

Final Engineering Report

BIG SANDY WATER DISTRICT

PHASE V

WATER SYSTEM IMPROVEMENTS

Boyd, Lawrence and Carter Counties, Kentucky



J. F. Sisler 7/26/19

June 2019

SME Project Code: 15030



SISLER-MAGGARD ENGINEERING, PLLC

220 EAST REYNOLDS ROAD, SUITE A3

LEXINGTON, KY 40517

(859) 271-2978

Fax (859) 271-5670

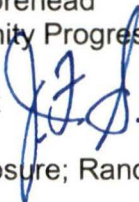
Email: sme@sislermaggard.com



MEMO

June 26, 2019

To: Elwood Howe, Area Director, Morehead
Anthony Hollingsworth, Community Progress Director

From: Joseph F. Sisler, P.E., President 

Cc: Big Sandy Water District w/enclosure; Randy Jones, Rubin & Hays

Subject: Big Sandy Water District
Phase V – Water System Improvements
SME #15030

The Big Sandy Water District (BSWD) received bids on the subject project on June 13, 2019. The Bid Tabulation is included herewith.

We have included the F.E.R. (Final Engineering Report) herewith and also simultaneously furnished same to Anthony Hollingsworth at State Office pursuant to his instructions. Also, in line with Ms. Teresa Shields instructions we have only included the changed pages from the P.E.R. such as New Budget, Proposed Rates, New loan amortization schedule, etc.

We have also included the full Revised Summary Addendum with the changed pages flagged to both parties.

We had a lengthy discussion with the Board at their June 19, 2019 regular Board meeting concerning the \$399,848 overrun. It should be noted that \$256,295 of the overrun is attributed to Contract H-1, which includes replacement of 47,000 L.F. of Blue Max service line and 1220 meter services which is 25.65% of their customers. The District believes the Blue Max to be a source of a major portion of their water losses, which is also stated herein is a subject of the PSC inquiry.

The Board by action at the Board meeting approved the necessary rate increase to improve their system.

As we stated in the F.E.R. the PSC has included BSWD in their water loss **hit** list. Since this project is primarily the District's long-term plan to deal with water loss, the sooner we can proceed to Construction the better, by getting in and out of Atlanta. However, we have included 90 days hold in contract documents. The details of these water loss improvement contracts: F-1 Water Tank Repairs & Painting; G-1 Pump Station Replacements & Upgrades; H-1 Service Line Replacements & Stream Crossing Replacements have been furnished to P.S.C.

If we can provide any further assistance, please advise.

FINAL ENGINEERING REPORT
BIG SANDY WATER DISTRICT
PHASE V – WATER SYSTEM IMPROVEMENTS
(HIGHLIGHTED ITEMS ARE REVISED)

TABLE OF CONTENTS

<u>Section</u>	<u>Description</u>	<u>Page No.</u>
	Executive Summary	E.S.
1	Project Planning	1
	a. Location	1
	b. Environmental Resources Present	2
	c. Population Trends	2
	d. Community Engagement	2
2	Existing Facilities	3
	a. Location Map	3
	b. History	3
	c. Condition of Existing Facilities	3
	d. Financial Status of any Existing Facilities	4
	e. Water/Energy/Waste Audits	5
3	Need for Project	6
	a. Health, Sanitation, and Security	6
	b. Aging Infrastructure	6
	c. Reasonable Growth	7
4	Alternatives Considered	8
	a. Design Criteria	8
	b. Map	8
	c. Environmental Impacts	8
	d. Land Requirements	9
	e. Potential Construction Problems	9
	f. Sustainability considerations	9
	i. Water and Energy Efficiency	9
	ii. Green Infrastructure	10
	iii. Other	10
	g. Cost Estimates	10
	i. Waterlines	10
	ii. Leak Detection Installations	10
	iii. Pump Stations	10
	iv. Water Tanks	11

5	Selection of an Alternative	12
	a. Life Cycle Cost Analysis	13
	b. Non-Monetary Factors	13
6	Proposed Project (Recommended Alternative)	15
	a. Preliminary Project Design	15
	b. Project Schedule	16
	c. Permit Requirements	17
	d. Sustainability considerations	17
	i. Water and Energy Efficiency	17
	ii. Green Infrastructure	17
	e. Total Project Cost Estimate (Engineer's Opinion of Probable Cost)	17
	f. Annual Operating Budget	17
	i. Income	17
	ii. Annual O&M Costs	17
	iii. Debt Repayment	17
	iv. Reserves	17
	v. Rate Structures	17
7	Conclusions and Recommendations	18
Appendix A	Estimated Construction and Project Cost	
Appendix B	Funding/Financial Section	
	Funding Breakdown	
	Statement of Budget, Income & Equity (RD442-7)	
	Operating Budget (RD442-7)	
	Amortization Schedules	
	RD Loan #1	
	RD Loan #2	
	Existing Rate Schedule	
	Proposed Rate Schedule	
	Bid Tabulations	
Appendix C	Water Purchase Agreements	
	Water Purchase Agreements	
	Water Purchase Agreement Extensions	
Appendix D	Water Tank Inspections	
Appendix E	Existing and Proposed Facilities	
Appendix F	Topo Maps	
	System Maps	

**FINAL ENGINEERING REPORT
BIG SANDY WATER DISTRICT
PHASE V – WATER SYSTEM IMPROVEMENTS**

EXECUTIVE SUMMARY

FINDINGS

Over the last 5-10 years the Big Sandy Water District has spent an immeasurable amount of time and resources of management, staff and personnel working to resolve their system water losses.

These efforts have included monthly discussions, directions and actions by the Board at their Board meetings. They have an ongoing Agenda item titled "Water Losses". Personnel efforts have included water line walking at night, bringing in KRWA circuit rider, contracting for installation of some isolation valves, etc.

This Phase V project is an enhancement and continuation of those efforts.

This project will be directed at trying to fix some items that have been found to be regular problems, such as replacing some stream crossings with HDD installation of HDPE piping with leak detection; installing valves and in line meters to isolate leaks with this project (District has purchased several valves and appurtenances for their own installation). Also will purchase and develop GPS system to allow/assist in readily locating valves, blowoffs, etc. so that system can be monitored and shut down to CONSERVE water when leaks occur,

The Repair and/or painting of (8) eight water storage tanks will resolve some small leaks, but is primarily an effort to clean and remove rusting of tanks to assist in maintaining chlorine residual/disinfection for sanitary reasons.

The District discovered over 10 years ago that the ¾" Blue Max Service lines previously installed with extension contracts has failed in many, many instances. The District has spent much time and resources to replace these on a continual basis. On this project approximately **1220** residential service lines will be replaced thru out the District.

The replacement of the existing inadequate water office is needed for better efficient operation and will provide public with better access to meetings and include a drive-up window.

Since the issuance of the L.O.C. (Letter of Conditions) 11/20/2018, the improvements were designed and bid on June 13, 2019 which is the basis for this F.E.R.

However, the enhanced need for this project for water loss remediation, the Ky Public Service Commissions (P.S.C.) issued an order # 2019-00041 on May 3, 2019 concerning water loses in 12 water Districts. The BSWD is part of that order and is responding to P.S.C. concerning their effects including this PHASE V project.

RECOMMENDATIONS

Based on studies, findings and conclusions and in accordance with other pertinent information contained in this report, it is recommended that the Big Sandy Water District take the following steps:

- A) Review this report, then direct the Engineer, upon notification of RD, to immediately complete necessary documentation to RD for further processing for Loan and Grant funds to construct the improvements outlined in this Report.
- B) Direct the Engineer to complete all necessary plans, specifications and contract documents to receive approvals and permission to advertise this project for bids.
- C) Upon completion of the above and receipt of approvals, initiate actions to acquire required permits, fee simple titles and right of way easements for construction areas.
- D) Upon favorable review of RD, make necessary arrangements, through local and bond counsel, to proceed with the Project.

- ii. Green Infrastructure – The water service line construction will be built, then seeded and strawed ASAP to minimize run-off during construction.

The one new water booster pump station (Quarry Branch) and office building will be fenced with sedimentation fences, then seeded and strawed.

