMBERS

Issuer	<i>University Area Joint Authority</i>
Solicitor	<i>Miller, Kistler & Campbell</i>
Bond Counsel	<i>Mette, Evans and Woodside</i>
Financial Advisor	<i>PFM Financial Advisors LLC</i>
Underwriter	<i>RBC Capital Markets</i>
Bond Insurance	<i>Assured Guaranty Municipal</i>
Trustee	<i>U.S. Bank National Association</i>
Rating Agency	<i>S&P Global Ratings</i>



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RATE RESOLUTION

WASTEWATER RECYCLING

RATES AND OTHER

CHARGES

1576 Spring Valley Road
State College, PA 16801
(814) 238-5361 FAX (814) 238-1531
www.uaja.com

Section 1

CONNECTION TO COLLECTION SYSTEM

1.1 Building Sewers and Connections

a) No unauthorized person shall uncover, make any connections with or opening into, use, alter, or disturb any public or private sewer or appurtenances without first obtaining a written permit from the Authority.

b) All costs and expenses incidental to the installation and connection of the building sewer shall be the responsibility of the owner. Installation and construction of the building sewer shall be in compliance with the UAJA Standard Specifications then in effect.

1.2 Tapping and Permit Fees

a) The Tapping Fees are as follows:

Capacity Component:	\$5440.00	Per EDU
Collection Component Pine Grove Mills	\$2214.00	Per EDU
Collection Component Rt 26	\$2825.00	Per EDU
Ghaner Pump Station collection	\$301.00	Per EDU
Grinder Pump Escrow	\$2331.00	Per EDU
Borough of State College Tap Fee	\$2575.00	Per EDU
Special Purpose Circleville Inter.Tap Fee	\$509.73	Per EDU
Special Purpose Valley Vista Tap Fee	\$584.90	Per EDU

Tapping fees are charged at the time the permit is issued. The capacity component is applied to all new connections.

Tapping fees are based on EDU's according to Section 2.

If more than two inspection trips are required because the lateral repeatedly fails inspection, a \$50.00 fee shall be charged per inspection trip in excess of two per Rate Resolution 1.2b

b) The Permit Fees are as follows:

Residential:	\$150.00
Non-Residential:	\$250.00
Repair/Abandonment:	\$ 25.00
Water Quality:	\$100.00
Water Quality(w/pump station)	\$250.00
Private to Private:	\$ 50.00

Section 2

WASTEWATER RATES AND OTHER FEES

2.1 General

Wastewater rates and other charges are imposed upon the Owner of each property or entity connected to the wastewater collection system. The rate for wastewater collection & treatment will usually be based upon an **Equivalent Dwelling Unit (EDU)**. Some bulk customers of the Authority, by contract or agreement only, may be charged based upon the **Bulk Treatment Rate** in affect at the time.

2.2 EDU Rate

The rate charged per EDU is One Hundred Four (\$104.00) dollars per quarter. Residents of the Pine Grove Mills service area will be billed One Hundred Four(\$104.00) per quarter plus an additional twenty two dollars and forty cents (\$22.40) for debt service.

2.3 Bulk Treatment Rate

The rate charged per one million gallons treated is Five Thousand Two Hundred and Eighty Seven (\$5287.00) dollars.

2.4 Assignment of Equivalent Dwelling Units

An Equivalent Dwelling Unit (EDU) shall apply to each classification of connection as follows:

(a) Residential

Apartment units, each	1
Attached business	
w/o separate sanitary facilities	1/2
w/ separate sanitary facilities	1
Condominiums	1
Daycare in home per 17.5 Population	1
Duplex / Multi-Plex (per unit)	1
Manufactured (mobile home park)	
Per lateral provided, unless capped	1
Rooming Units/Efficiency, each	1/2
(A single bed, one room, one bath apartment with no clothes washer)	
Single Family Homes	1
Townhouses, each	1

(b) Commercial

Automobile Dealer,	
(bays connected to sewer)	
2 bays or less	2
Each additional bay over 2	1/2
Automobile Dealer/Garage	
(bays not Connected to sewer)	*

Beauty/Barber shops, per chair	1/2
Bed & Breakfasts	
up to and including 5 rooms	1.5
6 to 10 rooms	2
Bowling Alleys, per 6 lanes	1 and *
Car Wash (bays connected to sewer)	
2 bays or less	2
Each additional bay over 2	1/2
not connected to sewer	*
Commercial Office Building	1 per Business up to 10 employees *
Fitness Centers,	*
with showers	*
with pool, per filter connected	2 and *
Hospitals per bed	1/2 and *
Hospital public dining, per 15 seats	1
Hotel/Motel, per room	1/2
Conference room	1 per 17.5
Restaurant/café seating	1 per 15 seats
Laundromat, per 5 washers	1
Medical Centers,	*
with pools, per filter connected	2
Nursing Homes per bed	1/2 and *
Nursing Home public dining, /15 seats	1
Personal Care/ Assisted living	1/2 per living unit and *
Restaurants, per 15 seats	1 and *
Retail food store	*
Each food preparation station	1
Each Bakery	1
Each Bank	1
Each Deli	1
Each Pharmacy	1
Each Photography center	1
Café seating, per 15 seats	1
Retail Stores	*
2 bays or less (if app.)	2
per 15 seats (if app.)	1
Retirement Homes, per unit	1 and *
Retire. Hm. public dining, /15 seats	1
Retire. Hm. industrial washer	1
Veterinary Facilities	*

Shell Buildings, per 3000 sq. ft. (for tapping fee & connection fee only)	1
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Billing for Shell building per quarter	1
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- * 1 EDU for up to each 10 employees
-or-
1 EDU for up to each 8 employees with showers

Example 1: up to 10 employees (no showers) = 1 EDU.

Example 2: 11 employees (no showers) = 1.5 EDU's.

Example 3: up to 8 employees (w/showers) = 1 EDU.

Example 4: 9 employees (w/showers) = 1.5 EDU's.

*** Employees that work off site will not be included in EDU count.**

(c) Industrial and Commercial

Per 10 employees	1
[do not include truck drivers]	
Per 8 employees with showers	1
[do not include truck drivers]	
Cooling Tower with drain to sewer	1
(unless volume warrants higher charge)	

(d) Public

Churches	1
w/daycare per 17.5 student & staff	1
Daycare per 17.5 population	1
Fire Hall, Ambulance	1
Library	1
Private Clubs/Organizations	
per 15 seats	1
Recreation Field w/sanitary facilities	1
Schools per 17.5 population	1
Swimming Pools	
Per filter connection	2 and
Average Patrons x10(gpd)/175(gpd)	

(e) Miscellaneous

- 1) Charge to drain pool (pool capacity times current bulk treatment rate–Authority must be notified in advance of draining)
- 2) Where more than one use occurs on any improved property, the sum of Equivalent Dwelling Units for each separate use will apply in establishing wastewater rates and charges.
- 3) Additional classifications for wastewater rates and other charges or modifications of the above schedules for wastewater rates and other charges may be established by this Authority from time to time as deemed necessary.
- 4) Nothing contained herein shall be construed as prohibiting special agreements between this Authority and nonresidential improved properties under conditions and circumstances making special agreements advisable and necessary.

Section 3

INFORMATION REQUIRED

3.1 Addresses

Every owner of an improved property, which is connected to the wastewater collection system, shall provide this Authority with his/her correct mailing address and thereafter shall keep this Authority advised of any address changes. Any changes to the address will only be accepted by the property owner calling the office and speaking to the Account Representative, or sending in written notice of the change. Failure of any property owner to receive bills for wastewater rates and other charges shall not be considered an excuse for nonpayment nor shall such failure result in an extension of the period of time during which the net bill shall be payable or late fees being waived.

Authority rules and regulations specifically require that bills be mailed directly to the owner of record and NOT to a tenant. Any agreement of payment between owner and tenant or bill paying service must be considered a transaction between both parties and in no way concerns this Authority.

3.2 Non-residential yearly reports

Owners of any nonresidential improved property may be responsible for providing this Authority with a yearly report. This report will be used to compute any changes to the wastewater rate or charges to such nonresidential improved property. This information may also be used to compute a surcharge. The report will be due on a yearly basis with the due date being the 10th day of April. If the owner of any nonresidential improved property fails to provide this Authority with complete information required to compute the sewer rate or charge, this Authority may estimate a reasonable applicable wastewater rate or charge for such nonresidential improved property. Such estimated wastewater rate or charge shall be the actual wastewater rate or charge payable until the required information is filed. No rebates will be paid by this Authority if the information filed reveals a lower wastewater rate or charge than that estimated by this Authority. If the resultant rate should be higher than what was estimated, the property owner will be responsible for paying the difference. Industrial users will still be required to send a questionnaire on a quarterly basis.

3.3 Volume surcharges

This Authority reserves the right to impose a volume surcharge and/or to revise the Equivalent Dwelling Unit classification for any improved property discharging domestic and/or industrial wastewater into the wastewater collection system in excess of a total flow of 175 gallons per day, per EDU. The volume surcharge will be based upon the EDU treatment rate currently in place.

Section 4

INVOICING

4.1 Invoicing

Invoicing is done in arrears and will be done according to the following table.

Quarter	Bill mail Date	Due Date
Jan. Feb. Mar.	Mid- April	Mid – May
April May June	Mid – July	Mid - August
July August Sept.	Mid – October	Mid – November
Oct. Nov. Dec.	Mid – January	Mid - February

4.2 Pro-rating

Owners of improved properties that connect to the sewer in the middle of a quarter will be charged from the date of connection. With permission from the University Area Joint Authority, owners of improved properties that disconnect sewer service by plugging the lateral will stop being billed as of the date that UAJA Personnel inspects the disconnection.

4.3 Delinquent payments

If wastewater rates and charges are not paid by provided due date each billing, an additional sum of 10% shall be added to the net bill, which net bill, plus such additional sum, shall constitute the gross bill. Payment made on or mailed and postmarked by the due date will be considered on time. When an account has a delinquent amount of \$150.00 or more, the property owner will be sent a certified letter requesting payment in full within 10 days. All costs associated with certified letters will be charged back to the customer's account. If the property owner fails to pay the balance on the account after receiving the certified letter, and it becomes necessary for this Authority to post the property for water termination, a fee of \$35.00 will be charged to the property owner's account. At the point of posting, the property owner is notified that the full amount due and owing, together with penalties, interest and legal fees must be paid in full within five (5) days of the notice. In the event the full amount due is not paid, the water utility serving this property shall be directed to discontinue water service to the posted property pursuant to: (1) the Act of 1957, July 10, P.L. 622, as amended and the Act of 1978, November 26, No. 299, as amended. In addition, the property owner will be assessed charges from the Water Utility for termination of service.

4.4 Payments returned by bank

In the event a payment of wastewater charges or other charges rendered by this Authority are returned by a banking institution for any reason, a charge of \$37.00 for each instance shall be added on the property owner's account. In the event the banking institution levies a charge against the Authority for processing a returned check, said charge will be levied against the account for which service is being rendered. The Authority may also demand payment of the account by cash, certified check, bank draft, cashier's check, bank/postal money order. The account, which was paid by the returned check, shall be considered delinquent until full payment is rendered.

Section 5

5.1 Liens for Wastewater Rate and Other Charges:

Wastewater rates and other charges imposed by this Rate Resolution shall be a lien on the improved property connected to and served by the wastewater collection system. Any wastewater rates and other charges which are delinquent shall be filed as a lien against the improved property connected to and served by the wastewater collection system. Such liens shall be filed and collected in the manner provided by law for the filing and collection of municipal claims.

Section 6

INDUSTRIAL PRETREATMENT

6.1 UAJA Industrial Pretreatment Program

UAJA is required by the US Environmental Protection Agency to comply with various requirements under the Clean Water Act and Other acts, which impose duties and obligations for controlling industrial users, also known as an Industrial Pretreatment Program. In order to perform the duties required in administering an Industrial Pretreatment Program, UAJA has the legal authority to perform inspections and sampling, issue permits and orders, collect permit fees, require reporting and record keeping, control rates and quantities of discharges, require that certain discharges be held, seek equitable relief, and impose penalties and fees as deemed appropriate.

6.2 Prohibited Wastes

(a) No person shall discharge or cause to be discharged any storm water, surface water, spring water, ground water, roof runoff, subsurface drainage, building foundation drainage, cellar drainage, drainage from roof leader connections, uncontaminated cooling water, HVAC or other uncontaminated condensate drainage, or unpolluted process waters into any Sewer.

(b) This Authority reserves the right to refuse permission to connect to the Sewage Collection System, to compel discontinuance of use of the Sewage Collection System or the Sewage Disposal System, or to compel pretreatment of Industrial wastes by any Industrial Establishment, in order to comply with provisions of the Service Agreement and to prevent discharge deemed harmful or to have a deleterious effect upon any Sewer, the Sewage Collection System or the Sewage disposal System.

(c) No Sanitary Sewage or Industrial Wastes shall be discharged to the Sewage Collection System:

- 1) Having a temperature higher than 150°F.
- 2) Containing more than 100 ppm of fats, wax, tar, oil and/or grease, whether emulsified or not, or containing substances which may solidify or become viscous at temperature between 32° F and 150°F.
- 3) Containing any gasoline, benzene, naphtha, fuel oil or other flammable or explosive liquids, solids or gases.
- 4) Containing any ashes, cinders, sand, mud, straw, shavings, metal, glass, rags, cloths, feathers, tar, plastics, wood, paunch manure, whole blood, hair, fleshings, entrails, cotton, wool or other fibers, paper dishes, cups or milk containers, either whole or ground by garbage grinders, or any other solid or viscous substances capable of causing obstructions or other interferences with property operation of the Sewage Collection System or Sewers or the Sewage Disposal System.
- 5) Having a pH lower than 6.0 or higher than 10; being corrosive; or having any other property capable of causing damage or hazards to structures, equipment or operating personnel of the Sewage Collection System, Sewers or the Sewage Disposal System.

