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JUN 19 2018

PUBLIC SERVICE  
COMMISSION

# FINAL ENGINEERING REPORT

CLIFTY CREEK WATER SYSTEM IMPROVEMENTS:

CONTRACT 1 – BIG CLIFTY AREA WATER TRANSMISSION MAIN & IMPROVEMENTS

CONTRACT 2 – DENHAM KNOB (SOMERSET) 500,000 GALLON GROUND WATER  
STORAGE TANK REHABILITATION

For The

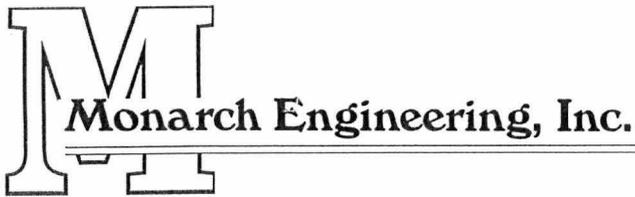
WESTERN PULASKI COUNTY WATER DISTRICT

Project financed by:

U.S.D.A. RURAL DEVELOPMENT

March 28, 2018





March 28, 2018

Mr. Don Calder, Chairman  
Western Pulaski County Water District  
2128 West Highway 80  
Somerset, KY 42503

Re: Clifty Creek Water System Improvements

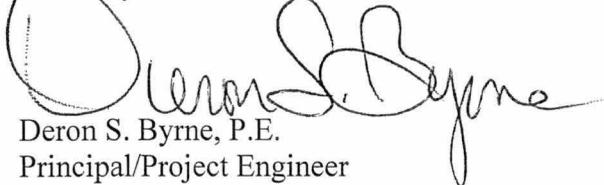
Dear Mr. Calder:

On March 28, 2018, bids were received by the Water District for the Clifty Creek Water System Improvements. There were two contracts considered, one being the Water Transmission Main and the second, the renovation of the Denham Knob Water Storage Tank. Ten bids were submitted for the Water Transmission Main with the lowest bid from Clay Pipeline, Inc. located in Manchester, KY in the amount of \$1,647,343.00 and four bids submitted for the Denham Knob Tank with the lowest bid from Huffman Tank & Tower, Inc. located in Albany, KY in the amount of \$157,300.00. A summarized bid tabulation of all bids received is attached.

Due to the need of the water transmission main and the renovation of the Denham Knob water tank, the competitive results of the bids received and that sufficient funds are available for this project, we recommend that you consider pursuing a contract award to the two above mentioned contractors in the amount of their bid. This recommendation is contingent upon approval from the Kentucky Public Service Commission and also the Kentucky Infrastructure Authority. A final budget showing all projects costs is attached.

Should you need additional information, please advise.

Sincerely,



Deron S. Byrne, P.E.  
Principal/Project Engineer

/dsb

Enclosures

**BID TABULATIONS**

**WESTERN PULASKI COUNTY WATER DISTRICT  
 CONTRACT 1: BIG CLIFTY CREEK AREA  
 WATER TRANSMISSION MAIN & IMPROVEMENTS  
 BID DATE: MARCH 27, 2018 @ 11:00 A.M. LOCAL TIME  
 PULASKI COUNTY, KENTUCKY**