- iii. Other – The new office building will be designed and constructed as an energy efficient building.

The operation of booster pump station at Quarry Branch, with more efficient pumps and VFD's is clearly more efficient and cost effective. The addition of VFD's at all the other pump stations will make them all more efficient.

g) Cost Estimates

The Cost Estimates for the project components is located in Appendix under Cost Estimates.

O & M Costs. This project is a basically a rehabilitation project and the goal of all improvements is to lower and control O & M costs.

- i. Waterlines - Replacing all the **1220+** leaking Blue Max PVC service lines – Subsequently repairs of breaks and/or leaks will reduce purchased water loss and save the cost of labor and materials for such repairs. Therefore, a significant savings to existing O & M costs will be realized by these water service line replacements to the 1220+ residences.
- ii. Leak detection installations – Water loss monitoring.
- iii. Pump Stations - These Pump Stations are over 20 years old and not in good repair.

The Cunningham Hill and Fuller Ridge Stations are in need of extensive repair. These stations will need new buildings, pumps, VFD's and some piping in place.

**FINAL ENGINEERING REPORT
BIG SANDY WATER DISTRICT
PHASE V – WATER SYSTEM IMPROVEMENTS**

SECTION 5 - SELECTION OF AN ALTERNATIVE

The selection of alternatives on this project, beyond “DO NOTHING” are really not alternatives. This project is the solution of (5) five direct and specific needs:

(1) Waterlines: Multiple service line replacements – The only real alternative is replacement (in place) of the many failing water service lines. The District has been replacing the failing Blue Max PVC service lines sporadically for 10+ years. However, the job is logically unsurmountable for a SMALL water district to replace ±1220 services. However, this work is a must, based on the known water losses.

(2) Water tanks: As previously discussed, the painting and repairs of the tanks is a necessity for the continued integrity of the system and the SANITARY necessities of maintaining chlorine residuals where rusting and leaks exist.

(3) Leak Monitoring Infrastructure: The District has diligently been chasing leaks for 5+ years. To assist in that effort this project will add the following:

- 1) Replace failing stream crossings with horizontal directional drilling of HDPE.
- 2) Adding leak detection assemblies at streams
- 3) Installing Master Meters in distribution system to isolate and determine flow before and after leaks
- 4) Provide system with GPS to allow ready location of all infrastructure such as valves, meters, blowoffs, etc. This will give ready access to items to isolate and confine leaks.
- 5) Install more “isolation” valves throughout system
- 6) District is already purchasing and installing “isolation” valves and will request reimbursement from project.

(4) Pump Stations: The existing pump stations are 20-30 years old and beyond their efficient operation and maintenance life time. We have outlined hereinbefore the necessary repair/replacement work on the pump stations.

(5) Office Building: The existing office building is a 20 year old deteriorating double wide that has electrical problems, insulation problems, rodent infestations, privacy of staff, etc.

The new building will be located on adjacent property that has become available. The old service station/general store property has been acquired by District and cleared in 2017.

The building will be energy efficient and operationally efficient for management staff to be allowed some privacy, more filing space (**including future space in reinforced attic**), conference room space to allow public participation with adequate parking and a drive up window.

a) Life Cycle Cost analysis – A life cycle/present worth cost analysis to evaluate present and future costs for comparison of alternatives is not needed due to the fact that these improvements are dictated by system failures and other alternatives are not viable or reasonable.

b) Non-Monetary Factors

- i. Operator Training – System operators already operate multiple pump stations and water tanks. Subsequently no new training will be required. Of course, the NEW or rehabbed pump station specifications will require the equipment's supplier to give "specific" training on their VFD's control panel, etc.
- ii. Design Criteria and Approvals and Permit Requirements – All waterlines and pump stations will be designed in accordance with Kentucky Natural Resources and Environmental Protection Cabinet, Division of Water (Ten State Standards), U.S. Department of Agriculture/Rural Development, and Kentucky Public Service Commission guidelines and their subsequent approvals. Approvals will be also secured from the Kentucky Natural Resources and Environmental Protection Cabinet, Division of Water Resources to obtain stream crossing permits where necessary.

Design drawings and Specifications will be submitted for approval by the Kentucky Natural Resources and Environmental Protection Cabinet, Division of Water, USDA/Rural Development and the Kentucky Public Service Commission.

**FINAL ENGINEERING REPORT
BIG SANDY WATER DISTRICT
PHASE V – WATER SYSTEM IMPROVEMENTS**

SECTION 6 – PROPOSED PROJECT (RECOMMENDED ALTERNATIVE)

a) Preliminary Project Design

i. Drinking Water –

EXISTING Water Suppliers – The water suppliers for the Big Sandy Water District System comes from the (7) seven sources as follows:

- 1) Ashland Water Works
- 2) City of Kenova, West Virginia
- 3) Louisa Board of Water and Sewer
- 4) Rattlesnake Ridge Water District
- 5) Cannonsburg Water District (Backup Only)
- 6) Paintsville (emergency backup only)
- 7) ~~Martin County Water District (emergency backup only)~~ - Dropped

The Water Purchase contracts are included in the Appendix. The current combined allocation limits far exceed the 1,150,000 MGD average usage.

ii. Storage –

No new storage is needed. However, (8) eight of the existing tanks will have painting and/or repairs under this project.

iii. Pumping Stations –

No new pump stations are proposed under this project. However, a new replacement pump station will be built at Quarry Branch **& Fuller Ridge**.

Several (5) other stations will have repairs/rehab work done and VFD's (variable frequency drives) added to increase operation efficiencies and electricity savings.

iv. Distribution Waterlines –

This project replaces approximately **1220+** service lines to residences throughout District.

v. Leak Detection –

Water loss is a major problem with the District and gets a lot of their attention. About 50% of this project is to help monitor and control the water losses. See itemization of the proposed actions under previous section and in the Cost Estimate in Appendix.

vi. New Office Building –

The new proposed **2100** S.F. office building, as outlined hereinbefore, will be constructed on ½ acre tract next to the existing office structure which is a 20 year old double wide.

b) Project Schedule – Plans and Specifications – It is anticipated that plans and specifications for water service lines, booster pump station replacements and upgrades, tank repairs and painting, water loss infrastructure and new office building will be submitted for approval to D.O.W. & Housing and Building Construction by Dec 1, 2018. The D.O.W. approval should be available on or before January 15, 2019.

Land Purchase – The office building site has been acquired in 2017. Copy of deed in Appendix.

Waterline easements – There should be none required. The service lines will be on public right-of-ways or existing easements.

Pump Stations and Water Tanks – No easements or deeds are required as work will be done on existing properties.