- 6) Containing toxic or poisonous solids, liquids or gases in sufficient quantity either singly or by interaction with other wastes, to injure or interfere with any sewage treatment process, to constitute hazards to humans or animals or to create any hazard in waters which receive treated effluent from the Sewage Disposal System. Toxic wastes shall include, but not by way of limitation, wastes containing cyanide, chromium, copper, cadmium, nickel, and/or mercury ions.
 - 7) Sludge, water, solids or other materials pumped from septic tanks.
 - 8) Any waters or wastes containing strong acid iron pickling wastes or concentrated plating solutions, whether neutralized or not.
 - 9) Materials which exert or cause:
 - a) unusual concentrations of inert suspended solids (such as, but not limited to, Fullers earth, lime slurries and lime residues) or of dissolved solids (such as, but not limited to, sodium chloride and sodium sulfate);
 - b) excessive discoloration (such as, but not limited to, dye wastes and vegetable tanning solutions);
 - c) unusual B.O.D., chemical oxygen demand or chlorine requirements in such quantities as to constitute a significant load on the Sewage Disposal System; or
 - d) unusual volume of flow or concentration of wastes constituting slugs.
 - 10) Containing radioactive wastes or isotopes of such half-life or concentration as may exceed limits established by the Authority.
 - 11) Notwithstanding the above provisions, any waste containing phenols or any other substance or having other characteristics which are prohibited by the Authority.
- (d)** In addition, no commercial entity shall discharge any waste exceeding the following Default Concentration Limits unless they have been granted an Industrial Wastewater Discharge Permit, a Local Limits Waiver, or a Conditional Waiver within the previous 24 months.

DEFAULT CONCENTRATION LIMITS FOR INDUSTRIAL USERS

Pollutant	Default IU Limit	Units
Arsenic	0.032	mg/l
Cadmium	0.0026	mg/l
Copper	0.60	mg/l
Cyanide	0.054	mg/l
Hexavalent Chromium	0.18	mg/l
Lead	0.066	mg/l
Mercury	0.00050	mg/l
Methylene Chloride	0.20	mg/l
Molybdenum	0.054	mg/l
Nickel	0.29	mg/l
Selenium	0.032	mg/l
Silver	0.10	mg/l
Thallium	0.010	mg/l
Zinc	0.60	mg/l

Any user unsure of whether their discharge exceeds these limits shall contact UAJA to obtain an Application for a Local Limits Waiver. This Application will be evaluated to determine whether there is a significant risk of exceeding these parameters based on the types of processes and other possible sources of pollution at that site.

However, knowingly exceeding any of these limits without written permission of the Authority is prohibited.

- (e)** Where necessary all Owners shall install suitable pre-treatment facilities in order to comply with subsections (c) and (d) of this Section. Plans, specifications and any other pertinent information relating to proposed facilities for preliminary treatment and handling of wastes shall be submitted for approval of this Authority and no construction of any such facility shall be commenced until approval thereof first shall have been obtained, in writing, from this Authority, and until approval thereof first

shall have been obtained from any governmental regulatory body having jurisdiction. Whenever facilities for preliminary treatment and handling of wastes shall have been provided by any Owner, such facilities continuously shall be maintained, at the expense of such Owner, in satisfactory operating condition; and this Authority shall have access to such facilities at reasonable times for purposes of inspection and testing.

- (f) No person shall install or operate in any Improved Property connected to the Sewage Collection System any garbage grinder equipped with a motor of $\frac{3}{4}$ horsepower or greater, without prior written approval of this Authority.
- (g) Nothing contained in this Section 5 shall be construed as prohibiting any special agreement or arrangement between this Authority and any person whereby Industrial Wastes of unusual strength or character may be admitted into the Sewage Collection System owned by this Authority, either before or after preliminary treatment.

6.3 Industrial waste permitting

- a) Industrial users proposing to connect to or discharge to the wastewater collection/treatment facility may be required to obtain a Wastewater Discharge Permit before connecting to the wastewater collection/treatment facility.
- b) The Authority may establish a system of rates and charges for implementation of the Industrial Pretreatment Program, which shall be applicable to industrial users within its service area. Rates and charges for implementation of the IPP may be changed from time to time by resolution, subject to approval by the Board of the UAJA.

6.4 Industrial wastewater inspections

Monitoring by Authority personnel will be composed of both announced and unannounced inspections and sampling. The frequency of monitoring may vary depending on circumstances as determined by the Authority. All industrial users will be inspected and sampled at least once per year. All inspections will be done in accordance with the guidelines set by the industrial pretreatment program in effect. Whenever facilities for preliminary treatment and handling of wastes shall have been provided by any owner, such facilities continuously shall be maintained, at the expense of the owner, in satisfactory operating condition; and this Authority shall have access to such facilities at reasonable times for purposes of inspection and testing.

6.5 Enforcement

The Authority may take such actions as provided for by applicable law to enforce the provisions of the Industrial Pretreatment Program. Such actions include, but are not limited to the imposition of penalties of up to \$25,000.00 per day and seeking injunctive relief under the provisions of the Publicly Owned Treatment Works Penalty Law, 35 P.S. 752.1 *et seq.*

SECTION 7

DEFINITIONS

7.1 Definitions

Unless the context specifically and clearly indicates otherwise, the meaning of terms and phrases in this Resolution shall be as follows:

- a) Abandonment Permit – required when service is no longer to be provided. This is the only mechanism that will be used to either reduce EDU's or stop the billing process. Inspection is required for confirmation of completion.
- b) Authority - The University Area Joint Authority a Pennsylvania municipal authority, its officers, Board members, employees and agents.
- c) Equivalent Dwelling Unit – a unit of measurement that estimates an average use of wastewater facilities. Roughly the average amount of wastewater generated by a typical family in one day.
- d) Improved Property - a property upon which there is erected a structure intended for continuous or periodic habitation, occupancy or use by human beings or animals from which structure domestic and/or industrial wastes shall be or may be discharged.

e) Industrial User - an improved property used, in whole or in part, for manufacturing, processing, cleaning, laundering or assembling any product, commodity or article or from which any process waste, as distinct from domestic waste, shall be discharged.

f) Industrial Pretreatment Program -The enforcement of the provisions of the regulations and controls of Industrial Users to the extent required by the federal pretreatment regulations set forth in 40 C.F.R. Part 403 and including similar provisions in ordinances of the contributing Municipalities authorized to be administer by and enforced by this Authority.

g) Industrial Waste: - Any solid, liquid or gaseous substance, or form of energy, which is produced as a result, whether directly or indirectly, of any industrial, manufacturing, trade or business process or activity, or in the course of developing, recovering, or processing of natural resources and which is discharged into the wastewater collection system; but not non-contact cooling water or sanitary sewage. Any wastewater which contains industrial waste and which is discharged from an industrial, manufacturing, trade or business premises is considered industrial waste for the purpose of this Resolution.

h) Non-contact cooling water - the water from any use such as air conditioning, cooling or refrigeration, or to which the only pollutant added is heat.

i) Non-residential - improved properties consisting of commercial, industrial, schools, professional offices, churches, institutions, etc.

j) Owner - any person vested with ownership, legal or equitable, sole or partial, of any improved property.

k) Private to Private Permit - A private to private permit is required when the connection of a detached or accessory use structure (ie: shed, shop, garage, out-building) to the primary use structure (residential) is desired. The definition of "detached" shall be described as a structure on the recorded building lot, with a separate use, that does not share either a common wall, or roof, or foundation with the primary use structure on that building lot. The private to private lateral shall be constructed following the same requirements for the primary building lateral and shall connect to that lateral at a place and in a manner which will allow future maintenance activity to be properly and efficiently conducted. Inspection prior to backfill is required.

l) Repair Permit - a repair permit is required anytime excavation is made to repair or relocate any existing sewer lateral piping anywhere on the property from the building to the property line. Inspection prior to backfill is required.

m) Wastewater - industrial or domestic wastes from dwellings, commercial buildings, industrial facilities, and institutions, together with any groundwater, surface water, and stormwater that may be present, whether treated or untreated, which enters the wastewater collection system.

n) Wastewater Collection System - all facilities, as of any particular time, for collecting, pumping, treating and disposing of domestic and/or industrial wastes, acquired, constructed, owned and operated by this Authority.

SECTION 8

Sewer Tapping Fee Calculations

Exhibit 1a - Summary of Capacity Part Calculations

CAPACITY PART

HISTORICAL TRENDED COSTS

Project Completion Year	Total Historical Cost	Grants	Net Cost	ENR Index	Trend Factor	Trended Cost	Capacity Cost
1967	\$ 244,931.00	\$ -	\$ 244,931.00	1074	10132	\$ 2,310,652.60	\$ 2,310,652.60
1968	\$ 1,508,256.00	\$ 251,600.00	\$ 1,256,656.00	1155	10132	\$ 11,023,756.36	\$ 11,023,756.36
1969	\$ 786,805.00	\$ 257,900.00	\$ 528,905.00	1269	10132	\$ 4,222,904.22	\$ 4,222,904.22
1970	\$ 6,509,489.21	\$ 886,266.42	\$ 5,623,222.79	1381	10132	\$ 41,255,969.09	\$ 41,255,969.09
1971	\$ 3,656.00	\$ -	\$ 3,656.00	1581	10132	\$ 23,429.85	\$ 23,429.85
1972	\$ 1,088.00	\$ -	\$ 1,088.00	1753	10132	\$ 6,288.43	\$ 6,288.43
1974	\$ 92,170.00	\$ -	\$ 92,170.00	2020	10132	\$ 462,310.12	\$ 462,310.12
1975	\$ 49,531.00	\$ -	\$ 49,531.00	2212	10132	\$ 226,875.27	\$ 226,875.27
1976	\$ 108,570.00	\$ -	\$ 108,570.00	2401	10132	\$ 458,155.45	\$ 458,155.45
1977	\$ 14,975.00	\$ -	\$ 14,975.00	2576	10132	\$ 58,900.12	\$ 58,900.12
1978	\$ 18,575.00	\$ -	\$ 18,575.00	2776	10132	\$ 67,796.07	\$ 67,796.07
1979	\$ 183,793.00	\$ -	\$ 183,793.00	3003	10132	\$ 620,110.12	\$ 620,110.12
1980	\$ 143,207.00	\$ -	\$ 143,207.00	3237	10132	\$ 448,246.32	\$ 448,246.32
1981	\$ 6,815.00	\$ -	\$ 6,815.00	3535	10132	\$ 19,533.12	\$ 19,533.12
1982	\$ 99.00	\$ -	\$ 99.00	3825	10132	\$ 262.24	\$ 262.24
1983	\$ 1,055.00	\$ -	\$ 1,055.00	4066	10132	\$ 2,628.94	\$ 2,628.94
1984	\$ 4,736.00	\$ -	\$ 4,736.00	4146	10132	\$ 11,573.84	\$ 11,573.84
1985	\$ 95,971.00	\$ -	\$ 95,971.00	4195	10132	\$ 231,794.56	\$ 231,794.56

1986	\$	169,656.00	\$	-	\$	169,656.00	4295	10132	2.36	\$	400,222.26	\$	400,222.26
1987	\$	232,802.00	\$	-	\$	232,802.00	4406	10132	2.30	\$	535,349.49	\$	535,349.49
1988	\$	736,093.00	\$	-	\$	736,093.00	4519	10132	2.24	\$	1,650,385.99	\$	1,650,385.99
1989	\$	981,229.00	\$	-	\$	981,229.00	4615	10132	2.20	\$	2,154,238.84	\$	2,154,238.84
1990	\$	8,091,034.00	\$	-	\$	8,091,034.00	4732	10132	2.14	\$	17,324,251.16	\$	17,324,251.16
1991	\$	18,019,993.00	\$	-	\$	18,019,993.00	4835	10132	2.10	\$	37,761,855.03	\$	37,761,855.03
1992	\$	5,933,112.00	\$	-	\$	5,933,112.00	4985	10132	2.03	\$	12,059,035.26	\$	12,059,035.26
1993	\$	1,117,936.00	\$	-	\$	1,117,936.00	5210	10132	1.94	\$	2,174,074.39	\$	2,174,074.39
1994	\$	456,565.00	\$	-	\$	456,565.00	5408	10132	1.87	\$	855,383.98	\$	855,383.98
1995	\$	411,257.00	\$	-	\$	411,257.00	5471	10132	1.85	\$	761,626.01	\$	761,626.01
1996	\$	106,350.00	\$	-	\$	106,350.00	5620	10132	1.80	\$	191,732.78	\$	191,732.78
1997	\$	296,887.00	\$	-	\$	296,887.00	5826	10132	1.74	\$	516,316.35	\$	516,316.35
1998	\$	1,631,664.00	\$	-	\$	1,631,664.00	5920	10132	1.71	\$	2,792,570.89	\$	2,792,570.89
1999	\$	1,714,730.00	\$	260,000.00	\$	1,454,730.00	6059	10132	1.67	\$	2,432,633.17	\$	2,432,633.17
2000	\$	2,752,597.00	\$	-	\$	2,752,597.00	6221	10132	1.63	\$	4,483,091.59	\$	4,483,091.59
2001	\$	3,609,790.00	\$	105,000.00	\$	3,504,790.00	6343	10132	1.60	\$	5,598,381.25	\$	5,598,381.25
2002	\$	12,444,054.00	\$	-	\$	12,444,054.00	6538	10132	1.55	\$	19,284,667.35	\$	19,284,667.35
2003	\$	16,854,836.00	\$	-	\$	16,854,836.00	6694	10132	1.51	\$	25,511,383.08	\$	25,511,383.08
2004	\$	16,266,860.13	\$	-	\$	16,266,860.13	7129	10132	1.42	\$	23,119,066.75	\$	23,119,066.75
2006	\$	62,320.00	\$	-	\$	62,320.00	7751	10132	1.31	\$	81,463.84	\$	81,463.84
2007	\$	1,858,303.00	\$	-	\$	1,858,303.00	7967	10132	1.27	\$	2,363,289.32	\$	2,363,289.32
2008	\$	5,395,900.20	\$	-	\$	5,395,900.20	8310	10132	1.22	\$	6,578,972.42	\$	6,578,972.42
2009	\$	77,500.00	\$	-	\$	77,500.00	8570	10132	1.18	\$	91,625.44	\$	91,625.44
2010	\$	68,140.00	\$	-	\$	68,140.00	8802	10132	1.15	\$	78,436.09	\$	78,436.09
2011	\$	396,061.86	\$	100,000.00	\$	296,061.86	9070	10132	1.12	\$	330,727.54	\$	330,727.54
2012	\$	1,638,099.00	\$	-	\$	1,638,099.00	9308	10132	1.09	\$	1,783,113.35	\$	1,783,113.35
2013	\$	236,875.00	\$	-	\$	236,875.00	9547	10132	1.06	\$	251,389.70	\$	251,389.70
2014	\$	205,871.84	\$	-	\$	205,871.84	9806	10132	1.03	\$	212,716.04	\$	212,716.04
2015	\$	7,528,858.00	\$	25,000.00	\$	7,503,858.00	10034	10132	1.01	\$	7,577,146.63	\$	7,577,146.63

Total Historical & Trended Cost	\$ 119,069,096.24	\$ 1,885,766.42	\$ 117,183,329.82		\$ 240,406,332.70	\$ 240,406,332.70
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Total Capacity Costs (Historical)	\$ 240,406,332.70
<u>Less Outstanding Debt Related to Facilities</u>	<u>\$ 75,436,404.74</u>
Total Trended Adjusted Cost	\$ 164,969,927.96

CAPACITY PART

Capacity (Gallons Per Day) - (Equals UAJA max discharge) ¹	7,000,000
Cost per Gallon	\$23.57
Gallons per Residential User Maximum Capacity Part	90 GPD x 2.38=
Maximum Capacity Part	\$5,044.00

1) UAJA's WQM Permit provides for an AAF of 9.0 MGD, however UAJA's NPDES permit for Spring Creek only allows 6.0 MGD to be discharged. The NPDES permit for Beneficial Reuse/Wetland Discharge authorizes an additional discharge of 3.0 MGD however, the installed Beneficial Reuse Facilities are rated for 1.0 MGD. Therefore, the 2.00 MGD balance of capacity in the permit is only available with additional expense which is not included in the numerator of the equation therefore, the 2.00 MGD was not included as capacity in the denominator.