			Clay Pipeline, Inc. 70 Fox Hollow Road Manchester, KY 40962		G & W Construction Co., Inc. 6730 Flemingsburg Road Morehead, KY 40351	
ITEM NO.	DESCRIPTION	QUANTITY	UNIT PRICE	TOTAL COST	UNIT PRICE	TOTAL COST
<b>BASE BID CONTRACT</b>						
1	12-Inch HDPE DR 7 Directional Bore	425 LF	\$196.00	\$83,300.00	\$223.95	\$95,178.75
2	10-Inch HDPE DR 9 Directional Bore	300 LF	177.50	53,250.00	138.40	41,520.00
3	8-Inch Ductile Iron CL350 Water Line	5,400 LF	36.00	194,400.00	28.98	156,492.00
4	8-Inch PVC SDR-21 Water Line	40,000 LF	16.20	648,000.00	14.79	591,600.00
5	Bore & Case for 8-Inch Water Line	590 LF	127.00	74,930.00	196.62	116,005.80
6	Free Bore for 8-Inch Water Line	300 LF	50.00	15,000.00	56.62	16,986.00
7	8-Inch Gate Valve	10 EA	2,017.50	20,175.00	1,317.31	13,173.10
8	6-Inch Gate Valve	1 EA	1,670.00	1,670.00	920.35	920.35
9	3-Way Flush Hydrant Assembly	8 EA	3,835.25	30,682.00	3,435.26	27,482.08
10	Temporary Blowoff Assembly	1 EA	2,235.00	2,235.00	1,635.38	1,635.38
11	Connection	4 EA	2,544.50	10,178.00	4,544.40	18,177.60
12	400 GPM Booster Pump Station (Piney Grove)	1 LS	237,642.50	237,642.50	274,502.29	274,502.29
13	800 GPM Booster Pump Station (Office 80 KY)	1 LS	254,726.50	254,726.50	299,854.48	299,854.48
14	Denham Knob Tank Valve Vault Replace	1 LS	16,684.00	16,684.00	16,684.29	16,684.29
15	Exploration	90 HR	50.00	4,500.00	300.00	27,000.00
<b>TOTAL BASE BID</b>				<b>\$1,647,373.00</b>		<b>\$1,697,212.12</b>

THE ABOVE IS A TRUE AND COMPLETE TABULATION OF BIDS RECEIVED AT 11:00A.M. LOCAL TIME, TUESDAY, MARCH 27, 2018 AT THE WESTERN PULASKI COUNTY WATER DISTRICT.

BY:

*David Bowles*

David Bowles

*3/28/18*

Date



**BID TABULATIONS**

**WESTERN PULASKI COUNTY WATER DISTRICT**

**CONTRACT 1: BIG CLIFTY CREEK AREA**

**WATER TRANSMISSION MAIN & IMPROVEMENTS**

**BID DATE: MARCH 27, 2018 @ 11:00 A.M. LOCAL TIME**

**PULASKI COUNTY, KENTUCKY**

<b>Weddle Enterprises, Inc.</b> 25 Shane's Lane Somerset, KY 42501	<b>Stotts Construction Co., Inc.</b> P.O. Box 1689 Columbia, KY 42728
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ITEM NO.	DESCRIPTION	QUANTITY	UNIT PRICE	TOTAL COST	UNIT PRICE	TOTAL COST
<b>BASE BID CONTRACT</b>						
1	12-Inch HDPE DR 7 Directional Bore	425 LF	\$293.20	\$124,610.00	\$200.00	\$85,000.00
2	10-Inch HDPE DR 9 Directional Bore	300 LF	112.75	33,825.00	153.00	45,900.00
3	8-Inch Ductile Iron CL350 Water Line	5,400 LF	43.56	235,224.00	23.50	126,900.00
4	8-Inch PVC SDR-21 Water Line	40,000 LF	14.30	572,000.00	13.70	548,000.00
5	Bore & Case for 8-Inch Water Line	590 LF	157.80	93,102.00	186.00	109,740.00
6	Free Bore for 8-Inch Water Line	300 LF	36.00	10,800.00	100.00	30,000.00
7	8-Inch Gate Valve	10 EA	1,355.00	13,550.00	1,500.00	15,000.00
8	6-Inch Gate Valve	1 EA	1,035.00	1,035.00	1,100.00	1,100.00
9	3-Way Flush Hydrant Assembly	8 EA	3,568.00	28,544.00	4,200.00	33,600.00
10	Temporary Blowoff Assembly	1 EA	1,833.00	1,833.00	1,850.00	1,850.00
11	Connection	4 EA	1,527.00	6,108.00	5,000.00	20,000.00
12	400 GPM Booster Pump Station (Piney Grove)	1 LS	264,294.00	264,294.00	350,000.00	350,000.00
13	800 GPM Booster Pump Station (Office 80 KY)	1 LS	272,906.00	272,906.00	330,000.00	330,000.00
14	Denham Knob Tank Valve Vault Replace	1 LS	26,050.00	26,050.00	40,000.00	40,000.00
15	Exploration	90 HR	350.00	31,500.00	50.00	4,500.00
<b>TOTAL BASE BID</b>				<b>\$1,715,381.00</b>		<b>\$1,741,590.00</b>