KDOT Encroachment Permit – **Obtained for U.S. 60 Pump Station repair.**

Advertisement for Bids – **May 23, 2019**

Contract(s) Awards – **September 15, 2019**

Loan Pre-Closing – **September 15, 2019**

Initiation of Construction – **October 1, 2019**

Substantial Completion – **March 1, 2020**

Final Completion – **April 1, 2020**

Initiation of Operation - **March 1, 2020**

APPENDIX A

ESTIMATED CONSTRUCTION

AND

PROJECT COST

Revised June 2019

Revised Budget			
(Actual Bids, June 13, 2019) See Attached Bid Tabulations			
Big Sandy Water District			
Phase V - Water System Improvements			
	Proposed	As Bid	Comments
Contract F-1 - Water Tank Painting & Repairs	\$ 709,000.00	\$ 674,400.00	\$34,600 Underrun
Contract G-1 - Pump Station Upgrades (not Cunningham Hill)	\$ 245,000.00	\$ 237,000.00	\$8,000 Underrun - No Cunningham Hill
Contract H-1 - Stream Crossings & Service Line Replacements	\$ 522,000.00	\$ 778,295.00	\$256,295 Overrun
Contract I-1 - New Office Building	\$ 250,000.00	\$ 436,153.00	\$186,153 Overrun (adjusted) SEE AWARD NEGOTIATION ATTACHMENTS
Construction Costs	\$ 1,726,000.00	\$ 2,125,848.00	\$399,848 Overrun
Other items in Original Budget			
System Master Meters (3", 4", 6")	\$ 64,000.00	\$ 64,000.00	
System GPS	\$ 30,000.00	\$ 30,000.00	
Misc. Valves by District	\$ 30,000.00	\$ 29,827.00	
Subtotal A	\$ 124,000.00	\$ 123,827.00	
Cunningham Hill Pump Station - Labor - Others (Replaced by District due to failure) - Pumps Material - Misc. Material		\$ 18,390.00 \$ 18,500.00 \$ 1,910.00	
Other Items not in Budget			
Emergency Stream Crossing replacements		\$ 76,200.00	
09/06/18 - SR 1/SR 3 - \$38,200			
05/03/19 - SR 32 - \$38,000			
Telemetry (2 new P.S.)		\$ 35,000.00	
Security System (Office)		\$ 2,500.00	
Septic Tank/Drain Field (office)		\$ 2,500.00	
Cabinets & Shelving (Office)		\$ 8,000.00	
Subtotal B		\$ 163,000.00	
Total Construction Cost	\$ 1,850,000.00	\$ 2,412,675.00	
10% Contingency	\$ 180,000.00	\$ 120,325.00	5%
Total Construction Cost	\$ 2,030,000.00	\$ 2,533,000.00	

PROJECT ESTIMATE

SME # 15030

06/26/2019

Total Construction Cost				\$ 2,533,000.00
<u>Engineering Fees (RD Fees) (\$2,533,000)</u>				
Basic (7.42%)				\$ 188,000.00
Resident Inspection (4.28%)				\$ 108,000.00
Additional Engineering (Permits [\$3,000], easements [\$6,000], surveying [\$4,000], Grant Administration [\$20,000], Environmental [\$10,000], Building Subs(Architectural, Mechanical, Electrical, Structural) [\$25,000]), Other [\$4,500])				\$ 72,500.00
Land Acquisition (Fuller \$300) (Quarry \$1,000) (Building \$60,000 + \$1,200)				\$ 62,500.00
Legal and Administrative				\$ 36,000.00
Interest During Construction				\$ 40,000.00
Total Actual Project Cost				\$ 3,040,000.00
<u>PROPOSED FUNDING (L.O.C. 11/20/2018)</u>				
USDA - RURAL DEVELOPMENT GRANT (28.48%)				\$ 700,000.00
USDA - RURAL DEVELOPMENT LOAN (67.94%)				\$ 1,670,000.00
Applicant (BSWD) - (3.58%)				\$ 88,000.00
Total Estimated Project Cost				\$ 2,458,000.00
<u>PROPOSED ADDITIONAL FUNDING</u>				
USDA - RURAL DEVELOPMENT GRANT (24.91%)				\$ 145,000.00
USDA - RURAL DEVELOPMENT LOAN (67.87%)				\$ 395,000.00
Applicant (BSWD) - (7.22%)				\$ 42,000.00
Total Additional Project Cost				\$ 582,000.00
<u>FINAL FUNDING</u>				
USDA - RURAL DEVELOPMENT GRANT (27.80%)				\$ 845,000.00
USDA - RURAL DEVELOPMENT LOAN (67.93%)				\$ 2,065,000.00
Applicant (BSWD) - (4.27%)				\$ 130,000.00
Total Project Cost				\$ 3,040,000.00

*Contract I-1
Building*

Award Negotiation!

Corrie

From: Corrie
Sent: Tuesday, June 18, 2019 2:22 PM
To: Jody Franklin; Joe@SislerMaggard.com
Subject: RE: Big Sandy Savings

Good afternoon Jody,

Please see Joe's remarks in [blue](#) below ...

Thank you,

Corrie Hanson

Administrative Assistant
Sisler-Maggard Engineering, PLLC
120 East Reynolds Rd, Suite A-3
Lexington, Kentucky 40517
59-271-2978-T
59-271-5670-F

Jody/Isaac,

The items that Joe had marked were plumbing fixtures, access stair to regular attic access, HM doors and hardware, and storefront. Per the subcontractors, here are where these changes came from:

1. Plumbing fixtures: Curtis said that his supplier changed the called out rear flushing toilet to a regular floor mount toilet in the Pro Flo brand – **Ok, but HC height! \$600 deduct.** Curtis thought that he had originally quoted an American Standard for the toilet. Also, they changed the kitchen area sink to a 15"x15" bar sink in the Pro Flo brand.
2. Delete specified access stair and install attic ladder: This change was made because the specifications called out a specific stair that was very expensive and did not pull down from the ceiling. We changed the cost to reflect a regular attic pull down stair with a 375 lb weight capacity. – **Ok, \$3,116.69 deduct.**
4. HM Doors and Hardware: Paul Johnson (the person from Schiller who quoted Big Sandy) said in an email to me the following: Good news!! After reviewing the cost and talking with management we were able to use one of our buying programs and reduce the project cost of this project by \$2,000 reflected in the hollow metal pricing. We appreciate the opportunity to help save you and the customer money and hope to be working with you on this soon!!" – **Ok, \$2,830 deduct.**
1. Storefront: This change came largely (if not all) from switching from Cardinal Glass, who we had originally quoted, to May Contracting. - **Ok, \$7,300 deduct.**

Total Deducts = \$13,846.69
Therefore \$450,000 – 13,846.69 = \$436,153.00 (rounded off)
Will recommend as basis of award!

Thank you,

Maci

Original Bid		\$ 474,005.20
	Item Description	Amount Deducted
1	Eliminate generator, transfer switch, generator pad, bollards, gas piping and tank pad.	\$ (25,900.00)
2	Plumbing fixture change	\$ (600.00)
3	Delete specified access stair and install attic ladder	\$ (3,116.69)
4	HM Doors & Hardware change to equals	\$ (2,830.00)
5	Eliminate Dedication Plaque	\$ (880.00)
6	Painting and coatings change	\$ (350.00)
7	Delete metal roof and install shingle roof	\$ (7,987.32)
8	Bid adjustment: Intended Lump sum bid was \$450,000.00 including unit prices.	\$ (24,005.20)
9	Change storefront to equals	\$ (7,300.00)
Total Deductions		\$ (72,969.21)
New quote minus deductions suggested		\$ 401,035.99

Please some further explanation of items 2, 3, 4, 9

Therefore actual bid of \$474,005.20 is adjusted to \$450,000

APPENDIX B

FUNDING/FINANCIAL SECTION (2 Pages)

FUNDING BREAKDOWN

~~STATEMENT OF BUDGET, INCOME & EQUITY (RD442-2)~~

~~OPERATING BUDGET (RD442-7)~~

AMORTIZATION SCHEDULE

RD LOAN #1

RD LOAN #2

EXISTING RATE SCHEDULE

PROPOSED RATE SCHEDULE

BID TABULATIONS

Revised June 26, 2019

FINANCIAL

The Big Sandy Water District (BSWD) system covers the western and southern portion of Boyd County, the small eastern portion of Carter County and nearly all of rural-southern, eastern and western Lawrence County that is not covered by the City of Louisa. The primary rural waterline by City of Louisa is in the Fallsburg area along S.R. 3 and west of town in Busseyville/Yatesville Lake area along S.R. 32. As stated in the "existing facilities" portion of this report the BSWD took over the Lawrence County Water District in 2001 at the request of USDA - Rural Development. The Lawrence County Water District customers were approved by KY PSC (Public Service Commission) under the BSWD rate structure.

The water purchase rates from the various water companies that BSWD purchases water from, vary significantly and have continued to grow frequently (at least every year) for the past few years. In Summer 2018 the rates were as follows:

City of Kenova	\$2.55/1000 gallons	
City of Ashland	\$2.19/1000 gallons	
City of Louisa	\$3.66/1000 gallons	
Cannonsburg Water District	\$4.42/1000 gallons	← \$4.60 + \$4.00 Surcharge per bill for 4 years. Effective May 1, 2019
Rattlesnake Ridge Water District	\$3.82/1000 gallons	

The City of Ashland purchase agreement of 2013 had agreed to hold their published bulk rate less .75¢/1000 gallons (which is currently \$2.94 - .75¢ = \$2.19/1000 gallons) for 5 years until 2018 and then it would raise to their bulk rate that they charge Cannonsburg Water District as established by current Ashland Rate Ordinance. That rate is anticipated to be around \$2.94/1000 gallons in 2019.