Exhibit 1b - Summary of Collection Part Calculations

COLLECTION PART

HISTORICAL TRENDED COSTS

Project Completion Year	Total Historical Cost		Grants		Net Cost		ENR Index		Trend Factor	Trended Cost		Collection Cost	
1970	\$	6,151,546.89	\$	807,531.05	\$	5,344,015.84	1381	10132	7.34	\$	39,207,507.97	\$	39,207,507.97
1999	\$	110,782.00	\$	-	\$	110,782.00	6060	10132	1.67	\$	185,221.65	\$	185,221.65
2003	\$	152,455.00	\$	-	\$	152,455.00	6695	10132	1.51	\$	230,720.55	\$	230,720.55
2005	\$	1,314,124.00	\$	1,314,124.00	\$	-	7446	10132	1.36	\$	-	\$	-
2006	\$	1,402,896.00	\$	1,402,896.00	\$	-	7751	10132	1.31	\$	-	\$	-
2007	\$	785,055.00	\$	785,055.00	\$	-	7967	10132	1.27	\$	-	\$	-
2008	\$	522,182.45	\$	504,192.45	\$	17,990.00	8310	10132	1.22	\$	21,934.38	\$	21,934.38
2009	\$	1,157,316.39	\$	1,157,316.39	\$	-	8570	10132	1.18	\$	-	\$	-
2010	\$	990,316.00	\$	990,316.00	\$	-	8802	10132	1.15	\$	-	\$	-
2011	\$	108,562.44	\$	108,562.44	\$	-	9070	10132	1.12	\$	-	\$	-
2012	\$	676,520.00	\$	676,520.00	\$	-	9308	10132	1.09	\$	-	\$	-
2013	\$	2,640,435.00	\$	2,640,435.00	\$	-	9547	10132	1.06	\$	-	\$	-
2014	\$	1,124,344.68	\$	1,124,344.68	\$	-	9806	10132	1.03	\$	-	\$	-
2015	\$	62,741.00	\$	-	\$	62,741.00	10034	10132	1.01	\$	63,353.78	\$	63,353.78
Total Historical & Trended Cost	\$	17,136,535.85	\$	11,511,293.01	\$	5,625,242.84					\$ 39,645,384.54	\$	39,645,384.54

REPLACEMENT COSTS

Description	Total Replacement Cost *	Grants	Net Cost	ENR Index	Trend Factor	Trended Cost	Collection Cost
Sewer Collection Syste	\$ 120,830,416.98	\$ 113,851,579.53	\$ 6,978,837.45	NA	NA	\$ 6,978,837.45	\$ 6,978,837.45
<i>Total Replacement Cos</i>	\$ 120,830,416.98	\$ 113,851,579.53	\$ 6,978,837.45				\$ 6,978,837.45

Total Collection Costs (Historical and Replacement)	\$ 46,624,221.99
<u>Less Outstanding Debt Related to Facilities</u>	<u>\$ 2,671,296.60</u>
Total Trended Adjusted Cost	\$ 43,952,925.39

COLLECTION PART

Capacity (Gallons Per Day) - (Equals UAJA max discharge) ¹	7,000,000
Cost per Gallon	\$6.28
Gallons per Residential User Maximum Capacity Part	90 GPD x 2.38=
Maximum Collection Part	214
	\$1,344.00

TOTAL MAXIMUM TAPPING FEE - CAPACITY AND COLLECTION PARTS, HYDRAULIC CAPACITY (PER HOUSEHOLD)	\$6,388.00
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* Replacement cost is based on engineer's estimate and comprehensive report by Industrial Appraisal Company dated May 1, 2015; historical is not ascertainable

1) UAJA's WQM Permit provides for an AAF of 9.0 MGD, however UAJA's NPDES permit for Spring Creek only allows 6.0 MGD to be discharged. The NPDES permit for Beneficial Reuse/Wetland Discharge authorizes an additional discharge of 3.0 MGD however, the installed Beneficial Reuse Facilities are rated for 1.0 MGD. Therefore, the 2.00 MGD balance of capacity in the permit is only available with additional expense which is not included in the numerator of the equation therefore, the 2.00 MGD was not included as capacity in the denominator.

Exhibit 2a - Detailed Historical Cost Breakdown - Capacity

HISTORICAL TRENDED COSTS

Project Completion Year	Total Historical Cost	Grants	Net Cost	ENR Index	Trend Factor	Trended Cost	Capacity Cost
CAPACITY							
1967	\$ 244,931.00	\$ -	\$ 244,931.00	1074	10132	9.43	\$ 2,310,652.60
1968	\$ 1,508,256.00	\$ 251,600.00	\$ 1,256,656.00	1155	10132	8.77	\$ 11,023,756.36
1969	\$ 786,805.00	\$ 257,900.00	\$ 528,905.00	1269	10132	7.98	\$ 4,222,904.22
1970	\$ 6,509,489.21	\$ 886,266.42	\$ 5,623,222.79	1381	10132	7.34	\$ 41,255,969.09
1971	\$ 3,656.00	\$ -	\$ 3,656.00	1581	10132	6.41	\$ 23,429.85
1972	\$ 1,088.00	\$ -	\$ 1,088.00	1753	10132	5.78	\$ 6,288.43
1974	\$ 92,170.00	\$ -	\$ 92,170.00	2020	10132	5.02	\$ 462,310.12
1975	\$ 49,531.00	\$ -	\$ 49,531.00	2212	10132	4.58	\$ 226,875.27
1976	\$ 108,570.00	\$ -	\$ 108,570.00	2401	10132	4.22	\$ 458,155.45
1977	\$ 14,975.00	\$ -	\$ 14,975.00	2576	10132	3.93	\$ 58,900.12
1978	\$ 18,575.00	\$ -	\$ 18,575.00	2776	10132	3.65	\$ 67,796.07
1979	\$ 183,793.00	\$ -	\$ 183,793.00	3003	10132	3.37	\$ 620,110.12
1980	\$ 143,207.00	\$ -	\$ 143,207.00	3237	10132	3.13	\$ 448,246.32
1981	\$ 6,815.00	\$ -	\$ 6,815.00	3535	10132	2.87	\$ 19,533.12
1982	\$ 99.00	\$ -	\$ 99.00	3825	10132	2.65	\$ 262.24
1983	\$ 1,055.00	\$ -	\$ 1,055.00	4066	10132	2.49	\$ 2,628.94
1984	\$ 4,736.00	\$ -	\$ 4,736.00	4146	10132	2.44	\$ 11,573.84
1985	\$ 95,971.00	\$ -	\$ 95,971.00	4195	10132	2.42	\$ 231,794.56
1986	\$ 169,656.00	\$ -	\$ 169,656.00	4295	10132	2.36	\$ 400,222.26
1987	\$ 232,802.00	\$ -	\$ 232,802.00	4406	10132	2.30	\$ 535,349.49
1988	\$ 736,093.00	\$ -	\$ 736,093.00	4519	10132	2.24	\$ 1,650,385.99
1989	\$ 981,229.00	\$ -	\$ 981,229.00	4615	10132	2.20	\$ 2,154,238.84
1990	\$ 8,091,034.00	\$ -	\$ 8,091,034.00	4732	10132	2.14	\$ 17,324,251.16
1991	\$ 18,019,993.00	\$ -	\$ 18,019,993.00	4835	10132	2.10	\$ 37,761,855.03
1992	\$ 5,933,112.00	\$ -	\$ 5,933,112.00	4985	10132	2.03	\$ 12,059,035.26
1993	\$ 1,117,936.00	\$ -	\$ 1,117,936.00	5210	10132	1.94	\$ 2,174,074.39
1994	\$ 456,565.00	\$ -	\$ 456,565.00	5408	10132	1.87	\$ 855,383.98
1995	\$ 411,257.00	\$ -	\$ 411,257.00	5471	10132	1.85	\$ 761,626.01
1996	\$ 106,350.00	\$ -	\$ 106,350.00	5620	10132	1.80	\$ 191,732.78
1997	\$ 296,887.00	\$ -	\$ 296,887.00	5826	10132	1.74	\$ 516,316.35
1998	\$ 1,631,664.00	\$ -	\$ 1,631,664.00	5920	10132	1.71	\$ 2,792,570.89
1999	\$ 1,714,730.00	\$ 260,000.00	\$ 1,454,730.00	6059	10132	1.67	\$ 2,432,633.17
2000	\$ 2,752,597.00	\$ -	\$ 2,752,597.00	6221	10132	1.63	\$ 4,483,091.59
2001	\$ 3,609,790.00	\$ 105,000.00	\$ 3,504,790.00	6343	10132	1.60	\$ 5,598,381.25
2002	\$ 12,444,054.00	\$ -	\$ 12,444,054.00	6538	10132	1.55	\$ 19,284,667.35
2003	\$ 16,854,836.00	\$ -	\$ 16,854,836.00	6694	10132	1.51	\$ 25,511,383.08
2004	\$ 16,266,860.13	\$ -	\$ 16,266,860.13	7129	10132	1.42	\$ 23,119,066.75
2006	\$ 62,320.00	\$ -	\$ 62,320.00	7751	10132	1.31	\$ 81,463.84
2007	\$ 1,858,303.00	\$ -	\$ 1,858,303.00	7967	10132	1.27	\$ 2,363,289.32
2008	\$ 5,395,900.20	\$ -	\$ 5,395,900.20	8310	10132	1.22	\$ 6,578,972.42
2009	\$ 77,500.00	\$ -	\$ 77,500.00	8570	10132	1.18	\$ 91,625.44
2010	\$ 68,140.00	\$ -	\$ 68,140.00	8802	10132	1.15	\$ 78,436.09
2011	\$ 396,061.86	\$ 100,000.00	\$ 296,061.86	9070	10132	1.12	\$ 330,727.54
2012	\$ 1,638,099.00	\$ -	\$ 1,638,099.00	9308	10132	1.09	\$ 1,783,113.35
2013	\$ 236,875.00	\$ -	\$ 236,875.00	9547	10132	1.06	\$ 251,389.70
2014	\$ 205,871.84	\$ -	\$ 205,871.84	9806	10132	1.03	\$ 212,716.04
2015	\$ 7,528,858.00	\$ 25,000.00	\$ 7,503,858.00	10034	10132	1.01	\$ 7,577,146.63
Total Historical & Trended Cost	\$ 119,069,096.24	\$ 1,885,766.42	\$ 117,183,329.82				\$ 240,406,332.70

HISTORICAL TRENDED COSTS

Project Completion Year	Total Historical Cost		Grants		Net Cost		ENR Index		Trend Factor		Trended Cost		Collection Cost	
COLLECTION														
1970	\$	6,151,546.89	\$	807,531.05	\$	5,344,015.84	1381	10132	7.34	\$	39,207,507.97	\$	39,207,507.97	
1999	\$	110,782.00	\$	-	\$	110,782.00	6060	10132	1.67	\$	185,221.65	\$	185,221.65	
2003	\$	152,455.00	\$	-	\$	152,455.00	6695	10132	1.51	\$	230,720.55	\$	230,720.55	
2005	\$	1,314,124.00	\$	1,314,124.00	\$	-	7446	10132	1.36	\$	-	\$	-	
2006	\$	1,402,896.00	\$	1,402,896.00	\$	-	7751	10132	1.31	\$	-	\$	-	
2007 ¹	\$	785,055.00	\$	785,055.00	\$	-	7967	10132	1.27	\$	-	\$	-	
2008 ¹	\$	522,182.45	\$	504,192.45	\$	17,990.00	8310	10132	1.22	\$	21,934.38	\$	21,934.38	
2009	\$	1,157,316.39	\$	1,157,316.39	\$	-	8570	10132	1.18	\$	-	\$	-	
2010	\$	990,316.00	\$	990,316.00	\$	-	8802	10132	1.15	\$	-	\$	-	
2011	\$	108,562.44	\$	108,562.44	\$	-	9070	10132	1.12	\$	-	\$	-	
2012	\$	676,520.00	\$	676,520.00	\$	-	9308	10132	1.09	\$	-	\$	-	
2013 ¹	\$	2,640,435.00	\$	2,640,435.00	\$	-	9547	10132	1.06	\$	-	\$	-	
2014 ¹	\$	1,124,344.68	\$	1,124,344.68	\$	-	9806	10132	1.03	\$	-	\$	-	
2015	\$	62,741.00	\$	-	\$	62,741.00	10034	10132	1.01	\$	63,353.78	\$	63,353.78	
Total Historical & Trended Cost	\$	17,199,276.85	\$	11,511,293.01	\$	5,687,983.84				\$	39,708,738.32	\$	39,708,738.32	
TOTAL HISTORICAL COSTS (ROUNDED)												\$	39,708,738.32	