**BID TABULATIONS**

**WESTERN PULASKI COUNTY WATER DISTRICT**

**CONTRACT 1: BIG CLIFTY CREEK AREA**

**WATER TRANSMISSION MAIN & IMPROVEMENTS**

**BID DATE: MARCH 27, 2018 @ 11:00 A.M. LOCAL TIME**

**PULASKI COUNTY, KENTUCKY**

			Flo-Line Contracting, LLC 189 Sunstar Blvd. Monticello, KY 42633		Cumberland Pipeline, LLC 4129 Highway 379 Russell Springs, KY 42642	
ITEM NO.	DESCRIPTION	QUANTITY	UNIT PRICE	TOTAL COST	UNIT PRICE	TOTAL COST
<b>BASE BID CONTRACT</b>						
1	12-Inch HDPE DR 7 Directional Bore	425 LF	\$230.00	\$97,750.00	\$224.60	\$95,455.00
2	10-Inch HDPE DR 9 Directional Bore	300 LF	150.00	45,000.00	186.50	55,950.00
3	8-Inch Ductile Iron CL350 Water Line	5,400 LF	29.50	159,300.00	25.00	135,000.00
4	8-Inch PVC SDR-21 Water Line	40,000 LF	16.60	664,000.00	16.00	640,000.00
5	Bore & Case for 8-Inch Water Line	590 LF	140.00	82,600.00	206.35	121,746.50
6	Free Bore for 8-Inch Water Line	300 LF	90.00	27,000.00	20.00	6,000.00
7	8-Inch Gate Valve	10 EA	1,250.00	12,500.00	1,069.00	10,690.00
8	6-Inch Gate Valve	1 EA	900.00	900.00	710.00	710.00
9	3-Way Flush Hydrant Assembly	8 EA	3,800.00	30,400.00	3,454.00	27,632.00
10	Temporary Blowoff Assembly	1 EA	1,800.00	1,800.00	1,595.00	1,595.00
11	Connection	4 EA	3,200.00	12,800.00	2,165.00	8,660.00
12	400 GPM Booster Pump Station (Piney Grove)	1 LS	305,000.00	305,000.00	318,305.00	318,305.00
13	800 GPM Booster Pump Station (Office 80 KY)	1 LS	320,000.00	320,000.00	339,300.00	339,300.00
14	Denham Knob Tank Valve Vault Replace	1 LS	28,000.00	28,000.00	28,336.00	28,336.00
15	Exploration	90 HR	30.00	2,700.00	75.00	6,750.00
<b>TOTAL BASE BID</b>				<b>\$1,789,750.00</b>		<b>\$1,796,129.50</b>