Revised 06/26/2019

FINANCIAL

(Based on actual bids 06/13/19)

BIG SANDY WATER DISTRICT

Committed loan of \$1,672,000 (Interest Rate 2.375%)

Debt Service = \$72,000

Proposed new loan of \$395,000 (Interest Rate 2.125%)

Debt Service = \$16,500

Proposed Rate Increase (Per L.O.C.) (4000 gal) is 5.28%

New Loan

\$395,000

Rate Increase

(7.95%) \$3.42/mo.

Revenue Based On

4676 – Residential Customers

80 – Non-Residential Customers

4756 – Customers

FUNDING BREAKDOWN

SME # 15030

06/26/2019

PROPOSED FUNDING (L.O.C. 11/20/2018)				
USDA - RURAL DEVELOPMENT GRANT (28.48%)				\$ 700,000.00
USDA - RURAL DEVELOPMENT LOAN (67.94%)				\$ 1,670,000.00
Applicant (BSWD) - (3.58%)				\$ 88,000.00
Total Estimated Project Cost				\$ 2,458,000.00
PROPOSED ADDITIONAL FUNDING				
USDA - RURAL DEVELOPMENT GRANT (24.91%)				\$ 145,000.00
USDA - RURAL DEVELOPMENT LOAN (67.87%)				\$ 395,000.00
Applicant (BSWD) - (7.22%)				\$ 42,000.00
Total Additional Project Cost				\$ 582,000.00
FINAL FUNDING				
USDA - RURAL DEVELOPMENT GRANT (27.80%)				\$ 845,000.00
USDA - RURAL DEVELOPMENT LOAN (67.93%)				\$ 2,065,000.00
Applicant (BSWD) - (4.27%)				\$ 130,000.00
Total Project Cost				\$ 3,040,000.00

Big Sandy Water District			
Loan - RUS		TABLE DATA	
Loan amount:	\$1,670,000.00	Table starts at date: or at payment number: 1	
Ann. interest rate:	2.380%		
Term in years:	40		
Payments / year:	1		
First payment due:	1/1/2021	Payment: \$65,189.10	
Plus 10% Cover	\$6,518.91	No.	Payment Date
Total Annual Payment	\$71,708.00	1	1/1/2021
		2	1/1/2022
		3	1/1/2023
		4	1/1/2024
		5	1/1/2025
Use payment of:	\$65,189.10	Beginning balance at payment 1:	1,670,000.00
payment in table: 1		Cumulative interest prior to payment 1:	0.00

No.	Payment Date	Beginning Balance	Interest	Principal	Ending Balance	Cumulative Interest
1	1/1/2021	1,670,000.00	39,746.00	25,443.10	1,644,556.90	39,746.00
2	1/1/2022	1,644,556.90	39,140.45	26,048.64	1,618,508.26	78,886.45
3	1/1/2023	1,618,508.26	38,520.50	26,668.60	1,591,839.66	117,406.95
4	1/1/2024	1,591,839.66	37,885.78	27,303.31	1,564,536.35	155,292.74
5	1/1/2025	1,564,536.35	37,235.97	27,953.13	1,536,583.22	192,528.70
6	1/1/2026	1,536,583.22	36,570.68	28,618.41	1,507,964.81	229,099.38
7	1/1/2027	1,507,964.81	35,889.56	29,299.53	1,478,665.28	264,988.94
8	1/1/2028	1,478,665.28	35,192.23	29,996.86	1,448,668.41	300,181.18
9	1/1/2029	1,448,668.41	34,478.31	30,710.79	1,417,957.63	334,659.49
10	1/1/2030	1,417,957.63	33,747.39	31,441.70	1,386,515.92	368,406.88
11	1/1/2031	1,386,515.92	32,999.08	32,190.02	1,354,325.91	401,405.96
12	1/1/2032	1,354,325.91	32,232.96	32,956.14	1,321,369.77	433,638.91
13	1/1/2033	1,321,369.77	31,448.60	33,740.49	1,287,629.27	465,087.51
14	1/1/2034	1,287,629.27	30,645.58	34,543.52	1,253,085.75	495,733.09
15	1/1/2035	1,253,085.75	29,823.44	35,365.65	1,217,720.10	525,556.53
16	1/1/2036	1,217,720.10	28,981.74	36,207.36	1,181,512.74	554,538.27
17	1/1/2037	1,181,512.74	28,120.00	37,069.09	1,144,443.65	582,658.27
18	1/1/2038	1,144,443.65	27,237.76	37,951.34	1,106,492.31	609,896.03
19	1/1/2039	1,106,492.31	26,334.52	38,854.58	1,067,637.74	636,230.55
20	1/1/2040	1,067,637.74	25,409.78	39,779.32	1,027,858.42	661,640.33
21	1/1/2041	1,027,858.42	24,463.03	40,726.06	987,132.35	686,103.36
22	1/1/2042	987,132.35	23,493.75	41,695.35	945,437.01	709,597.11
23	1/1/2043	945,437.01	22,501.40	42,687.69	902,749.31	732,098.51
24	1/1/2044	902,749.31	21,485.43	43,703.66	859,045.65	753,583.94
25	1/1/2045	859,045.65	20,445.29	44,743.81	814,301.84	774,029.23
26	1/1/2046	814,301.84	19,380.38	45,808.71	768,493.13	793,409.61
27	1/1/2047	768,493.13	18,290.14	46,898.96	721,594.17	811,699.75
28	1/1/2048	721,594.17	17,173.94	48,015.15	673,579.02	828,873.69
29	1/1/2049	673,579.02	16,031.18	49,157.91	624,421.10	844,904.87
30	1/1/2050	624,421.10	14,861.22	50,327.87	574,093.23	859,766.09
31	1/1/2051	574,093.23	13,663.42	51,525.68	522,567.55	873,429.51
32	1/1/2052	522,567.55	12,437.11	52,751.99	469,815.57	885,866.62
33	1/1/2053	469,815.57	11,181.61	54,007.48	415,808.08	897,048.23
34	1/1/2054	415,808.08	9,896.23	55,292.86	360,515.22	906,944.46
35	1/1/2055	360,515.22	8,580.26	56,608.83	303,906.39	915,524.72
36	1/1/2056	303,906.39	7,232.97	57,956.12	245,950.26	922,757.70
37	1/1/2057	245,950.26	5,853.62	59,335.48	186,614.78	928,611.31
38	1/1/2058	186,614.78	4,441.43	60,747.66	125,867.12	933,052.74
39	1/1/2059	125,867.12	2,995.64	62,193.46	63,673.66	936,048.38
40	1/1/2060	63,673.66	1,515.43	63,673.66	0.00	937,563.81

bswd**Loan - RUS****TABLE DATA**

Loan amount:	\$395,000.00	Table starts at date: or at payment number: 1
Ann. interest rat	2.125%	
Term in years:	40	
Payments / year	1	
First payment du	1/1/2020	

10% debt Coverage		\$1,475.79	Payment:	\$14,757.94
No.	Payment Date	Beginning Balance	Interest	
1	1/1/2020	395,000.00	8,393.75	
2	1/1/2021	387,160.02	8,227.15	
3	1/1/2022	379,153.44	8,057.01	
4	1/1/2023	370,976.72	7,883.26	
5	1/1/2024	362,626.25	7,705.81	

Use payment of: \$16,233.73 Beginning balance at payment 1: 395,000.00
 Payment in table: 1 Cumulative interest prior to payment 1: 0.00