REPLACEMENT COSTS

Project Completion Year	Project Description		Units	Cost/Unit	Total Replacement Cost	Grants/Contributed Facilities/Assessments	Collection Replacement Cost
COLLECTION							
1970	North Meter Pit	Building and Structures	1	\$ 35,600.84	\$ 35,600.84	\$ 35,600.84	\$ -
1970	South Meter Pit	Building and Structures	1	\$ 35,600.84	\$ 35,600.84	\$ 35,600.84	\$ -
1970	Land ²	Land - Maylie	1	\$ 491,291.64	\$ 491,291.64	\$ 368,468.73	\$ 122,822.91
1972	Land ²	Land - ROW	1	\$ 186,277.85	\$ 186,277.85	\$ 139,708.39	\$ 46,569.46
1974	Harris Drive	Pumps and Controls	180 gpm	\$ 206,484.89	\$ 206,484.89	\$ 206,484.89	\$ -
1974	Harris Drive	Wetwell and Structures	1	\$ 299,047.08	\$ 299,047.08	\$ 299,047.08	\$ -
1974	Outer Drive	Pumps and Controls	180 gpm	\$ 206,484.89	\$ 206,484.89	\$ 206,484.89	\$ -
1974	Outer Drive	Wetwell and Structures	1	\$ 299,047.08	\$ 299,047.08	\$ 299,047.08	\$ -
1974	Kaywood	Pumps and Controls	180 gpm	\$ 206,484.89	\$ 206,484.89	\$ 206,484.89	\$ -
1974	Kaywood	Wetwell and Structures	1	\$ 299,047.08	\$ 299,047.08	\$ 299,047.08	\$ -
1979	Whitehall Road	Pumps and Controls	60 gpm	\$ 149,523.54	\$ 149,523.54	\$ 149,523.54	\$ -
1979	Whitehall Road	Wetwell and Structures	1	\$ 242,085.73	\$ 242,085.73	\$ 242,085.73	\$ -
1980	Gravity Sewer	Four Foot Diameter Brick or Concrete	5386	\$ 4,200.00	\$ 22,621,200.00	\$ 21,782,577.57	\$ 838,622.43
1980	Gravity Sewer	Five Foot Diameter Concrete	50	\$ 5,000.00	\$ 250,000.00	\$ 187,500.00	\$ 62,500.00
1980	Gravity Sewer	Air Release Manholes	45	\$ 4,000.00	\$ 180,000.00	\$ 135,000.00	\$ 45,000.00
1980	Gravity Sewer	8" Diameter Gravity Sewer	780344	\$ 100.00	\$ 78,034,400.00	\$ 78,034,400.00	\$ -
1980	Gravity Sewer	10" Diameter Gravity Sewer	17002	\$ 105.00	\$ 1,785,210.00	\$ -	\$ 1,785,210.00
1980	Gravity Sewer	12" Diameter Gravity Sewer	13041	\$ 110.00	\$ 1,434,510.00	\$ -	\$ 1,434,510.00
1980	Forcemain	1.5" Diameter Forcemain ¹	375	\$ 39.00	\$ 14,625.00	\$ 10,968.75	\$ 3,656.25
1980	Forcemain	2" Diameter Forcemain ¹	414	\$ 39.00	\$ 16,146.00	\$ 12,109.50	\$ 4,036.50
1980	Forcemain	3" Diameter Forcemain ¹	4120	\$ 42.00	\$ 173,040.00	\$ 129,780.00	\$ 43,260.00
1980	Land ²	Pump Station/Meter Pit Sites	1	\$ 1,246,029.52	\$ 1,246,029.52	\$ 934,522.14	\$ 311,507.38
1980	Land ²	Forcemain and Gravity Sewer Easements	1	\$ 6,764,160.22	\$ 6,764,160.22	\$ 5,073,120.17	\$ 1,691,040.06
1986	North Meter Pit	Metering Equipment	1	\$ 242,085.73	\$ 242,085.73	\$ 242,085.73	\$ -
1986	South Meter Pit	Metering Equipment	1	\$ 242,085.73	\$ 242,085.73	\$ 242,085.73	\$ -
1986	Haymarket	Pumps and Controls	83 gpm	\$ 156,643.71	\$ 156,643.71	\$ 156,643.71	\$ -
1986	Haymarket	Wetwell and Structures	1	\$ 256,326.07	\$ 256,326.07	\$ 256,326.07	\$ -
1988	Persia	Pumps and Controls	69 gpm	\$ 156,643.71	\$ 156,643.71	\$ 156,643.71	\$ -
1988	Persia	Wetwell and Structures	1	\$ 256,326.07	\$ 256,326.07	\$ 256,326.07	\$ -
1988	Scenery Park	Pumps and Controls	68 gpm	\$ 156,643.71	\$ 156,643.71	\$ 156,643.71	\$ -
1988	Scenery Park	Wetwell and Structures	1	\$ 256,326.07	\$ 256,326.07	\$ 256,326.07	\$ -
1990	Piney Ridge	Pumps and Controls	174 gpm	\$ 206,484.89	\$ 206,484.89	\$ 206,484.89	\$ -
1990	Piney Ridge	Wetwell and Structures	1	\$ 299,047.08	\$ 299,047.08	\$ 299,047.08	\$ -
1990	Piney Ridge	Generator	1	\$ 42,721.01	\$ 42,721.01	\$ 42,721.01	\$ -
1991	Aspen Heights	Pumps and Controls	111 gpm	\$ 170,884.05	\$ 170,884.05	\$ 170,884.05	\$ -
1991	Aspen Heights	Wetwell and Structures	1	\$ 249,205.90	\$ 249,205.90	\$ 249,205.90	\$ -
1992	St. Ives Place	Pumps and Controls	90 gpm	\$ 163,763.88	\$ 163,763.88	\$ 163,763.88	\$ -
1992	St. Ives Place	Wetwell and Structures	1	\$ 270,566.41	\$ 270,566.41	\$ 270,566.41	\$ -
1994	Land ²	Land - ROW	1	\$ 30,349.01	\$ 30,349.01	\$ 22,761.76	\$ 7,587.25
1995	Graysdale 2A	Pumps and Controls	76 gpm	\$ 156,643.71	\$ 156,643.71	\$ 156,643.71	\$ -
1995	Graysdale 2A	Wetwell and Structures	1	\$ 256,326.07	\$ 256,326.07	\$ 256,326.07	\$ -
1999	Graysdale 2B	Pumps and Controls	76 gpm	\$ 156,643.71	\$ 156,643.71	\$ 156,643.71	\$ -
1999	Graysdale 2B	Wetwell and Structures	1	\$ 256,326.07	\$ 256,326.07	\$ 256,326.07	\$ -
1999	Graysdale 2B	Generator	1	\$ 35,600.84	\$ 35,600.84	\$ 35,600.84	\$ -
1999	Fox Hill Road	Pumps and Controls	167 gpm	\$ 199,364.72	\$ 199,364.72	\$ 199,364.72	\$ -
1999	Fox Hill Road	Wetwell and Structures	1	\$ 284,806.75	\$ 284,806.75	\$ 284,806.75	\$ -
1999	Fox Hill Road	Generator	1	\$ 49,841.18	\$ 49,841.18	\$ 49,841.18	\$ -
2003	Claster's Meter Pit	Building and Structures	1	\$ 58,385.38	\$ 58,385.38	\$ -	\$ 58,385.38
2004	Marywood	Pumps and Controls (146 gpm)	1	\$ 185,124.39	\$ 185,124.39	\$ 185,124.39	\$ -
2004	Marywood	Wetwell and Structures	1	\$ 270,566.41	\$ 270,566.41	\$ 270,566.41	\$ -
2004	Marywood	Generator	1	\$ 42,721.01	\$ 42,721.01	\$ 42,721.01	\$ -
2013	Land ²	Land - Top of Hill	1	\$ 28,715.64	\$ 28,715.64	\$ 21,536.73	\$ 7,178.91
Total Replacement Cost					\$ 120,313,466.05	\$ 113,851,579.53	\$ 6,461,886.53
SUBTOTAL REPLACEMENT COSTS (ROUNDED)							\$ 6,461,886.53
Engineering, Permitting, Bidding, & Construction Administration (6%)							\$ 387,713.19
Legal and Financing Costs (2.0%)							\$ 129,237.73
TOTAL REPLACEMENT COSTS							\$ 6,978,837.45
TOTAL COSTS (HISTORICAL + REPLACEMENT)							\$ 46,687,575.77

1) Total value of projects completed has been reduced to account for projects assessed via a Special Purpose Fee.
2) Land values obtained from comprehensive report by Industrial Appraisal Company dated May 1, 2015 and has been adjusted by the same formula used for other components. HRG does not certify land values.

Exhibit 3 - Summary of Outstanding Debt Related to Facilities

Due Date	10A Principle	10A Interest	2011A Principle	2011A Interest	2012 Principle	2012 Interest	2014 Principle	2014 Interest	2015 Principle	2015 Interest	Emmaus Prin.	Emmaus Int.	Total Debt Service Due
Mar-16	\$2,500	\$114,265	\$170,000	\$82,299	\$1,317,500	\$232,200	\$795,000	\$662,060		\$153,660	\$75,000	\$18,977	\$3,623,460
Sep-16	\$2,500	\$114,265	\$170,000	\$82,299	\$1,317,500	\$232,200	\$795,000	\$662,060		\$153,660			\$3,529,483
Mar-17	\$2,500	\$114,213	\$187,500	\$78,899	\$1,387,500	\$179,500	\$807,500	\$623,979		\$153,660	\$80,000	\$15,515	\$3,630,765
Sep-17	\$2,500	\$114,213	\$187,500	\$78,899	\$1,387,500	\$179,500	\$807,500	\$623,979		\$153,660			\$3,535,250
Mar-18	\$2,500	\$114,154	\$200,000	\$75,149	\$1,422,500	\$151,750	\$827,500	\$584,815		\$153,660	\$80,000	\$12,035	\$3,624,063
Sep-18	\$2,500	\$114,154	\$200,000	\$75,149	\$1,422,500	\$151,750	\$827,500	\$584,815		\$153,660			\$3,532,028
Mar-19	\$15,000	\$114,089	\$215,000	\$70,449	\$1,512,500	\$80,625	\$827,500	\$544,268		\$153,660	\$85,000	\$8,356	\$3,626,446
Sep-19	\$15,000	\$114,089	\$215,000	\$70,449	\$1,512,500	\$80,625	\$827,500	\$544,268		\$153,660			\$3,533,090
Mar-20	\$20,000	\$113,661	\$227,500	\$64,806	\$250,000	\$5,000	\$1,225,000	\$503,720		\$153,660	\$90,000	\$4,459	\$2,657,805
Sep-20	\$20,000	\$113,661	\$227,500	\$64,806	\$250,000	\$5,000	\$1,225,000	\$503,720		\$153,660			\$2,563,346
Mar-21	\$172,500	\$113,061	\$245,000	\$58,322			\$1,285,000	\$443,695	\$205,000	\$153,660	\$95,000	\$344	\$2,771,582
Sep-21	\$172,500	\$113,061	\$245,000	\$58,322			\$1,285,000	\$443,695	\$205,000	\$153,660			\$2,676,238
Mar-22	\$215,000	\$107,541	\$260,000	\$50,972			\$1,350,000	\$380,730	\$302,500	\$144,947			\$2,811,690
Sep-22	\$215,000	\$107,541	\$260,000	\$50,972			\$1,350,000	\$380,730	\$302,500	\$144,947			\$2,811,690
Mar-23	\$212,500	\$100,339	\$280,000	\$42,847			\$1,415,000	\$314,580	\$312,500	\$132,847			\$2,810,613
Sep-23	\$212,500	\$100,339	\$280,000	\$42,847			\$1,415,000	\$314,580	\$312,500	\$132,847			\$2,810,613
Mar-24	\$207,500	\$93,008	\$297,500	\$33,747			\$1,490,000	\$245,245	\$325,000	\$120,347			\$2,812,346
Sep-24	\$207,500	\$93,008	\$297,500	\$33,747			\$1,490,000	\$245,245	\$325,000	\$120,347			\$2,812,346
Mar-25	\$207,500	\$85,641	\$320,000	\$23,706			\$1,557,500	\$172,235	\$332,500	\$112,628			\$2,811,711
Sep-25	\$207,500	\$85,641	\$320,000	\$23,706			\$1,557,500	\$172,235	\$332,500	\$112,628			\$2,811,711
Mar-26	\$200,000	\$78,171	\$345,000	\$12,506			\$1,635,000	\$95,918	\$342,500	\$104,316			\$2,813,411
Sep-26	\$200,000	\$78,171	\$345,000	\$12,506			\$1,635,000	\$95,918	\$342,500	\$104,316			\$2,813,411
Mar-27	\$907,500	\$70,771					\$157,500	\$15,803	\$1,565,000	\$95,325			\$2,811,899
Sep-27	\$907,500	\$70,771					\$157,500	\$15,803	\$1,565,000	\$95,325			\$2,811,899
Mar-28	\$942,500	\$36,286					\$165,000	\$8,085	\$1,612,500	\$48,375			\$2,812,746
Sep-28	\$942,500	\$36,286					\$165,000	\$8,085	\$1,612,500	\$48,375			\$2,812,746
TOTAL	\$6,215,000	\$2,510,400	\$5,495,000	\$1,187,406	\$11,780,000	\$1,298,150	\$27,075,000	\$9,190,262	\$9,995,000	\$3,361,483	\$505,000	\$59,686	\$78,672,387
Percent Capacity	100%	100%	100%	100%	100%	100%	100%	100%	80%	80%	0%	0%	
Total Capacity	\$6,215,000	\$2,510,400	\$5,495,000	\$1,187,406	\$11,780,000	\$1,298,150	\$27,075,000	\$9,190,262	\$7,996,000	\$2,689,186	\$0	\$0	\$75,436,405
Percent Collection	0%	0%	0%	0%	0%	0%	0%	0%	20%	20%	0%	0%	
Total Collection	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,999,000	\$672,297	\$0	\$0	\$2,671,297
Percent Special Purpose	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%	
Total Special Purpose	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$505,000	\$59,686	\$564,686.00

Exhibit 4 - Derivation of Organic Based Tapping Fee Charge

A. Determination of Conversion Factor Based Upon Historic UAJA Loadings

Avg. Historic BOD Loading (Years 2010 - 2014) (Per Chapter 94 Report)	0.38 lb/day/EDU
	2.63 EDUs/1 lb BOD

B. Verification of Above Conversion Factor Based Upon Industry Standards

BOD = 0.17 lb/day/capita	(Per DEP Domestic Wastewater Facilities Manual)
Capita per Household = 2.38	(Census Data - Centre County)

Lbs/day/EDU = 0.17 lb/day/cap * 2.38 people per household =	0.40 lb/day/EDU
	2.47 EDUs/1 lb BOD

(UAJA historic loading data appears appropriate when compared to standard industry approximations. With the consideration given to water saving appliances, UAJA's wastewater stream has a slightly higher concentration than predicted by the standard model.)