**BID TABULATIONS**

**WESTERN PULASKI COUNTY WATER DISTRICT**

**CONTRACT 1: BIG CLIFTY CREEK AREA**

**WATER TRANSMISSION MAIN & IMPROVEMENTS**

**BID DATE: MARCH 27, 2018 @ 11:00 A.M. LOCAL TIME**

**PULASKI COUNTY, KENTUCKY**

<b>Ford Contracting, Inc.</b> 375 Southway Drive Lancaster, KY 40444	<b>Frederick &amp; May Construction Co.</b> P.O. Box 337 West Liberty, KY 41472
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ITEM NO.	DESCRIPTION	QUANTITY	UNIT PRICE	TOTAL COST	UNIT PRICE	TOTAL COST
<b>BASE BID CONTRACT</b>						
1	12-Inch HDPE DR 7 Directional Bore	425 LF	\$275.00	\$116,875.00	\$180.00	\$76,500.00
2	10-Inch HDPE DR 9 Directional Bore	300 LF	250.00	75,000.00	160.00	48,000.00
3	8-Inch Ductile Iron CL350 Water Line	5,400 LF	40.00	216,000.00	45.00	243,000.00
4	8-Inch PVC SDR-21 Water Line	40,000 LF	18.75	750,000.00	20.50	820,000.00
5	Bore & Case for 8-Inch Water Line	590 LF	260.00	153,400.00	200.00	118,000.00
6	Free Bore for 8-Inch Water Line	300 LF	100.00	30,000.00	35.00	10,500.00
7	8-Inch Gate Valve	10 EA	1,400.00	14,000.00	1,200.00	12,000.00
8	6-Inch Gate Valve	1 EA	1,000.00	1,000.00	850.00	850.00
9	3-Way Flush Hydrant Assembly	8 EA	4,000.00	32,000.00	4,700.00	37,600.00
10	Temporary Blowoff Assembly	1 EA	2,000.00	2,000.00	3,500.00	3,500.00
11	Connection	4 EA	2,700.00	10,800.00	3,500.00	14,000.00
12	400 GPM Booster Pump Station (Piney Grove)	1 LS	260,000.00	260,000.00	268,000.00	268,000.00
13	800 GPM Booster Pump Station (Office 80 KY)	1 LS	274,000.00	274,000.00	288,000.00	288,000.00
14	Denham Knob Tank Valve Vault Replace	1 LS	20,425.00	20,425.00	25,000.00	25,000.00
15	Exploration	90 HR	250.00	22,500.00	250.00	22,500.00
<b>TOTAL BASE BID</b>				<b>\$1,978,000.00</b>		<b>\$1,987,450.00</b>

**BID TABULATIONS**  
**WESTERN PULASKI COUNTY WATER DISTRICT**  
**CONTRACT 1: BIG CLIFTY CREEK AREA**  
**WATER TRANSMISSION MAIN & IMPROVEMENTS**  
**BID DATE: MARCH 27, 2018 @ 11:00 A.M. LOCAL TIME**  
**PULASKI COUNTY, KENTUCKY**

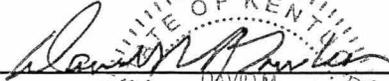
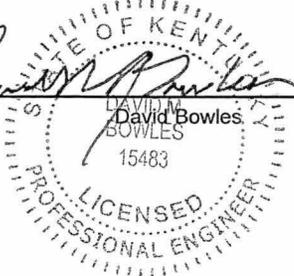
<b>K. Carrender Construction Co., Inc.</b> 200 Ringgold Road Somerset, KY 42503	<b>Norris Bros. Excavating, LLC</b> 1007 Rodgers Road Crossville, TN 38572
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ITEM NO.	DESCRIPTION	QUANTITY	UNIT PRICE	TOTAL COST	UNIT PRICE	TOTAL COST
<b>BASE BID CONTRACT</b>						
1	12-Inch HDPE DR 7 Directional Bore	425 LF	\$350.00	\$148,750.00	\$195.00	\$82,875.00
2	10-Inch HDPE DR 9 Directional Bore	300 LF	160.00	48,000.00	180.00	54,000.00
3	8-Inch Ductile Iron CL350 Water Line	5,400 LF	56.45	304,830.00	45.00	243,000.00
4	8-Inch PVC SDR-21 Water Line	40,000 LF	17.25	690,000.00	29.50	1,180,000.00
5	Bore & Case for 8-Inch Water Line	590 LF	255.00	150,450.00	180.00	106,200.00
6	Free Bore for 8-Inch Water Line	300 LF	140.00	42,000.00	80.00	24,000.00
7	8-Inch Gate Valve	10 EA	1,580.00	15,800.00	1,100.00	11,000.00
8	6-Inch Gate Valve	1 EA	1,065.00	1,065.00	850.00	850.00
9	3-Way Flush Hydrant Assembly	8 EA	4,450.00	35,600.00	3,400.00	27,200.00
10	Temporary Blowoff Assembly	1 EA	1,810.00	1,810.00	2,800.00	2,800.00
11	Connection	4 EA	3,700.00	14,800.00	2,500.00	10,000.00
12	400 GPM Booster Pump Station (Piney Grove)	1 LS	382,700.00	382,700.00	396,000.00	396,000.00
13	800 GPM Booster Pump Station (Office 80 KY)	1 LS	402,200.00	402,200.00	520,000.00	520,000.00
14	Denham Knob Tank Valve Vault Replace	1 LS	32,000.00	32,000.00	29,000.00	29,000.00
15	Exploration	90 HR	100.00	9,000.00	10.00	900.00
<b>TOTAL BASE BID</b>				<b>\$2,279,005.00</b>		<b>\$2,687,825.00</b>