Table

No.	Payment Date	Beginning Balance	Interest	Principal	Ending Balance	Cumulative Interest
1	#####	395,000.00	8,393.75	7,839.98	387,160.02	8,393.75
2	#####	387,160.02	8,227.15	8,006.58	379,153.44	16,620.90
3	#####	379,153.44	8,057.01	8,176.72	370,976.72	24,677.91
4	#####	370,976.72	7,883.26	8,350.47	362,626.25	32,561.17
5	#####	362,626.25	7,705.81	8,527.92	354,098.32	40,266.97
6	#####	354,098.32	7,524.59	8,709.14	345,389.18	47,791.56
7	#####	345,389.18	7,339.52	8,894.21	336,494.97	55,131.08
8	#####	336,494.97	7,150.52	9,083.21	327,411.76	62,281.60
9	#####	327,411.76	6,957.50	9,276.23	318,135.53	69,239.10
10	#####	318,135.53	6,760.38	9,473.35	308,662.18	75,999.48
11	#####	308,662.18	6,559.07	9,674.66	298,987.52	82,558.55
12	#####	298,987.52	6,353.48	9,880.25	289,107.28	88,912.04
13	#####	289,107.28	6,143.53	10,090.20	279,017.08	95,055.57
14	#####	279,017.08	5,929.11	10,304.62	268,712.46	100,984.68
15	#####	268,712.46	5,710.14	10,523.59	258,188.87	106,694.82
16	#####	258,188.87	5,486.51	10,747.22	247,441.65	112,181.33
17	#####	247,441.65	5,258.14	10,975.59	236,466.06	117,439.47
18	#####	236,466.06	5,024.90	11,208.83	225,257.23	122,464.37
19	#####	225,257.23	4,786.72	11,447.01	213,810.22	127,251.09
20	#####	213,810.22	4,543.47	11,690.26	202,119.96	131,794.56
21	#####	202,119.96	4,295.05	11,938.68	190,181.28	136,089.61
22	#####	190,181.28	4,041.35	12,192.38	177,988.90	140,130.96
23	#####	177,988.90	3,782.26	12,451.47	165,537.43	143,913.22
24	#####	165,537.43	3,517.67	12,716.06	152,821.37	147,430.89
25	#####	152,821.37	3,247.45	12,986.28	139,835.10	150,678.35
26	#####	139,835.10	2,971.50	13,262.23	126,572.86	153,649.84
27	#####	126,572.86	2,689.67	13,544.06	113,028.81	156,339.52
28	#####	113,028.81	2,401.86	13,831.87	99,196.94	158,741.38
29	#####	99,196.94	2,107.93	14,125.80	85,071.14	160,849.31
30	#####	85,071.14	1,807.76	14,425.97	70,645.17	162,657.07
31	#####	70,645.17	1,501.21	14,732.52	55,912.65	164,158.28
32	#####	55,912.65	1,188.14	15,045.59	40,867.07	165,346.43
33	#####	40,867.07	868.43	15,365.30	25,501.76	166,214.85
34	#####	25,501.76	541.91	15,691.82	9,809.95	166,756.77
35	#####	9,809.95	208.46	9,809.95	0.00	166,965.23
36	#####	0.00	0.00	0.00	0.00	166,965.23
37	#####	0.00	0.00	0.00	0.00	166,965.23
38	#####	0.00	0.00	0.00	0.00	166,965.23

EXISTING

FOR	DIVISION 1	
P.S.C. KY. NO.		1
30th Revised	SHEET NO.	1
CANCELLING P.S.C. KY. NO.		1
29th Revised	SHEET NO.	1

BIG SANDY WATER DISTRICT
 (Name of Utility)

Division 1 Monthly Water Rates (Original Big Sandy Water District Area)

5/8" x 3/4" Meter		
First	1,000 gallons	\$17.02 Minimum Bill
Next	9,000 gallons	8.67 per 1,000 gallons
Next	10,000 gallons	6.07 per 1,000 gallons
Next	20,000 gallons	5.65 per 1,000 gallons
Over	40,000 gallons	5.42 per 1,000 gallons
1" Meter		
First	10,000 gallons	\$94.97 Minimum Bill
Next	10,000 gallons	6.07 per 1,000 gallons
Next	20,000 gallons	5.65 per 1,000 gallons
Over	40,000 gallons	5.42 per 1,000 gallons
1 1/2" Meter		
First	20,000 gallons	\$155.67 Minimum Bill
Next	20,000 gallons	5.65 per 1,000 gallons
Over	40,000 gallons	5.42 per 1,000 gallons
2" Meter		
First	40,000 gallons	\$268.67 Minimum Bill
Over	40,000 gallons	5.42 per 1,000 gallons
3" Meter		
First	100,000 gallons	\$593.87 Minimum Bill
Over	100,000 gallons	5.42 per 1,000 gallons
4" Meter		
First	200,000 gallons	\$1,135.87 Minimum Bill
Over	200,000 gallons	5.42 per 1,000 gallons
Wholesale Water Rate		
Cannonsburg Water District		\$5.12 per 1,000 gallons

Rates based on monthly consumption and calculated per 100 gallons

Date of Issue 1/13/2017
 Month / Date / Year

Date Effective 1/1/2017
 Month / Date / Year

Issued By Paul E. Thomas
 Signature of Officer

Title Chairman
 BY AUTHORITY OF ORDER OF THE PUBLIC SERVICE COMMISSION
 IN CASE NO. 2016-00423 DATED 01/04/17

KENTUCKY
PUBLIC SERVICE COMMISSION

Talina R. Mathews
 EXECUTIVE DIRECTOR

Talina R. Mathews

EFFECTIVE
1/1/2017
PURSUANT TO BULK RATE SCHEDULE 9(1)

BIG SANDY WATER DISTRICT
(Name of Utility)

FOR	DIVISION 2
P.S.C. KY. NO.	1
28th Revised	SHEET NO. 2
CANCELLING P.S.C. KY. NO.	1
27th Revised	SHEET NO. 2

Division 2 Monthly Water Rates (Former Overland Development Area)

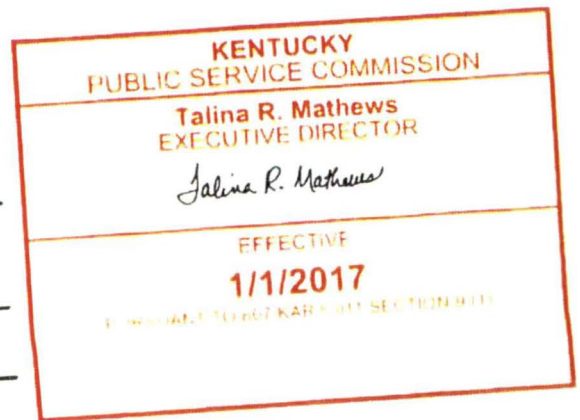
First	2,000 gallons	\$25.48 Minimum Bill
Next	8,000 gallons	10.01 per 1,000 gallons
Next	20,000 gallons	8.23 per 1,000 gallons
Next	20,000 gallons	7.29 per 1,000 gallons
Over	50,000 gallons	6.39 per 1,000 gallons

Date of Issue 1/13/2017
Month / Date / Year

Date Effective 1/1/2017
Month / Date / Year

Issued By *Paul E. Thomas*
Signature of Officer

Title Chairman
BY AUTHORITY OF ORDER OF THE PUBLIC SERVICE COMMISSION
IN CASE NO. 2016-00423 DATED 01/04/17



PROPOSED

A. Recommended Rate Schedule with RUS Grant:

Meter Size 5/8"

First 1,000 Gallons @ \$ 18.25 *Minimum.*
Next 9,000 Gallons @ \$ 9.40 *per 1,000 Gallons.*
Next 10,000 Gallons @ \$ 6.40 *per 1,000 Gallons.*
Next 20,000 Gallons @ \$ 5.95 *per 1,000 Gallons.*
All Over 40,000 Gallons @ \$ 5.70 *per 1,000 Gallons*

Meter Size 1" :

First 10,000 Gallons @ \$ 102.85 *Minimum.*
Next 10,000 Gallons @ \$ 6.40 *per 1,000 Gallons.*
Next 20,000 Gallons @ \$ 5.95 *per 1,000 Gallons.*
ALL OVER 40,000 Gallons @ \$ 5.70 *per 1,000 Gallons.*

Meter Size 1 1/2" :

First 20,000 Gallons @ \$ 166.85 *Minimum.*
Next 20,000 Gallons @ \$ 5.95 *per 1,000 Gallons.*
ALL OVER 40,000 Gallons @ \$ 5.70 *per 1,000 Gallons.*

Meter Size 2" :

First 40,000 Gallons @ \$ 285.85 *Minimum.*
ALL OVER 40,000 Gallons @ \$ 5.70 *per 1,000 Gallons.*

Meter Size 3" :

First 100,000 Gallons @ \$ 627.85 *Minimum.*
ALL OVER 100,000 Gallons @ \$ 5.70 *per 1,000 Gallons.*

PROPOSED

Meter Size 4":

First 200,000 Gallons @ \$ 1,197.85 Minimum.