C. Verification Based Upon Capacity of AWTF

UAJA Influent BOD Loading Capacity Per Day =	38,801 lb.
UAJA Permitted Capacity =	9,000,000 gpd
Gallons/ lb. BOD =	231.95
Gallons per Residential User (EDU) 90 * 2.38 =	214
No. of EDUs in 1lb. BOD =	1.08 EDUs/1 lb BOD
No. of lb. BOD/ EDU =	0.92 lb/day/EDU

Facilities have been installed and permitted to handle historic BOD loadings shown above.

Determination of Organic Tapping Fee Charge

Organic Loading per EDU = 2.63 EDUs/1 lb BOD

Max Tapping Fee/EDU - Capacity Part =	\$5,044.00 *2.63 EDUs/lb.
Capacity Part : Cost per Pound BOD₅ (non-residential) =	\$ 13,273.68 /lb
Max Tapping Fee/EDU - Collection Part =	\$1,344.00 *2.63 EDUs/lb.
Collection Part : Cost per Pound BOD₅ (non-residential) =	\$ 3,536.84 /lb
Total Residential Tapping Fee =	\$ 16,810.53 /lb



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February 2016

FINAL DRAFT

**WASTEWATER COLLECTION,
CONVEYANCE, AND TREATMENT FACILITIES
CAPITAL CHARGES STUDY
PURSUANT TO ACT 57 OF 2003**

**University Area Joint Authority
Centre County, Pennsylvania**

HRG Project No. R01178.0565

UNIVERSITY AREA JOINT AUTHORITY
WASTEWATER COLLECTION, CONVEYANCE, AND TREATMENT FACILITIES

CAPITAL CHARGES STUDY
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UNIVERSITY AREA JOINT AUTHORITY WASTEWATER COLLECTION, CONVEYANCE, AND TREATMENT FACILITIES

SUMMARY OF CAPITAL CHARGES FEES FEBRUARY 2016

The University Area Joint Authority (UAJA) wastewater collection, conveyance and treatment system was originally constructed in 1970. At that time, the original facilities were owned by the College-Harris Joint Authority (CHJA) and the Patton-Ferguson Joint Authority (PFJA). The system consists of the treatment plant, pumping stations, and the associated collection and conveyance piping.

UAJA's treatment facility is permitted to treat wastewater flows based upon its current Water Quality Management (WQM) Permit issued by the Pennsylvania Department of Environmental Protection (DEP). The permit authorizes UAJA to treat an average annual flow of 9.0 million gallons per day (MGD). The DEP has issued two (2) National Pollutant Discharge Effluent Permits for the Authority; the first allows for 6.0 MGD of treated wastewater to be discharged to Spring Creek while the second permit allows for an additional 3.0 MGD to be discharged through Beneficial Reuse (BR) and wetland discharge. Discharging a full 3.0 MGD to Beneficial Reuse/wetlands is the maximum rate currently approved by DEP under Act 537 planning, and associated permitting, to handle planned growth in the service region. Beneficial Reuse facilities currently installed at the plant have the capacity to handle 1.0 MGD. As growth in the Centre Region continues, the Authority plans to construct additional BR facilities to handle up to 3.0 MGD. Based upon currently installed facilities, the rated capacity of the plant is 7.0 MGD.

Act 57 of 2003 provides for the imposition of three separate fees that are designed to allow Municipal Authorities and Municipalities to recover certain, specific costs and equity in the system. With the exception of assessments, these are the only initial charges that are allowed. However, the Authority may also require financial security including the funding of an escrow account in order to insure payment of review and inspection fees. Sewer rents and other charges that recover operating, maintenance, and debt service costs are largely unaffected by Act 57 except that certain conditions are applied to the collection and amount of reservation of capacity fees.

The three fees authorized by Act 57 are summarized below:

	Maximum Amount of Charge per EDU
1 Connection Fee	Actual Cost
2 Customer Facilities Fee	Actual Cost
3 Tapping Fee	
a) Capacity Part	\$5,044.00
b) Collection Part	\$1,344.00
c) Special Purpose Part *	As Applicable
d) Reimbursement Part *	As Applicable
Total Residential Tapping Fee	\$6,388.00

*APPLIES ONLY TO CERTAIN SPECIFIC NEW CONNECTIONS.

The above Residential Tapping Fee is the maximum allowed by Act 57. The maximum tapping fee for a Non-Residential connection will be based upon either the number of gallons per day (hydraulic capacity) or the pounds BOD₅ per day (organic capacity) required by the new connection.

UNIVERSITY AREA JOINT AUTHORITY
WASTEWATER COLLECTION, CONVEYANCE, AND TREATMENT FACILITIES

The maximum tapping fee for a Non-Residential connection based upon gallons per day is computed as follows:

Non-Residential Tapping Fee (Hydraulic)	
Capacity Part	\$23.57
Collection Part	\$6.28
Total (per gpd)	<u>\$29.85</u>

The maximum tapping fee for a Non-Residential connection based upon pounds of BOD₅ per day is computed as follows:

Non-Residential Tapping Fee (Organic)	
Capacity Part	\$ 13,273.68
Collection Part	\$ 3,536.84
Total (per lb. BOD ₅)	<u>\$16,810.53</u>

Of the resulting fees, the Authority may choose to apply the higher of the two charges (either hydraulic or organic) to the Non-Residential user. Under certain circumstances, the Authority may elect to charge Non-Residential users a tapping fee based upon other regulated parameters of the Authority's wastewater.

The Special Purpose Part and Reimbursement Part will be applied as applicable.

The Act allows for the imposition of a Reservation of Capacity Fee, however the Authority has chosen not to enact the Fee at this time.

UNIVERSITY AREA JOINT AUTHORITY
WASTEWATER COLLECTION, CONVEYANCE, AND TREATMENT FACILITIES

SCHEDULE A:
CALCULATION OF CONNECTION FEE

The connection fee covers the cost of the facilities installed between the sewer main and the property line of the property being connected. Construction of these facilities is generally the responsibility of the property owner with the prior approval of the Authority. All costs associated with the installation of these facilities are to be paid by the property owner. If the Authority incurs costs associated with the installation of these facilities, the fee will be calculated using an actual cost method as illustrated below. The illustration provides examples of costs the Authority might incur that are chargeable to the property owner under the definition of this fee, but is not all-inclusive.

In lieu of payment of a connection fee, the Authority may require the construction and dedication of these facilities by the property owner. In this case, the Authority's only cost will be for inspection, and the cost of inspection may be charged based on the Authority's rate resolution in effect at the time of connection.

\$	Direct Materials Cost
+	Direct Subcontract Costs
+	Equipment Rental Charges
+	Direct Labor Costs
+	Fringe Benefits, Employment Taxes, and other Employment Costs
+	Cost of Inspection ⁽¹⁾
+	Application and Administrative Costs
+	Planning Module Review ⁽²⁾
+	Miscellaneous Engineering
+	Miscellaneous Legal Expenses
<hr/>	
=	Total Connection Fee

(1) Includes the cost of inspection for all facilities installed by property owner or subcontractor hired by the Authority.

(2) If required.

UNIVERSITY AREA JOINT AUTHORITY
WASTEWATER COLLECTION, CONVEYANCE, AND TREATMENT FACILITIES

SCHEDULE B:
CALCULATION OF CUSTOMER FACILITIES FEE

The customer facilities fee covers the cost of facilities from the property line to the proposed dwelling or building. The property owner generally provides the construction of these facilities. In most instances, the Authority's only cost will be for inspection, and the cost of inspection may be charged based on the Authority's rate resolution in effect at the time of connection.

In some instances, the Authority may determine that the installation of special facilities is necessary to accommodate flow from a particular property. An example would be the installation of a grinder pump when gravity flow to the sewer main is not possible. The Authority may elect to install such facilities; however, all costs of these facilities are chargeable to the property owner as illustrated below:

\$	Direct Materials Cost
+	Direct Subcontract Costs
+	Equipment Rental Charges
+	Direct Labor Costs
+	Fringe Benefits, Employment Taxes, and other Employment Costs
+	Other Direct Costs
<hr/>	
=	Total Customer Facilities Fee

UNIVERSITY AREA JOINT AUTHORITY
WASTEWATER COLLECTION, CONVEYANCE, AND TREATMENT FACILITIES

CALCULATION OF TAPPING FEE:
SUMMARY

The tapping fee is based on the Authority's equity in the system and payment of the tapping fee constitutes the new user's "buy-in" to the system. The capital costs associated with the construction of the Authority's facilities are updated to reflect current costs in accordance with one of the methods allowed by the Act. Facilities funded by others and dedicated to the Authority are not included in the computation of this fee. Outstanding debt related to the facilities must be subtracted except when calculating the initial tapping fee for a new system. The estimated cost of future capacity facilities has not been included in this calculation.

The tapping fee is comprised of up to four components, which are separately calculated. In lieu of the payment of a tapping fee, the Authority may require the construction and dedication of only such capacity, collection, or other special purpose facilities to supply service to the property owner or owners.

Capacity Part	\$5,044.00
+ Collection Part	\$1,344.00
+ Special Purpose Part *	As Applicable
+ Reimbursement Part *	As Applicable
= Tapping Fee	<u>\$6,388.00</u>

* Applies only to certain specific new connections.

UNIVERSITY AREA JOINT AUTHORITY
WASTEWATER COLLECTION, CONVEYANCE, AND TREATMENT FACILITIES

SCHEDULE C:
CALCULATION OF TAPPING FEE
CAPACITY PART

Capacity Part. This part of the tapping fee includes those costs associated with construction of the wastewater treatment facility, major pump stations, force mains, interceptors, and Beneficial Reuse Transmission mains. Collection lines and appurtenances are included in the Collection Part.

As outlined by Act 57 of 2003, this study computes the value of the system based on historical costs trended to current values using the generally accepted Engineering News Record (ENR) construction index. Pursuant to the requirements of Act 57, the calculation of this fee requires a downward adjustment to reflect funds or facilities contributed by other parties, federal and state grants, and capital contributions from developers to arrive at the net historical cost. Outstanding debt must also be deducted from the cost of facilities since this is not the initial tapping fee for a system exclusively serving new users. This methodology is used for the costs associated with all capacity facilities.

Values have been established using the actual costs of the facilities and all associated project costs including engineering, legal, financial, and other costs. A breakdown of historical costs and grants is included in Exhibit 2a. Since this is not the initial tapping fee for a system exclusively serving new users, outstanding debt has been subtracted. Costs associated with the construction of future facilities have not been included in the fee.

The calculation of the Capacity part of the tapping fee is illustrated below. Detailed costs and calculations are included in Exhibit 1a.

Total Adjusted and Trended Cost of Capacity Facilities - Outstanding Debt		=	Cost per Unit of Design Capacity	
System Design Capacity (gpd)				
\$240,406,332.70	- \$75,436,404.74	=	\$23.57	per gpd
7,000,000				

Act 57 establishes the maximum capacity for a residential connection. It is based on 90 gallons per day per capita applied to the average number of persons per household as determined by the most recent United States census. This calculation uses a capacity per residential dwelling unit (EDU) of 214 gpd based on the 90 gallons per person per day multiplied by the 2010 Census statistic of 2.38 persons per household in Centre County.

The maximum Capacity Part of the Tapping Fee per EDU is calculated as follows:

Number of Units of Design Capacity (gpd per EDU)	x	Cost per Unit of Design Capacity	=	Capacity Part of Tapping Fee	
214	x	\$23.57	=	\$5,044.00	per EDU

UNIVERSITY AREA JOINT AUTHORITY

WASTEWATER COLLECTION, CONVEYANCE, AND TREATMENT FACILITIES

The maximum Capacity Part of the Tapping Fee for a Non-Residential connection based upon gallons per day is \$23.57 or if an organic fee is to be determined, it will be calculated as follows:

BOD Loading =	0.38	lb/day/EDU	
	2.63	EDUs/1 lb BOD	
Max Tapping Fee/EDU - Capacity Part =	\$5,044.00	*2.63 EDUs/lb.	
Capacity Part : Cost per Pound BOD₅ (non-residential) =	\$ 13,273.68	/lb	

UNIVERSITY AREA JOINT AUTHORITY
WASTEWATER COLLECTION, CONVEYANCE, AND TREATMENT FACILITIES

SCHEDULE D:
CALCULATION OF TAPPING FEE
COLLECTION PART

Collection Part: This part includes costs associated with the construction of the sewage collection system including sewer mains, manholes, small pumping stations, associated forcemains and appurtenances.

As outlined by Act 57 of 2003, this study computes the value of the system based on historical costs trended to current values using the generally accepted Engineering News Record (ENR) construction index. Reliable historical cost records were not available for all facilities. To the extent that historical cost is not ascertainable, reasonable estimates of current replacement costs have been prepared by Herbert, Rowland and Grubic, Inc. (HRG). Pursuant to the requirements of Act 57, the calculation of this fee requires a downward adjustment to reflect funds or facilities contributed by other parties, federal and state grants, and capital contributions from developers to arrive at the net historical cost. Outstanding debt must also be deducted from the cost of facilities since this is not the initial tapping fee for a system exclusively serving new users. This methodology is used for the costs associated with all collection facilities.

A breakdown of historical and replacement costs, in addition to grants is included in Exhibit 2b. Since this is not the initial tapping fee for a system exclusively serving new users, outstanding debt has been subtracted. Costs associated with the construction of future facilities have not been included in the fee.

The calculation of the Collection Facilities Part of the Tapping Fee is illustrated below.

Total Adjusted and Trended Cost of Collection Facilities - Outstanding Debt		=		Cost per Unit of Design Capacity	
System Design Capacity (gpd)					
\$46,624,221.99	- \$2,671,297			\$6.28	per gpd
7,000,000					

Act 57 establishes the maximum capacity for a residential connection. It is based on 90 gallons per day per capita applied to the average number of persons per household as determined by the most recent United States census. This calculation uses a capacity per residential dwelling unit (EDU) of 214 gpd based on the 90 gallons per person per day multiplied by the 2010 Census statistic of 2.38 persons per household in Centre County.