**BID TABULATIONS**  
**WESTERN PULASKI COUNTY WATER DISTRICT**  
**CONTRACT 2: BIG CLIFTY CREEK AREA**  
**DENHAM KNOB (SOMERSET) 500,000 GALLON**  
**GROUND WATER STORAGE TANK REHABILITATION**  
**BID DATE: MARCH 27, 2018 @ 11:00 A.M. LOCAL TIME**  
**PULASKI COUNTY, KENTUCKY**

			Huffman Tank & Tower, Inc. 210 Burkesville Road Albany, KY 42602		Horizon Brothers Painting 1053 Kendra Lane Howell, MI 48843	
ITEM NO.	DESCRIPTION	QUANTITY	UNIT PRICE	TOTAL COST	UNIT PRICE	TOTAL COST
<b>BASE BID CONTRACT</b>						
1	Miscellaneous Repairs & Modifications	1 LS	\$10,000.00	\$10,000.00	\$17,350.00	\$17,350.00
	1A Caulk interior roof lapped seams & crevice along the top of the shell (Est. 420 L.F.).		2,700.00		5,000.00	
	1B Grind flush all sharp edges, weld spatter, burrs, etc. (Estimated 2 hours).		200.00		100.00	
	1C Fill sharp edged pits (1/8" deep) with a solventless epoxy (Estimated 25 S.F.).		500.00		1,500.00	
	1D Weld sharp edged pits (deeper than 1/8")		500.00		250.00	
	1E Install 60" tall handrails 10 ft. to each side of the caged shell ladder.		2,000.00		4,000.00	
	1F Install a 42" tall handrail with a mid-rail from the roof access hatch to the roof vent.		2,200.00		4,000.00	
	1G Seal the steel tank to concrete foundation with DOW Corning CWS caulk.		1,000.00		1,000.00	
	1H Install new stainless steel bolts, washers, and brass nuts at both shell manways.		500.00		1,000.00	
	1I Remove davit from the southwest manway.		200.00		500.00	
<b>TOTAL BASE BID Continued</b>						

THE ABOVE IS A TRUE AND COMPLETE TABULATION OF BIDS RECEIVED AT 11:00A.M. LOCAL TIME, TUESDAY, MARCH 27, 2018 AT THE WESTERN PULASKI COUNTY WATER DISTRICT.

BY:   


3/28/18  
 Date

**BID TABULATIONS**  
**WESTERN PULASKI COUNTY WATER DISTRICT**  
**CONTRACT 2: BIG CLIFTY CREEK AREA**  
**DENHAM KNOB (SOMERSET) 500,000 GALLON**  
**GROUND WATER STORAGE TANK REHABILITATION**  
**BID DATE: MARCH 27, 2018 @ 11:00 A.M. LOCAL TIME**  
**PULASKI COUNTY, KENTUCKY**

			Huffman Tank & Tower, Inc. 210 Burkesville Road Albany, KY 42602		Horizon Brothers Painting 1053 Kendra Lane Howell, MI 48843	
ITEM NO.	DESCRIPTION	QUANTITY	UNIT PRICE	TOTAL COST	UNIT PRICE	TOTAL COST
	<b>BASE BID CONTRACT Continued</b>					
2	Complete Removal & Reapplication Exterior Coating System	1 LS	\$72,300.00	\$72,300.00	\$75,900.00	\$75,900.00
3	Complete Removal & Reapplication of Interior Coating System	1 LS	70,000.00	70,000.00	63,100.00	63,100.00
4	Application of Basic Lettering/Logo	1 LS	3,000.00	3,000.00	2,000.00	2,000.00
5	Cleaning/Disinfection/Sampling	1 LS	1,000.00	1,000.00	1,000.00	1,000.00
6	Site Clean-up & Restoration	1 LS	1,000.00	1,000.00	1,000.00	1,000.00
	<b>TOTAL BASE BID</b>			<b>\$157,300.00</b>		<b>\$160,350.00</b>