ALL OVER 200,000 Gallons @ \$ 5.70 per 1,000 Gallons.

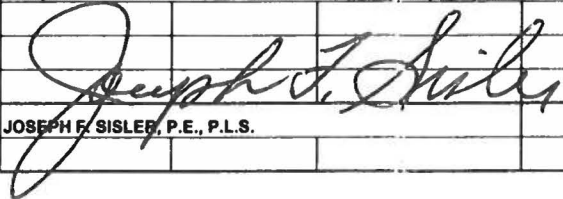
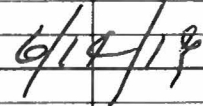
Overland Development

Same as above

Cannonsburg Water District

Same as above

- If more than one rate, use additional sheets.

BID TAB														
BIG SANDY WATER DISTRICT														
PHASE V - WATER SYSTEM IMPROVEMENTS														
CONTRACT F-1 - WATER TANK PAINTING & REPAIRS														
BID OPENING 06/13/2019 @ 12:00 noon														
				1		2		3		4		5		
				Currens Construction Services, LLC Harrodsburg, KY		Worldwide Industries Corp. Butler, PA		D & M Painting Corp. Washington, PA		Seven Brothers Painting, Inc. Shelby Township, MI		Superior Industrial Maint. Co. Concord, NC		
Engineers Estimate														
ITEM NO.	ITEM DESCRIPTION	UNIT QUANTITY	UNIT COST	TOTAL COST	UNIT COST	TOTAL COST	UNIT COST	TOTAL COST	UNIT COST	TOTAL COST	UNIT COST	TOTAL COST	UNIT COST	TOTAL COST
1	Sandblasting & Painting - 23,500 gallon steel ground storage tank (Fuller Ridge)	1 EA	\$ 35,000.00	\$ 35,000.00	\$ 43,700.00	\$ 43,700.00	\$ 44,162.00	\$ 44,162.00	\$ 65,800.00	\$ 65,800.00	\$ 70,000.00	\$ 70,000.00	\$ 130,548.00	\$ 130,548.00
2	Sandblasting & Painting - 40,600 gallon steel ground storage tank (Cunningham Hill)	1 EA	\$ 45,000.00	\$ 45,000.00	\$ 52,400.00	\$ 52,400.00	\$ 65,312.00	\$ 65,312.00	\$ 95,200.00	\$ 95,200.00	\$ 93,000.00	\$ 93,000.00	\$ 174,157.00	\$ 174,157.00
3	Sandblasting & Painting - 75,000 gallon steel ground storage tank (Quarry Branch)	1 EA	\$ 55,000.00	\$ 55,000.00	\$ 62,400.00	\$ 62,400.00	\$ 83,944.00	\$ 83,944.00	\$ 123,000.00	\$ 123,000.00	\$ 112,000.00	\$ 112,000.00	\$ 196,622.00	\$ 196,622.00
4	Sandblasting & Painting - 137,000 gallon steel ground storage tank (Rush Hill)	1 EA	\$ 100,000.00	\$ 100,000.00	\$ 106,900.00	\$ 106,900.00	\$ 137,805.00	\$ 137,805.00	\$ 148,000.00	\$ 148,000.00	\$ 171,000.00	\$ 171,000.00	\$ 295,814.00	\$ 295,814.00
5	Sandblasting & Painting - 216,000 gallon steel ground storage tank (Bowling Drive)	1 EA	\$ 120,000.00	\$ 120,000.00	\$ 133,200.00	\$ 133,200.00	\$ 174,825.00	\$ 174,825.00	\$ 192,400.00	\$ 192,400.00	\$ 208,000.00	\$ 208,000.00	\$ 336,110.00	\$ 336,110.00
6	Sandblasting & Painting - 106,000 gallon steel ground storage tank (Buchanan)	1 EA	\$ 90,000.00	\$ 90,000.00	\$ 88,300.00	\$ 88,300.00	\$ 107,910.00	\$ 107,910.00	\$ 142,000.00	\$ 142,000.00	\$ 140,000.00	\$ 140,000.00	\$ 247,740.00	\$ 247,740.00
7	Sandblasting & Painting - 300,000 gallon steel ground storage tank (U.S. 23)	1 EA	\$ 140,000.00	\$ 140,000.00	\$ 148,400.00	\$ 148,400.00	\$ 189,610.00	\$ 189,610.00	\$ 210,200.00	\$ 210,200.00	\$ 230,000.00	\$ 230,000.00	\$ 339,197.00	\$ 339,197.00
8	Misc. Repairs/Caulking - 360,000 gallon (glass lined) ground storage tank (U.S. 23)	1 EA	\$ 25,000.00	\$ 25,000.00	\$ 26,500.00	\$ 26,500.00	\$ 36,441.00	\$ 36,441.00	\$ 24,000.00	\$ 24,000.00	\$ 20,000.00	\$ 20,000.00	\$ 359,719.00	\$ 359,719.00
9	General Grinding (as needed - Rush Hill Tank)	20 M.HR	\$ 75.00	\$ 1,500.00	\$ 60.00	\$ 1,200.00	\$ 140.00	\$ 2,800.00	\$ 150.00	\$ 3,000.00	\$ 100.00	\$ 2,000.00	\$ 100.00	\$ 2,000.00
10	Welding Seams (as needed - Rush Hill Tank)	40 LF	\$ 25.00	\$ 1,000.00	\$ 40.00	\$ 1,600.00	\$ 100.00	\$ 4,000.00	\$ 125.00	\$ 5,000.00	\$ 100.00	\$ 4,000.00	\$ 200.00	\$ 8,000.00
11	Pit Filler (as needed - Rush Hill Tank)	5 GAL	\$ 500.00	\$ 2,500.00	\$ 600.00	\$ 3,000.00	\$ 800.00	\$ 4,000.00	\$ 1,000.00	\$ 5,000.00	\$ 500.00	\$ 2,500.00	\$ 200.00	\$ 1,000.00
12	Pit Welding (as needed - Rush Hill Tank)	20 PITS	\$ 20.00	\$ 400.00	\$ 30.00	\$ 600.00	\$ 25.00	\$ 500.00	\$ 20.00	\$ 400.00	\$ 50.00	\$ 1,000.00	\$ 100.00	\$ 2,000.00
13	Seam Rolling w/extra coat of epoxy (as needed - Rush Hill Tank)	100 LF	\$ 25.00	\$ 2,500.00	\$ 20.00	\$ 2,000.00	\$ 40.00	\$ 4,000.00	\$ 40.00	\$ 4,000.00	\$ 20.00	\$ 2,000.00	\$ 50.00	\$ 5,000.00
14	Quarry Branch Tank (review & recommend floor warpage repair)	1 LS	\$ 5,000.00	\$ 5,000.00	\$ 4,200.00	\$ 4,200.00	\$ 4,240.00	\$ 4,240.00	\$ 4,200.00	\$ 4,200.00	\$ 10,000.00	\$ 10,000.00	\$ 8,000.00	\$ 8,000.00
TOTAL CONSTRUCTION COSTS (Items 1-14)				\$ 622,900.00	\$ 674,400.00	\$ 859,549.00	\$ 1,022,200.00	\$ 1,065,500.00	\$ 2,105,907.00					
Certification: Sisler-Maggard Engineering, PLLC We hereby certify that the above bid tabulations accurately represents bids received, except for noted corrections, and the bids were promptly opened and read aloud.														
 JOSEPH F. SISLER, P.E., P.L.S.														
														