The maximum Collection Part of the Tapping Fee per EDU is calculated as follows:

Number of Units of Design Capacity (gpd per EDU)	x	Cost per Unit of Design Capacity	=	Capacity Part of Tapping Fee	
214	x	\$6.28	=	\$1,344.00	per EDU

UNIVERSITY AREA JOINT AUTHORITY

WASTEWATER COLLECTION, CONVEYANCE, AND TREATMENT FACILITIES

The maximum Collection Part of the Tapping Fee for a Non-Residential connection based upon gallons per day is \$6.28 or if an organic fee is to be determined, it will be calculated as follows:

BOD Loading =	0.38	lb/day/EDU	
	2.63	EDUs/1 lb BOD	
Max Tapping Fee/EDU - Collection Part =	\$1,344.00	*2.63 EDUs/lb.	
Collection Part : Cost per Pound BOD₅ (non-residential)	\$ 3,536.84	/lb	

UNIVERSITY AREA JOINT AUTHORITY
WASTEWATER COLLECTION, CONVEYANCE, AND TREATMENT FACILITIES

SCHEDULE E:
CALCULATION OF TAPPING FEE
SPECIAL PURPOSE PART

The Special Purpose Part is generally applicable only to a particular group of customers. This fee is designed to recover the cost of facilities that serve a special purpose or specific area, such as pump stations. Fees would be separately calculated for each applicable group and applied to new users as appropriate.

All costs associated with the installation of these facilities are to be paid by the users of these facilities through the imposition and collection of a special purpose part. If the Authority incurs costs associated with the installation of these facilities, the fee will be calculated using an actual cost method as illustrated below. The illustration provides examples of costs the Authority might incur that are chargeable to the users under the definition of this fee, but is not all-inclusive.

\$	Direct Materials Cost
+	Direct Subcontract Costs
+	Equipment Rental Charges
+	Direct Labor Costs
+	Fringe Benefits, Employment Taxes, and other Employment Costs
+	Cost of Inspection
+	Application and Administrative Costs
+	Planning Module Review
+	Miscellaneous Engineering
+	Miscellaneous Legal Expenses
=	Total Cost of Special Purpose Facilities

<u>Cost of Special Purpose Facilities</u>		
Design Capacity of Special Purpose Facilities	=	Special Purpose Part of Tapping Fee

The Authority currently charges the following Special Purpose Fees:

Special Purpose Part	\$ 584.90 Valley Vista Interceptor
	\$ 509.73 Circleville Interceptor

The Authority may continue to collect these fees until they have been imposed on the total number of design capacity units used in the original calculations for the Special Purpose Part. These fees have not been updated as part of the 2016 Study.

UNIVERSITY AREA JOINT AUTHORITY
WASTEWATER COLLECTION, CONVEYANCE, AND TREATMENT FACILITIES

SCHEDULE F:
CALCULATION OF TAPPING FEE
REIMBURSEMENT PART

Where appropriate, a reimbursement component may be included in the tapping fee charged to new connections for facilities constructed by others for which a reimbursement is due to the person constructing the facilities. This reimbursement must be defined in a written agreement between the Authority and the entity constructing the facilities. Typically, such agreements reimburse the cost of the capacity available for use by future connections.

The Authority does not currently assess a Reimbursement Part.

UNIVERSITY AREA JOINT AUTHORITY
WASTEWATER COLLECTION, CONVEYANCE, AND TREATMENT FACILITIES

SCHEDULE G:
CALCULATION OF RESERVATION OF CAPACITY FEE

Act 57 specifically authorizes a municipality to collect a fee for reserving capacity under certain circumstances: "... no reservation of capacity fee or other similar charge shall be imposed or collected from a property owner who has applied for service unless the charge is based on debt and fixed operating expenses. A Reservation of Capacity Fee or other similar charge may not exceed 60% of the average bill for a residential customer in the same service area for the same billing period. Any Authority opting to collect a reservation of capacity fee or other similar charge may not collect the Tapping Fee until the time as the building permit fee is due."

The Authority has chosen not to enact a Reservation of Capacity Fee at this time.

UNIVERSITY AREA JOINT AUTHORITY
WASTEWATER COLLECTION, CONVEYANCE, AND TREATMENT FACILITIES

CERTIFICATE OF CONSULTING ENGINEER
(As required under the Pennsylvania Municipal Authorities Act)

I, the undersigned Consulting Engineer to the University Area Joint Authority (the "Authority") hereby certify that the replacement costs used in the computation of capital charges for the Authority are based upon reasonable written estimates of the current replacement costs and have been used only to the extent that historical cost is not ascertainable. I deem the assumptions upon which such computations have been made to be reasonable for such purposes. I further certify:

- (i) Herbert, Rowland & Grubic, Inc. is the consulting engineer to the Authority.
- (ii) I am a registered professional engineer, duly qualified and licensed under the laws of the Commonwealth of Pennsylvania.
- (iii) I am familiar with Section 5607(d) of the Pennsylvania Municipal Authorities Act, 53, PA.C.S. Chapter 56, pertaining to the enumerated fees.

Herbert, Rowland & Grubic, Inc.



By: Adrienne M. Vicari, PE
PE # 073697

Exhibit 1a - Summary of Capacity Part Calculations

CAPACITY PART

HISTORICAL TRENDED COSTS

Project Completion Year	Total Historical Cost	Grants	Net Cost	ENR Index	Trend Factor	Trended Cost	Capacity Cost
1967	\$ 244,931.00	\$ -	\$ 244,931.00	1074	10132	\$ 2,310,652.60	\$ 2,310,652.60
1968	\$ 1,508,256.00	\$ 251,600.00	\$ 1,256,656.00	1155	10132	\$ 11,023,756.36	\$ 11,023,756.36
1969	\$ 786,805.00	\$ 257,900.00	\$ 528,905.00	1269	10132	\$ 4,222,904.22	\$ 4,222,904.22
1970	\$ 6,509,489.21	\$ 886,266.42	\$ 5,623,222.79	1381	10132	\$ 41,255,969.09	\$ 41,255,969.09
1971	\$ 3,656.00	\$ -	\$ 3,656.00	1581	10132	\$ 23,429.85	\$ 23,429.85
1972	\$ 1,088.00	\$ -	\$ 1,088.00	1753	10132	\$ 6,288.43	\$ 6,288.43
1974	\$ 92,170.00	\$ -	\$ 92,170.00	2020	10132	\$ 462,310.12	\$ 462,310.12
1975	\$ 49,531.00	\$ -	\$ 49,531.00	2212	10132	\$ 226,875.27	\$ 226,875.27
1976	\$ 108,570.00	\$ -	\$ 108,570.00	2401	10132	\$ 458,155.45	\$ 458,155.45
1977	\$ 14,975.00	\$ -	\$ 14,975.00	2576	10132	\$ 58,900.12	\$ 58,900.12
1978	\$ 18,575.00	\$ -	\$ 18,575.00	2776	10132	\$ 67,796.07	\$ 67,796.07
1979	\$ 183,793.00	\$ -	\$ 183,793.00	3003	10132	\$ 620,110.12	\$ 620,110.12
1980	\$ 143,207.00	\$ -	\$ 143,207.00	3237	10132	\$ 448,246.32	\$ 448,246.32
1981	\$ 6,815.00	\$ -	\$ 6,815.00	3535	10132	\$ 19,533.12	\$ 19,533.12
1982	\$ 99.00	\$ -	\$ 99.00	3825	10132	\$ 262.24	\$ 262.24
1983	\$ 1,055.00	\$ -	\$ 1,055.00	4066	10132	\$ 2,628.94	\$ 2,628.94
1984	\$ 4,736.00	\$ -	\$ 4,736.00	4146	10132	\$ 11,573.84	\$ 11,573.84
1985	\$ 95,971.00	\$ -	\$ 95,971.00	4195	10132	\$ 231,794.56	\$ 231,794.56
1986	\$ 169,656.00	\$ -	\$ 169,656.00	4295	10132	\$ 400,222.26	\$ 400,222.26
1987	\$ 232,802.00	\$ -	\$ 232,802.00	4406	10132	\$ 535,349.49	\$ 535,349.49
1988	\$ 736,093.00	\$ -	\$ 736,093.00	4519	10132	\$ 1,650,385.99	\$ 1,650,385.99
1989	\$ 981,229.00	\$ -	\$ 981,229.00	4615	10132	\$ 2,154,238.84	\$ 2,154,238.84
1990	\$ 8,091,034.00	\$ -	\$ 8,091,034.00	4732	10132	\$ 17,324,251.16	\$ 17,324,251.16
1991	\$ 18,019,993.00	\$ -	\$ 18,019,993.00	4835	10132	\$ 37,761,855.03	\$ 37,761,855.03
1992	\$ 5,933,112.00	\$ -	\$ 5,933,112.00	4985	10132	\$ 12,059,035.26	\$ 12,059,035.26
1993	\$ 1,117,936.00	\$ -	\$ 1,117,936.00	5210	10132	\$ 2,174,074.39	\$ 2,174,074.39
1994	\$ 456,565.00	\$ -	\$ 456,565.00	5408	10132	\$ 855,383.98	\$ 855,383.98
1995	\$ 411,257.00	\$ -	\$ 411,257.00	5471	10132	\$ 761,626.01	\$ 761,626.01
1996	\$ 106,350.00	\$ -	\$ 106,350.00	5620	10132	\$ 191,732.78	\$ 191,732.78
1997	\$ 296,887.00	\$ -	\$ 296,887.00	5826	10132	\$ 516,316.35	\$ 516,316.35
1998	\$ 1,631,664.00	\$ -	\$ 1,631,664.00	5920	10132	\$ 2,792,570.89	\$ 2,792,570.89
1999	\$ 1,714,730.00	\$ 260,000.00	\$ 1,454,730.00	6059	10132	\$ 2,432,633.17	\$ 2,432,633.17
2000	\$ 2,752,597.00	\$ -	\$ 2,752,597.00	6221	10132	\$ 4,483,091.59	\$ 4,483,091.59
2001	\$ 3,609,790.00	\$ 105,000.00	\$ 3,504,790.00	6343	10132	\$ 5,598,381.25	\$ 5,598,381.25
2002	\$ 12,444,054.00	\$ -	\$ 12,444,054.00	6538	10132	\$ 19,284,667.35	\$ 19,284,667.35
2003	\$ 16,854,836.00	\$ -	\$ 16,854,836.00	6694	10132	\$ 25,511,383.08	\$ 25,511,383.08
2004	\$ 16,266,860.13	\$ -	\$ 16,266,860.13	7129	10132	\$ 23,119,066.75	\$ 23,119,066.75
2006	\$ 62,320.00	\$ -	\$ 62,320.00	7751	10132	\$ 81,463.84	\$ 81,463.84
2007	\$ 1,858,303.00	\$ -	\$ 1,858,303.00	7967	10132	\$ 2,363,289.32	\$ 2,363,289.32
2008	\$ 5,395,900.20	\$ -	\$ 5,395,900.20	8310	10132	\$ 6,578,972.42	\$ 6,578,972.42
2009	\$ 77,500.00	\$ -	\$ 77,500.00	8570	10132	\$ 91,625.44	\$ 91,625.44
2010	\$ 68,140.00	\$ -	\$ 68,140.00	8802	10132	\$ 78,436.09	\$ 78,436.09
2011	\$ 396,061.86	\$ 100,000.00	\$ 296,061.86	9070	10132	\$ 330,727.54	\$ 330,727.54
2012	\$ 1,638,099.00	\$ -	\$ 1,638,099.00	9308	10132	\$ 1,783,113.35	\$ 1,783,113.35
2013	\$ 236,875.00	\$ -	\$ 236,875.00	9547	10132	\$ 251,389.70	\$ 251,389.70
2014	\$ 205,871.84	\$ -	\$ 205,871.84	9806	10132	\$ 212,716.04	\$ 212,716.04
2015	\$ 7,528,858.00	\$ 25,000.00	\$ 7,503,858.00	10034	10132	\$ 7,577,146.63	\$ 7,577,146.63
Total Historical & Trended Cost	\$ 119,069,096.24	\$ 1,885,766.42	\$ 117,183,329.82			\$ 240,406,332.70	\$ 240,406,332.70

Total Capacity Costs (Historical)	\$ 240,406,332.70
Less Outstanding Debt Related to Facilities	\$ 75,436,404.74
Total Trended Adjusted Cost	\$ 164,969,927.96

CAPACITY PART

Capacity (Gallons Per Day) - (Equals UAJA max discharge) ¹	7,000,000
Cost per Gallon	\$23.57
Gallons per Residential User Maximum Capacity Part	90 GPD x 2.38=
Maximum Capacity Part	214
	\$5,044.00

1) UAJA's WQM Permit provides for an AAF of 9.0 MGD, however UAJA's NPDES permit for Spring Creek only allows 6.0 MGD to be discharged. The NPDES permit for Beneficial Reuse/Wetland Discharge authorizes an additional discharge of 3.0 MGD however, the installed Beneficial Reuse Facilities are rated for 1.0 MGD. Therefore, the 2.00 MGD balance of capacity in the permit is only available with additional expense which is not included in the numerator of the equation therefore, the 2.00 MGD was not included as capacity in the denominator.

Exhibit 1b - Summary of Collection Part Calculations

COLLECTION PART

HISTORICAL TRENDED COSTS

Project Completion Year	Total Historical Cost	Grants	Net Cost	ENR Index	Trend Factor	Trended Cost	Collection Cost	
1970	\$ 6,151,546.89	\$ 807,531.05	\$ 5,344,015.84	1381	10132	7.34	\$ 39,207,507.97	\$ 39,207,507.97
1999	\$ 110,782.00	\$ -	\$ 110,782.00	6060	10132	1.67	\$ 185,221.65	\$ 185,221.65
2003	\$ 152,455.00	\$ -	\$ 152,455.00	6695	10132	1.51	\$ 230,720.55	\$ 230,720.55
2005	\$ 1,314,124.00	\$ 1,314,124.00	\$ -	7446	10132	1.36	\$ -	\$ -
2006	\$ 1,402,896.00	\$ 1,402,896.00	\$ -	7751	10132	1.31	\$ -	\$ -
2007	\$ 785,055.00	\$ 785,055.00	\$ -	7967	10132	1.27	\$ -	\$ -
2008	\$ 522,182.45	\$ 504,192.45	\$ 17,990.00	8310	10132	1.22	\$ 21,934.38	\$ 21,934.38
2009	\$ 1,157,316.39	\$ 1,157,316.39	\$ -	8570	10132	1.18	\$ -	\$ -
2010	\$ 990,316.00	\$ 990,316.00	\$ -	8802	10132	1.15	\$ -	\$ -
2011	\$ 108,562.44	\$ 108,562.44	\$ -	9070	10132	1.12	\$ -	\$ -
2012	\$ 676,520.00	\$ 676,520.00	\$ -	9308	10132	1.09	\$ -	\$ -
2013	\$ 2,640,435.00	\$ 2,640,435.00	\$ -	9547	10132	1.06	\$ -	\$ -
2014	\$ 1,124,344.68	\$ 1,124,344.68	\$ -	9806	10132	1.03	\$ -	\$ -
2015	\$ 62,741.00	\$ -	\$ 62,741.00	10034	10132	1.01	\$ 63,353.78	\$ 63,353.78
Total Historical & Trended Cost	\$ 17,136,535.85	\$ 11,511,293.01	\$ 5,625,242.84				\$ 39,645,384.54	\$ 39,645,384.54

REPLACEMENT COSTS

Description	Total Replacement Cost *	Grants	Net Cost	ENR Index	Trend Factor	Trended Cost	Collection Cost
Sewer Collection System	\$ 120,830,416.98	\$ 113,851,579.53	\$ 6,978,837.45	NA	NA	\$ 6,978,837.45	\$ 6,978,837.45
<i>Total Replacement Costs</i>	\$ 120,830,416.98	\$ 113,851,579.53	\$ 6,978,837.45				\$ 6,978,837.45

Total Collection Costs (Historical and Replacement)	\$ 46,624,221.99
Less Outstanding Debt Related to Facilities	\$ 2,671,296.60
Total Trended Adjusted Cost	\$ 43,952,925.39

COLLECTION PART

Capacity (Gallons Per Day) - (Equals UAJA max discharge) ¹	7,000,000
Cost per Gallon	\$6.28
Gallons per Residential User Maximum Capacity Part	90 GPD x 2.38=
Maximum Collection Part	\$1,344.00

TOTAL MAXIMUM TAPPING FEE - CAPACITY AND COLLECTION PARTS, HYDRAULIC CAPACITY (PER HOUSEHOLD) \$6,388.00

* Replacement cost is based on engineer's estimate and comprehensive report by Industrial Appraisal Company dated May 1, 2015; historical is not ascertainable.

1) UAJA's WQM Permit provides for an AAF of 9.0 MGD, however UAJA's NPDES permit for Spring Creek only allows 6.0 MGD to be discharged. The NPDES permit for Beneficial Reuse/Wetland Discharge authorizes an additional discharge of 3.0 MGD however, the installed Beneficial Reuse Facilities are rated for 1.0 MGD. Therefore, the 2.00 MGD balance of capacity in the permit is only available with additional expense which is not included in the numerator of the equation therefore, the 2.00 MGD was not included as capacity in the denominator.

Exhibit 2a - Detailed Historical Cost Breakdown - Capacity

HISTORICAL TRENDED COSTS

Project Completion Year	Total Historical Cost	Grants	Net Cost	ENR Index	Trend Factor	Trended Cost	Capacity Cost
CAPACITY							
1967	\$ 244,931.00	\$ -	\$ 244,931.00	1074	10132	\$ 2,310,652.60	\$ 2,310,652.60
1968	\$ 1,508,256.00	\$ 251,600.00	\$ 1,256,656.00	1155	10132	\$ 11,023,756.36	\$ 11,023,756.36
1969	\$ 786,805.00	\$ 257,900.00	\$ 528,905.00	1269	10132	\$ 4,222,904.22	\$ 4,222,904.22
1970	\$ 6,509,489.21	\$ 886,266.42	\$ 5,623,222.79	1381	10132	\$ 41,255,969.09	\$ 41,255,969.09
1971	\$ 3,656.00	\$ -	\$ 3,656.00	1581	10132	\$ 23,429.85	\$ 23,429.85
1972	\$ 1,088.00	\$ -	\$ 1,088.00	1753	10132	\$ 6,288.43	\$ 6,288.43
1974	\$ 92,170.00	\$ -	\$ 92,170.00	2020	10132	\$ 462,310.12	\$ 462,310.12
1975	\$ 49,531.00	\$ -	\$ 49,531.00	2212	10132	\$ 226,875.27	\$ 226,875.27
1976	\$ 108,570.00	\$ -	\$ 108,570.00	2401	10132	\$ 458,155.45	\$ 458,155.45
1977	\$ 14,975.00	\$ -	\$ 14,975.00	2576	10132	\$ 58,900.12	\$ 58,900.12
1978	\$ 18,575.00	\$ -	\$ 18,575.00	2776	10132	\$ 67,796.07	\$ 67,796.07
1979	\$ 183,793.00	\$ -	\$ 183,793.00	3003	10132	\$ 620,110.12	\$ 620,110.12
1980	\$ 143,207.00	\$ -	\$ 143,207.00	3237	10132	\$ 448,246.32	\$ 448,246.32
1981	\$ 6,815.00	\$ -	\$ 6,815.00	3535	10132	\$ 19,533.12	\$ 19,533.12
1982	\$ 99.00	\$ -	\$ 99.00	3825	10132	\$ 262.24	\$ 262.24
1983	\$ 1,055.00	\$ -	\$ 1,055.00	4066	10132	\$ 2,628.94	\$ 2,628.94
1984	\$ 4,736.00	\$ -	\$ 4,736.00	4146	10132	\$ 11,573.84	\$ 11,573.84
1985	\$ 95,971.00	\$ -	\$ 95,971.00	4195	10132	\$ 231,794.56	\$ 231,794.56
1986	\$ 169,656.00	\$ -	\$ 169,656.00	4295	10132	\$ 400,222.26	\$ 400,222.26
1987	\$ 232,802.00	\$ -	\$ 232,802.00	4406	10132	\$ 535,349.49	\$ 535,349.49
1988	\$ 736,093.00	\$ -	\$ 736,093.00	4519	10132	\$ 1,650,385.99	\$ 1,650,385.99
1989	\$ 981,229.00	\$ -	\$ 981,229.00	4615	10132	\$ 2,154,238.84	\$ 2,154,238.84
1990	\$ 8,091,034.00	\$ -	\$ 8,091,034.00	4732	10132	\$ 17,324,251.16	\$ 17,324,251.16
1991	\$ 18,019,993.00	\$ -	\$ 18,019,993.00	4835	10132	\$ 37,761,855.03	\$ 37,761,855.03
1992	\$ 5,933,112.00	\$ -	\$ 5,933,112.00	4985	10132	\$ 12,059,035.26	\$ 12,059,035.26
1993	\$ 1,117,936.00	\$ -	\$ 1,117,936.00	5210	10132	\$ 2,174,074.39	\$ 2,174,074.39
1994	\$ 456,565.00	\$ -	\$ 456,565.00	5408	10132	\$ 855,383.98	\$ 855,383.98
1995	\$ 411,257.00	\$ -	\$ 411,257.00	5471	10132	\$ 761,626.01	\$ 761,626.01
1996	\$ 106,350.00	\$ -	\$ 106,350.00	5620	10132	\$ 191,732.78	\$ 191,732.78
1997	\$ 296,887.00	\$ -	\$ 296,887.00	5826	10132	\$ 516,316.35	\$ 516,316.35
1998	\$ 1,631,664.00	\$ -	\$ 1,631,664.00	5920	10132	\$ 2,792,570.89	\$ 2,792,570.89
1999	\$ 1,714,730.00	\$ 260,000.00	\$ 1,454,730.00	6059	10132	\$ 2,432,633.17	\$ 2,432,633.17
2000	\$ 2,752,597.00	\$ -	\$ 2,752,597.00	6221	10132	\$ 4,483,091.59	\$ 4,483,091.59
2001	\$ 3,609,790.00	\$ 105,000.00	\$ 3,504,790.00	6343	10132	\$ 5,598,381.25	\$ 5,598,381.25
2002	\$ 12,444,054.00	\$ -	\$ 12,444,054.00	6538	10132	\$ 19,284,667.35	\$ 19,284,667.35
2003	\$ 16,854,836.00	\$ -	\$ 16,854,836.00	6694	10132	\$ 25,511,383.08	\$ 25,511,383.08
2004	\$ 16,266,860.13	\$ -	\$ 16,266,860.13	7129	10132	\$ 23,119,066.75	\$ 23,119,066.75
2006	\$ 62,320.00	\$ -	\$ 62,320.00	7751	10132	\$ 81,463.84	\$ 81,463.84
2007	\$ 1,858,303.00	\$ -	\$ 1,858,303.00	7967	10132	\$ 2,363,289.32	\$ 2,363,289.32
2008	\$ 5,395,900.20	\$ -	\$ 5,395,900.20	8310	10132	\$ 6,578,972.42	\$ 6,578,972.42
2009	\$ 77,500.00	\$ -	\$ 77,500.00	8570	10132	\$ 91,625.44	\$ 91,625.44
2010	\$ 68,140.00	\$ -	\$ 68,140.00	8802	10132	\$ 78,436.09	\$ 78,436.09
2011	\$ 396,061.86	\$ 100,000.00	\$ 296,061.86	9070	10132	\$ 330,727.54	\$ 330,727.54
2012	\$ 1,638,099.00	\$ -	\$ 1,638,099.00	9308	10132	\$ 1,783,113.35	\$ 1,783,113.35
2013	\$ 236,875.00	\$ -	\$ 236,875.00	9547	10132	\$ 251,389.70	\$ 251,389.70
2014	\$ 205,871.84	\$ -	\$ 205,871.84	9806	10132	\$ 212,716.04	\$ 212,716.04
2015	\$ 7,528,858.00	\$ 25,000.00	\$ 7,503,858.00	10034	10132	\$ 7,577,146.63	\$ 7,577,146.63
Total Historical & Trended Cost	\$ 119,069,096.24	\$ 1,885,766.42	\$ 117,183,329.82			\$ 240,406,332.70	\$ 240,406,332.70

Exhibit 2b - Detailed Historical/Replacement Cost Breakdown - Collection

HISTORICAL TRENDED COSTS

Project Completion Year	Total Historical Cost		Grants		Net Cost		ENR Index		Trend Factor		Trended Cost		Collection Cost	
COLLECTION														
1970	\$	6,151,546.89	\$	807,531.05	\$	5,344,015.84	1381	10132	7.34	\$	39,207,507.97	\$	39,207,507.97	
1999	\$	110,782.00	\$	-	\$	110,782.00	6060	10132	1.67	\$	185,221.65	\$	185,221.65	
2003	\$	152,455.00	\$	-	\$	152,455.00	6695	10132	1.51	\$	230,720.55	\$	230,720.55	
2005	\$	1,314,124.00	\$	1,314,124.00	\$	-	7446	10132	1.36	\$	-	\$	-	
2006	\$	1,402,896.00	\$	1,402,896.00	\$	-	7751	10132	1.31	\$	-	\$	-	
2007 ¹	\$	785,055.00	\$	785,055.00	\$	-	7967	10132	1.27	\$	-	\$	-	
2008 ¹	\$	522,182.45	\$	504,192.45	\$	17,990.00	8310	10132	1.22	\$	21,934.38	\$	21,934.38	
2009	\$	1,157,316.39	\$	1,157,316.39	\$	-	8570	10132	1.18	\$	-	\$	-	
2010	\$	990,316.00	\$	990,316.00	\$	-	8802	10132	1.15	\$	-	\$	-	
2011	\$	108,562.44	\$	108,562.44	\$	-	9070	10132	1.12	\$	-	\$	-	
2012	\$	676,520.00	\$	676,520.00	\$	-	9308	10132	1.09	\$	-	\$	-	
2013 ¹	\$	2,640,435.00	\$	2,640,435.00	\$	-	9547	10132	1.06	\$	-	\$	-	
2014 ¹	\$	1,124,344.68	\$	1,124,344.68	\$	-	9806	10132	1.03	\$	-	\$	-	
2015	\$	62,741.00	\$	-	\$	62,741.00	10034	10132	1.01	\$	63,353.78	\$	63,353.78	
Total Historical & Trended Cost	\$	17,199,276.85	\$	11,511,293.01	\$	5,687,983.84				\$	39,708,738.32	\$	39,708,738.32	
TOTAL HISTORICAL COSTS (ROUNDED)												\$	39,708,738.32	