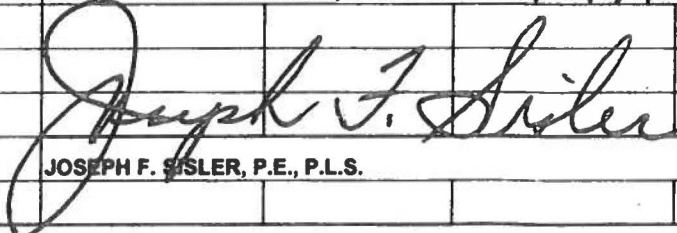
BID TAB

BIG SANDY WATER DISTRICT

PHASE V - WATER SYSTEM IMPROVEMENTS

CONTRACT G-1 - WATER BOOSTER PUMP STATION UPGRADES

BID OPENING 06/13/2019 @ 12:00 noon

		Engineers Estimate				1 B.P. Pipeline Quincy, KY		2 Triple B Construction Ashland, KY		3 Jones Contracting, LLC Lackey, KY	
ITEM NO.	ITEM DESCRIPTION	UNIT QUANTITY	UNIT COST	TOTAL COST	UNIT COST	TOTAL COST	UNIT COST	TOTAL COST	UNIT COST	TOTAL COST	
1	Proposed Quarry Branch Pump Station Complete	1 EA	\$ 110,000.00	\$ 110,000.00	\$ 110,000.00	\$ 110,000.00	\$ 144,900.00	\$ 144,900.00	\$ 256,300.00	\$ 256,300.00	
2	Proposed Fuller Ridge Pump Station Complete	1 EA	\$ 85,000.00	\$ 85,000.00	\$ 95,000.00	\$ 95,000.00	\$ 136,900.00	\$ 136,900.00	\$ 245,200.00	\$ 245,200.00	
3	Existing "U.S. 60" Pump Station (Coalton) - Furnish & Install - V.F.D	1 EA	\$ 25,000.00	\$ 25,000.00	\$ 32,000.00	\$ 32,000.00	\$ 19,500.00	\$ 19,500.00	\$ 13,000.00	\$ 13,000.00	
TOTAL CONSTRUCTION COSTS (Items 1-3)				\$ 220,000.00		\$ 237,000.00		\$ 301,300.00		\$ 514,500.00	
<p align="center">Certification: Sisler-Maggard Engineering, PLLC</p> <p>We hereby certify that the above bid tabulations accurately represents bids received, except for noted corrections, and the bids were promptly opened and read aloud.</p> <div style="display: flex; justify-content: space-between; align-items: flex-end;"> <div style="text-align: center;">  JOSEPH F. SISLER, P.E., P.L.S. </div> <div style="text-align: right;"> 6/14/19 </div> </div>											