REPLACEMENT COSTS

Project Completion Year	Project Description		Units	Cost/Unit	Total Replacement Cost	Grants/Contributed Facilities/Assessments	Collection Replacement Cost
COLLECTION							
1970	North Meter Pit	Building and Structures	1	\$ 35,600.84	\$ 35,600.84	\$ 35,600.84	\$ -
1970	South Meter Pit	Building and Structures	1	\$ 35,600.84	\$ 35,600.84	\$ 35,600.84	\$ -
1970	Land ²	Land - Maylie	1	\$ 491,291.64	\$ 491,291.64	\$ 368,468.73	\$ 122,822.91
1972	Land ²	Land - ROW	1	\$ 186,277.85	\$ 186,277.85	\$ 139,708.39	\$ 46,569.46
1974	Harris Drive	Pumps and Controls	180 gpm	\$ 206,484.89	\$ 206,484.89	\$ 206,484.89	\$ -
1974	Harris Drive	Wetwell and Structures	1	\$ 299,047.08	\$ 299,047.08	\$ 299,047.08	\$ -
1974	Outer Drive	Pumps and Controls	180 gpm	\$ 206,484.89	\$ 206,484.89	\$ 206,484.89	\$ -
1974	Outer Drive	Wetwell and Structures	1	\$ 299,047.08	\$ 299,047.08	\$ 299,047.08	\$ -
1974	Kaywood	Pumps and Controls	180 gpm	\$ 206,484.89	\$ 206,484.89	\$ 206,484.89	\$ -
1974	Kaywood	Wetwell and Structures	1	\$ 299,047.08	\$ 299,047.08	\$ 299,047.08	\$ -
1979	Whitehall Road	Pumps and Controls	60 gpm	\$ 149,523.54	\$ 149,523.54	\$ 149,523.54	\$ -
1979	Whitehall Road	Wetwell and Structures	1	\$ 242,085.73	\$ 242,085.73	\$ 242,085.73	\$ -
1980	Gravity Sewer	Four Foot Diameter Brick or Concrete	5386	\$ 4,200.00	\$ 22,621,200.00	\$ 21,782,577.57	\$ 838,622.43
1980	Gravity Sewer	Five Foot Diameter Concrete	50	\$ 5,000.00	\$ 250,000.00	\$ 187,500.00	\$ 62,500.00
1980	Gravity Sewer	Air Release Manholes	45	\$ 4,000.00	\$ 180,000.00	\$ 135,000.00	\$ 45,000.00
1980	Gravity Sewer	8" Diameter Gravity Sewer	780344	\$ 100.00	\$ 78,034,400.00	\$ 78,034,400.00	\$ -
1980	Gravity Sewer	10" Diameter Gravity Sewer	17002	\$ 105.00	\$ 1,785,210.00	\$ -	\$ 1,785,210.00
1980	Gravity Sewer	12" Diameter Gravity Sewer	13041	\$ 110.00	\$ 1,434,510.00	\$ -	\$ 1,434,510.00
1980	Forcemain	1.5" Diameter Forcemain ¹	375	\$ 39.00	\$ 14,625.00	\$ 10,968.75	\$ 3,656.25
1980	Forcemain	2" Diameter Forcemain ¹	414	\$ 39.00	\$ 16,146.00	\$ 12,109.50	\$ 4,036.50
1980	Forcemain	3" Diameter Forcemain ¹	4120	\$ 42.00	\$ 173,040.00	\$ 129,780.00	\$ 43,260.00
1980	Land ²	Pump Station/Meter Pit Sites	1	\$ 1,246,029.52	\$ 1,246,029.52	\$ 934,522.14	\$ 311,507.38
1980	Land ²	Forcemain and Gravity Sewer Easements	1	\$ 6,764,160.22	\$ 6,764,160.22	\$ 5,073,120.17	\$ 1,691,040.06
1986	North Meter Pit	Metering Equipment	1	\$ 242,085.73	\$ 242,085.73	\$ 242,085.73	\$ -
1986	South Meter Pit	Metering Equipment	1	\$ 242,085.73	\$ 242,085.73	\$ 242,085.73	\$ -
1986	Haymarket	Pumps and Controls	83 gpm	\$ 156,643.71	\$ 156,643.71	\$ 156,643.71	\$ -
1986	Haymarket	Wetwell and Structures	1	\$ 256,326.07	\$ 256,326.07	\$ 256,326.07	\$ -
1988	Persia	Pumps and Controls	69 gpm	\$ 156,643.71	\$ 156,643.71	\$ 156,643.71	\$ -
1988	Persia	Wetwell and Structures	1	\$ 256,326.07	\$ 256,326.07	\$ 256,326.07	\$ -
1988	Scenery Park	Pumps and Controls	68 gpm	\$ 156,643.71	\$ 156,643.71	\$ 156,643.71	\$ -
1988	Scenery Park	Wetwell and Structures	1	\$ 256,326.07	\$ 256,326.07	\$ 256,326.07	\$ -
1990	Piney Ridge	Pumps and Controls	174 gpm	\$ 206,484.89	\$ 206,484.89	\$ 206,484.89	\$ -
1990	Piney Ridge	Wetwell and Structures	1	\$ 299,047.08	\$ 299,047.08	\$ 299,047.08	\$ -
1990	Piney Ridge	Generator	1	\$ 42,721.01	\$ 42,721.01	\$ 42,721.01	\$ -
1991	Aspen Heights	Pumps and Controls	111 gpm	\$ 170,884.05	\$ 170,884.05	\$ 170,884.05	\$ -
1991	Aspen Heights	Wetwell and Structures	1	\$ 249,205.90	\$ 249,205.90	\$ 249,205.90	\$ -
1992	St. Ives Place	Pumps and Controls	90 gpm	\$ 163,763.88	\$ 163,763.88	\$ 163,763.88	\$ -
1992	St. Ives Place	Wetwell and Structures	1	\$ 270,566.41	\$ 270,566.41	\$ 270,566.41	\$ -
1994	Land ²	Land - ROW	1	\$ 30,349.01	\$ 30,349.01	\$ 22,761.76	\$ 7,587.25
1995	Graysdale 2A	Pumps and Controls	76 gpm	\$ 156,643.71	\$ 156,643.71	\$ 156,643.71	\$ -
1995	Graysdale 2A	Wetwell and Structures	1	\$ 256,326.07	\$ 256,326.07	\$ 256,326.07	\$ -
1999	Graysdale 2B	Pumps and Controls	76 gpm	\$ 156,643.71	\$ 156,643.71	\$ 156,643.71	\$ -
1999	Graysdale 2B	Wetwell and Structures	1	\$ 256,326.07	\$ 256,326.07	\$ 256,326.07	\$ -
1999	Graysdale 2B	Generator	1	\$ 35,600.84	\$ 35,600.84	\$ 35,600.84	\$ -
1999	Fox Hill Road	Pumps and Controls	167 gpm	\$ 199,364.72	\$ 199,364.72	\$ 199,364.72	\$ -
1999	Fox Hill Road	Wetwell and Structures	1	\$ 284,806.75	\$ 284,806.75	\$ 284,806.75	\$ -
1999	Fox Hill Road	Generator	1	\$ 49,841.18	\$ 49,841.18	\$ 49,841.18	\$ -
2003	Claster's Meter Pit	Building and Structures	1	\$ 58,385.38	\$ 58,385.38	\$ -	\$ 58,385.38
2004	Marywood	Pumps and Controls (146 gpm)	1	\$ 185,124.39	\$ 185,124.39	\$ 185,124.39	\$ -
2004	Marywood	Wetwell and Structures	1	\$ 270,566.41	\$ 270,566.41	\$ 270,566.41	\$ -
2004	Marywood	Generator	1	\$ 42,721.01	\$ 42,721.01	\$ 42,721.01	\$ -
2013	Land ²	Land - Top of Hill	1	\$ 28,715.64	\$ 28,715.64	\$ 21,536.73	\$ 7,178.91
Total Replacement Cost					\$ 120,313,466.05	\$ 113,851,579.53	\$ 6,461,886.53
SUBTOTAL REPLACEMENT COSTS (ROUNDED)							\$ 6,461,886.53
Engineering, Permitting, Bidding, & Construction Administration (6%)							\$ 387,713.19
Legal and Financing Costs (2.0%)							\$ 129,237.73
TOTAL REPLACEMENT COSTS							\$ 6,978,837.45
TOTAL COSTS (HISTORICAL + REPLACEMENT)							\$ 46,687,575.77

1) Total value of projects completed has been reduced to accout for projects assessed via a Special Purpose Fee.
2) Land values obtained from comprehensive report by Industrial Appraisal Company dated May 1, 2015 and has been adjusted by the same formula used for other components. HRG does not certify land values.

Exhibit 3 - Summary of Outstanding Debt Related to Facilities

Due Date	10A Principle	10A Interest	2011A Principle	2011A Interest	2012 Principle	2012 Interest	2014 Principle	2014 Interest	2015 Principle	2015 Interest	Emmaus Prin.	Emmaus Int.	Total Debt Service Due
Mar-16	\$2,500	\$114,265	\$170,000	\$82,299	\$1,317,500	\$232,200	\$795,000	\$662,060		\$153,660	\$75,000	\$18,977	\$3,623,460
Sep-16	\$2,500	\$114,265	\$170,000	\$82,299	\$1,317,500	\$232,200	\$795,000	\$662,060		\$153,660			\$3,529,483
Mar-17	\$2,500	\$114,213	\$187,500	\$78,899	\$1,387,500	\$179,500	\$807,500	\$623,979		\$153,660	\$80,000	\$15,515	\$3,630,765
Sep-17	\$2,500	\$114,213	\$187,500	\$78,899	\$1,387,500	\$179,500	\$807,500	\$623,979		\$153,660			\$3,535,250
Mar-18	\$2,500	\$114,154	\$200,000	\$75,149	\$1,422,500	\$151,750	\$827,500	\$584,815		\$153,660	\$80,000	\$12,035	\$3,624,063
Sep-18	\$2,500	\$114,154	\$200,000	\$75,149	\$1,422,500	\$151,750	\$827,500	\$584,815		\$153,660			\$3,532,028
Mar-19	\$15,000	\$114,089	\$215,000	\$70,449	\$1,512,500	\$80,625	\$827,500	\$544,268		\$153,660	\$85,000	\$8,356	\$3,626,446
Sep-19	\$15,000	\$114,089	\$215,000	\$70,449	\$1,512,500	\$80,625	\$827,500	\$544,268		\$153,660			\$3,533,090
Mar-20	\$20,000	\$113,661	\$227,500	\$64,806	\$250,000	\$5,000	\$1,225,000	\$503,720		\$153,660	\$90,000	\$4,459	\$2,657,805
Sep-20	\$20,000	\$113,661	\$227,500	\$64,806	\$250,000	\$5,000	\$1,225,000	\$503,720		\$153,660			\$2,563,346
Mar-21	\$172,500	\$113,061	\$245,000	\$58,322			\$1,285,000	\$443,695	\$205,000	\$153,660	\$95,000	\$344	\$2,771,582
Sep-21	\$172,500	\$113,061	\$245,000	\$58,322			\$1,285,000	\$443,695	\$205,000	\$153,660			\$2,676,238
Mar-22	\$215,000	\$107,541	\$260,000	\$50,972			\$1,350,000	\$380,730	\$302,500	\$144,947			\$2,811,690
Sep-22	\$215,000	\$107,541	\$260,000	\$50,972			\$1,350,000	\$380,730	\$302,500	\$144,947			\$2,811,690
Mar-23	\$212,500	\$100,339	\$280,000	\$42,847			\$1,415,000	\$314,580	\$312,500	\$132,847			\$2,810,613
Sep-23	\$212,500	\$100,339	\$280,000	\$42,847			\$1,415,000	\$314,580	\$312,500	\$132,847			\$2,810,613
Mar-24	\$207,500	\$93,008	\$297,500	\$33,747			\$1,490,000	\$245,245	\$325,000	\$120,347			\$2,812,346
Sep-24	\$207,500	\$93,008	\$297,500	\$33,747			\$1,490,000	\$245,245	\$325,000	\$120,347			\$2,812,346
Mar-25	\$207,500	\$85,641	\$320,000	\$23,706			\$1,557,500	\$172,235	\$332,500	\$112,628			\$2,811,711
Sep-25	\$207,500	\$85,641	\$320,000	\$23,706			\$1,557,500	\$172,235	\$332,500	\$112,628			\$2,811,711
Mar-26	\$200,000	\$78,171	\$345,000	\$12,506			\$1,635,000	\$95,918	\$342,500	\$104,316			\$2,813,411
Sep-26	\$200,000	\$78,171	\$345,000	\$12,506			\$1,635,000	\$95,918	\$342,500	\$104,316			\$2,813,411
Mar-27	\$907,500	\$70,771					\$157,500	\$15,803	\$1,565,000	\$95,325			\$2,811,899
Sep-27	\$907,500	\$70,771					\$157,500	\$15,803	\$1,565,000	\$95,325			\$2,811,899
Mar-28	\$942,500	\$36,286					\$165,000	\$8,085	\$1,612,500	\$48,375			\$2,812,746
Sep-28	\$942,500	\$36,286					\$165,000	\$8,085	\$1,612,500	\$48,375			\$2,812,746
TOTAL	\$6,215,000	\$2,510,400	\$5,495,000	\$1,187,406	\$11,780,000	\$1,298,150	\$27,075,000	\$9,190,262	\$9,995,000	\$3,361,483	\$505,000	\$59,686	\$78,672,387
Percent Capacity	100%	100%	100%	100%	100%	100%	100%	100%	80%	80%	0%	0%	
Total Capacity	\$6,215,000	\$2,510,400	\$5,495,000	\$1,187,406	\$11,780,000	\$1,298,150	\$27,075,000	\$9,190,262	\$7,996,000	\$2,689,186	\$0	\$0	\$75,436,405
Percent Collection	0%	0%	0%	0%	0%	0%	0%	0%	20%	20%	0%	0%	
Total Collection	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,999,000	\$672,297	\$0	\$0	\$2,671,297
Percent Special Purpose	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%	
Total Special Purpose	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$505,000	\$59,686	\$564,686.00

Exhibit 4 - Derivation of Organic Based Tapping Fee Charge

A. Determination of Conversion Factor Based Upon Historic UAJA Loadings

Avg. Historic BOD Loading (Years 2010 - 2014) (Per Chapter 94 Report)	0.38 lb/day/EDU
	2.63 EDUs/1 lb BOD

B. Verification of Above Conversion Factor Based Upon Industry Standards

BOD = 0.17 lb/day/capita	(Per DEP Domestic Wastewater Facilities Manual)
Capita per Household = 2.38	(Census Data - Centre County)

Lbs/day/EDU = 0.17 lb/day/cap * 2.38 people per household =	0.40 lb/day/EDU
	2.47 EDUs/1 lb BOD

(UAJA historic loading data appears appropriate when compared to standard industry approximations. With the consideration given to water saving appliances, UAJA's wastewater stream has a slightly higher concentration than predicted by the standard model.)

C. Verification Based Upon Capacity of AWTF

UAJA Influent BOD Loading Capacity Per Day =	38,801 lb.
UAJA Permitted Capacity =	9,000,000 gpd
Gallons/ lb. BOD =	231.95
Gallons per Residential User (EDU) : 90 * 2.38 =	214
No. of EDUs in 1lb. BOD =	1.08 EDUs/1 lb BOD
No. of lb. BOD/ EDU =	0.92 lb/day/EDU

Facilities have been installed and permitted to handle historic BOD loadings shown above.

Determination of Organic Tapping Fee Charge

Organic Loading per EDU =	2.63 EDUs/1 lb BOD
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Max Tapping Fee/EDU - Capacity Part =	\$5,044.00 *2.63 EDUs/lb.
Capacity Part : Cost per Pound BOD₅ (non-residential) =	\$ 13,273.68 /lb

Max Tapping Fee/EDU - Collection Part =	\$1,344.00 *2.63 EDUs/lb.
Collection Part : Cost per Pound BOD₅ (non-residential) =	\$ 3,536.84 /lb

Total Residential Tapping Fee =	\$ 16,810.53 /lb
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