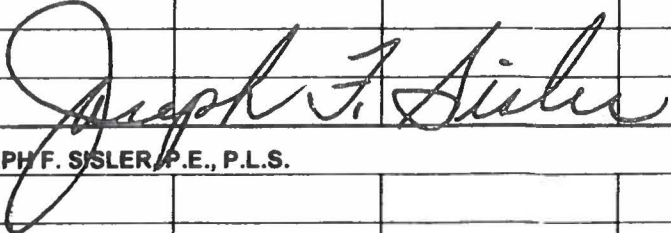
BID TABULATION												
BIG SANDY WATER DISTRICT												
PHASE V - WATER SYSTEM IMPROVEMENTS												
CONTRACT H-1 - STREAM CROSSING REPLACEMENTS AND SERVICE LINE REPLACEMENTS												
BID OPENING 06/13/2019 @ 12:00 noon												
				1		2		3		4		
				B.P. PIPELINE, LLC		OPELL EXCAVATING, LLC		MINERAL LABS, INC (L&L)		BOCA ENTERPRISESE, INC.		
				QUINCY, KY		ASHLAND, KY		SALYERSVILLE, KY		HAGER HILL, KY		
Engineers Estimate												
ITEM NO.	ITEM DESCRIPTION	UNIT QUANTITY	UNIT COST	TOTAL COST	UNIT COST	TOTAL COST	UNIT COST	TOTAL COST	UNIT COST	TOTAL COST	UNIT COST	TOTAL COST
1	8" HDPE DR9 (IPS) Waterline - Horizontal Directional Drill (HDD)	350 LF	\$ 125.00	\$ 43,750.00	\$ 90.00	\$ 31,500.00	\$ 70.00	\$ 24,500.00	\$ 155.00	\$ 54,250.00	\$ 100.00	\$ 35,000.00
2	6" HDPE DR9 (IPS) Waterline - Horizontal Directional Drill (HDD)	575 LF	\$ 100.00	\$ 57,500.00	\$ 80.00	\$ 46,000.00	\$ 60.00	\$ 34,500.00	\$ 135.00	\$ 77,625.00	\$ 90.00	\$ 51,750.00
3	1" 250 PSI HDPE Service Line - Horizontal Directional Drill (HDD) (S.R. 581)	100 LF	\$ 20.00	\$ 2,000.00	\$ 25.00	\$ 2,500.00	\$ 6.00	\$ 600.00	\$ 30.00	\$ 3,000.00	\$ 40.00	\$ 4,000.00
4	12" Steel Casing - Bore & Jack w/6" Waterline (S.R. 581)	70 LF	\$ 125.00	\$ 8,750.00	\$ 130.00	\$ 9,100.00	\$ 90.00	\$ 6,300.00	\$ 200.00	\$ 14,000.00	\$ 175.00	\$ 12,250.00
5	Proposed 3/4" Service Line 250 PSI Polyethylene (S.R. 581)	25 LF	\$ 8.00	\$ 200.00	\$ 15.00	\$ 375.00	\$ 8.00	\$ 200.00	\$ 8.00	\$ 200.00	\$ 8.00	\$ 200.00
6	6" PVC CL 250 Waterline	1050 LF	\$ 10.00	\$ 10,500.00	\$ 18.00	\$ 18,900.00	\$ 10.00	\$ 10,500.00	\$ 18.00	\$ 18,900.00	\$ 15.00	\$ 15,750.00
7	3" PVC CL 250 Waterline	400 LF	\$ 8.00	\$ 3,200.00	\$ 15.00	\$ 6,000.00	\$ 7.00	\$ 2,800.00	\$ 12.00	\$ 4,800.00	\$ 7.50	\$ 3,000.00
8	6" Gate Valve	8 EA	\$ 1,200.00	\$ 9,600.00	\$ 850.00	\$ 6,800.00	\$ 1,050.00	\$ 8,400.00	\$ 2,000.00	\$ 16,000.00	\$ 1,200.00	\$ 9,600.00
9	3" Gate Valve	11 EA	\$ 700.00	\$ 7,700.00	\$ 650.00	\$ 7,150.00	\$ 675.00	\$ 7,425.00	\$ 1,700.00	\$ 18,700.00	\$ 1,000.00	\$ 11,000.00
10	Leak Detector Assembly	5 EA	\$ 1,500.00	\$ 7,500.00	\$ 1,600.00	\$ 8,000.00	\$ 1,250.00	\$ 6,250.00	\$ 2,000.00	\$ 10,000.00	\$ 1,000.00	\$ 5,000.00
11	Blow-Off Assembly	5 EA	\$ 1,500.00	\$ 7,500.00	\$ 1,500.00	\$ 7,500.00	\$ 1,000.00	\$ 5,000.00	\$ 2,200.00	\$ 11,000.00	\$ 1,200.00	\$ 6,000.00
12	Tie New 6" to Ex. 6" PVC	4 EA	\$ 1,500.00	\$ 6,000.00	\$ 1,200.00	\$ 4,800.00	\$ 800.00	\$ 3,200.00	\$ 2,500.00	\$ 10,000.00	\$ 2,500.00	\$ 10,000.00
13	Tie New 3" to Ex. 3" PVC	6 EA	\$ 1,000.00	\$ 6,000.00	\$ 800.00	\$ 4,800.00	\$ 775.00	\$ 4,650.00	\$ 2,000.00	\$ 12,000.00	\$ 2,500.00	\$ 15,000.00
14	Tie New 3/4" Service Line to Ex. 3/4" Service Line	2 EA	\$ 300.00	\$ 600.00	\$ 200.00	\$ 400.00	\$ 150.00	\$ 300.00	\$ 300.00	\$ 600.00	\$ 1,000.00	\$ 2,000.00
15	Re-Connect Ex. Meter (S.R. 581)	1 EA	\$ 500.00	\$ 500.00	\$ 1,000.00	\$ 1,000.00	\$ 200.00	\$ 200.00	\$ 1,000.00	\$ 1,000.00	\$ 1,000.00	\$ 1,000.00
16	6" End Cap	6 EA	\$ 500.00	\$ 3,000.00	\$ 600.00	\$ 3,600.00	\$ 350.00	\$ 2,100.00	\$ 1,000.00	\$ 6,000.00	\$ 800.00	\$ 4,800.00
17	3" End Cap	4 EA	\$ 500.00	\$ 2,000.00	\$ 400.00	\$ 1,600.00	\$ 325.00	\$ 1,300.00	\$ 800.00	\$ 3,200.00	\$ 600.00	\$ 2,400.00
18	Fiberglass Markers (Stream Crossings)	12 EA	\$ 60.00	\$ 720.00	\$ 60.00	\$ 720.00	\$ 60.00	\$ 720.00	\$ 42.00	\$ 504.00	\$ 100.00	\$ 1,200.00
19	Replacement Service Line - 3/4" 250 PSI Polyethylene - for meters on Short Side of watermain less than 30 L.F. shall be Open Cut (Approx. 697 Services)	9,000 LF	\$ 8.00	\$ 72,000.00	\$ 7.50	\$ 67,500.00	\$ 15.00	\$ 135,000.00	\$ 5.00	\$ 45,000.00	\$ 5.00	\$ 45,000.00
20	Replacement Service Line - 3/4" 250 PSI Polyethylene for meters on Short or Long Side of watermain from 30 L.F. to 100 L.F. shall be by Trenchless Service Line Replacement Tool	18,600 LF	\$ 9.00	\$ 167,400.00	\$ 9.00	\$ 167,400.00	\$ 12.00	\$ 223,200.00	\$ 8.50	\$ 158,100.00	\$ 7.00	\$ 130,200.00
21	Replacement Service Line - 3/4" 250 PSI Polyethylene for meters on Short Side of watermain over 100 L.F. shall be by Horizontal Directional Drill (HDD)	13,500 LF	\$ 11.00	\$ 148,500.00	\$ 12.00	\$ 162,000.00	\$ 12.00	\$ 162,000.00	\$ 11.50	\$ 155,250.00	\$ 8.00	\$ 108,000.00
22	Replacement Service Line - 1" 250 PSI Polyethylene - Short/Long Side of watermain shall be Horizontal Directional Drill (HDD) (Approx. 10 Services)	5,900 LF	\$ 14.00	\$ 82,600.00	\$ 15.00	\$ 88,500.00	\$ 6.00	\$ 35,400.00	\$ 12.00	\$ 70,800.00	\$ 8.00	\$ 47,200.00
23	Reconnect Meters 3/4"- 1" - Short and Long Side	1220 EA	\$ 125.00	\$ 152,500.00	\$ 100.00	\$ 122,000.00	\$ 125.00	\$ 152,500.00	\$ 125.00	\$ 152,500.00	\$ 500.00	\$ 610,000.00
24	2" HDPE DR11 Waterline (Horizontal Directional Drill) @ U.S. 60	75 LF	\$ 30.00	\$ 2,250.00	\$ 26.00	\$ 1,950.00	\$ 20.00	\$ 1,500.00	\$ 28.00	\$ 2,100.00	\$ 45.00	\$ 3,375.00
25	2" CL 250 PVC Waterline	300 LF	\$ 7.00	\$ 2,100.00	\$ 18.00	\$ 5,400.00	\$ 7.00	\$ 2,100.00	\$ 5.50	\$ 1,650.00	\$ 7.00	\$ 2,100.00
26	2" Gate Valve	1 EA	\$ 600.00	\$ 600.00	\$ 600.00	\$ 600.00	\$ 700.00	\$ 700.00	\$ 1,500.00	\$ 1,500.00	\$ 1,000.00	\$ 1,000.00
27	2" Blow-off Assembly	1 EA	\$ 1,000.00	\$ 1,000.00	\$ 1,400.00	\$ 1,400.00	\$ 775.00	\$ 775.00	\$ 2,300.00	\$ 2,300.00	\$ 1,000.00	\$ 1,000.00
28	Tie New 2" to Ex. 6" Waterline	1 EA	\$ 500.00	\$ 500.00	\$ 800.00	\$ 800.00	\$ 1,200.00	\$ 1,200.00	\$ 2,000.00	\$ 2,000.00	\$ 2,500.00	\$ 2,500.00
TOTAL CONSTRUCTION COSTS (Items 1-28)					\$ 806,470.00	\$ 778,295.00	\$ 833,320.00	\$ 852,979.00	\$ 1,140,325.00			
<p>Certification: Sisler-Maggard Engineering, PLLC</p> <p>We hereby certify that the above bid tabulations accurately represents bids received, except for noted corrections, and the bids were promptly opened and read aloud.</p> <p><i>Joseph F. Sisler</i> 6/14/19</p> <p>JOSEPH F. SISLER, P.E., P.L.S.</p>												

BID TAB
BIG SANDY WATER DISTRICT

PHASE V - WATER SYSTEM IMPROVEMENTS

CONTRACT I-1 - OFFICE BUILDING

BID OPENING 06/13/2019 @ 12:00 noon

		1				2		3			
		Engineers Estimate				Allen Construction West Liberty, KY		Jones Contracting, LLC Lackey, KY		Clays Performance Const., LLC West Hamlin, WV	
ITEM NO.	ITEM DESCRIPTION	UNIT QUANTITY	UNIT COST	TOTAL COST	UNIT COST	TOTAL COST	UNIT COST	TOTAL COST	UNIT COST	TOTAL COST	
1	Building Complete	1 LS	\$ 300,000.00	\$ 300,000.00	\$ 450,000.00	\$ 450,000.00	\$ 477,345.00	\$ 477,345.00	\$ 546,161.00	\$ 546,161.00	
2	Stone Base (SEE SITE PLAN) Detail "C"	500 SY	\$ 20.00	\$ 10,000.00	\$ 19.21	\$ 9,605.00 *	\$ 7.00	\$ 3,500.00	\$ 35.40	\$ 17,700.00	
3	Asphalt Paving on existing stone base (SEE SITE PLAN) Detail "B"	300 SY	\$ 25.00	\$ 7,500.00	\$ 35.20	\$ 10,560.00 *	\$ 35.00	\$ 10,500.00	\$ 42.33	\$ 12,699.00 *	
4	Asphalt Paving including stone base (SEE SITE PLAN) Detail "A"	52 sy	\$ 60.00	\$ 3,120.00	\$ 73.85	\$ 3,840.20 *	\$ 50.00	\$ 2,600.00	\$ 63.46	\$ 3,299.92 *	
TOTAL CONSTRUCTION COSTS (Items 1-4)				\$ 320,620.00	\$ 474,005.20 *	\$ 493,945.00	\$ 579,859.92 *				
<p align="center">Certification: Sisler-Maggard Engineering, PLLC</p> <p align="center">We hereby certify that the above bid tabulations accurately represents bids received, except for noted corrections, and the bids were promptly opened and read aloud.</p> <div style="display: flex; justify-content: space-between; align-items: center;"> <div style="text-align: center;">  JOSEPH F. SISLER, P.E., P.L.S. </div> <div style="text-align: center;"> 6/14/19 </div> </div>											
<p>* Contract Bid #1 - Corrected amount - Bid amount did not include items 2 thru 4 on bid form</p> <p>* Contract Bid #3 - Corrected amount - Bid items 3 & 4 were rounded off on bid form</p>											