556 Carlton Drive  
 Lawrenceburg, KY 40342  
 Phone (502) 839-1310  
 Fax (502) 839-1373

**BID TABULATIONS**  
**WESTERN PULASKI COUNTY WATER DISTRICT**  
**CONTRACT 2: BIG CLIFTY CREEK AREA**  
**DENHAM KNOB (SOMERSET) 500,000 GALLON**  
**GROUND WATER STORAGE TANK REHABILITATION**  
**BID DATE: MARCH 27, 2018 @ 11:00 A.M. LOCAL TIME**  
**PULASKI COUNTY, KENTUCKY**

<b>C &amp; S Quality Services, LLC</b> 1042 Forest Hill Lawrenceburg, KY 40342	<b>Superior Industrial Maintenance Co.</b> P.O. Box 940 Harrisburg, NC 28075
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ITEM NO.	DESCRIPTION	QUANTITY	UNIT PRICE	TOTAL COST	UNIT PRICE	TOTAL COST
	<b>BASE BID CONTRACT</b>					
1	Miscellaneous Repairs & Modifications	1 LS	\$10,675.00	\$10,675.00	\$23,680.00	\$23,680.00
	1A Caulk interior roof lapped seams & crevice along the top of the shell (Est. 420 L.F.).		500.00		3,800.00	
	1B Grind flush all sharp edges, weld spatter, burrs, etc. (Estimated 2 hours).		100.00		250.00	
	1C Fill sharp edged pits (1/8" deep) with a solventless epoxy (Estimated 25 S.F.).		475.00		980.00	
	1D Weld sharp edged pits (deeper than 1/8")		2,000.00		1,750.00	
	1E Install 60" tall handrails 10 ft. to each side of the caged shell ladder.		3,000.00		3,900.00	
	1F Install a 42" tall handrail with a mid-rail from the roof access hatch to the roof vent.		3,000.00		7,500.00	
	1G Seal the steel tank to concrete foundation with DOW Corning CWS caulk.		500.00		1,800.00	
	1H Install new stainless steel bolts, washers, and brass nuts at both shell manways.		1,000.00		2,900.00	
	1I Remove davit from the southwest manway.		100.00		800.00	
2	Complete Removal & Reapplication Exterior Coating System	1 LS	100,225.00	100,225.00	251,610.00	251,610.00
3	Complete Removal & Reapplication of Interior Coating System	1 LS	88,350.00	88,350.00	205,863.00	205,863.00
4	Application of Basic Lettering/Logo	1 LS	1,500.00	1,500.00	8,000.00	8,000.00
5	Cleaning/Disinfection/Sampling	1 LS	1,500.00	1,500.00	1,500.00	1,500.00
6	Site Clean-up & Restoration	1 LS	1,500.00	1,500.00	1,500.00	1,500.00
	<b>TOTAL BASE BID</b>			<b>\$203,750.00</b>		<b>\$492,153.00</b>

**FINAL BUDGET**  
**BIG CLIFTY WATER SYSTEM IMPROVEMENTS - PHASE 1**  
**WESTERN PULASKI WATER DISTRICT**  
**MARCH 2018**

**PROJECT COSTS**

CONTRACT 1: BIG CLIFTY WATER TRANSMISSION MAIN	\$1,647,373.00
CONTRACT 2: DENHAM KNOB TANK REHABILITATION	157,300.00
CONTRACT 3: FISHING CREEK BRIDGE WL REPLACEMENT (IN DESIGN - TO BE BID)	649,500.00
	<hr/> <hr/>
SUBTOTAL	\$2,454,173.00
CONTINGENCY	245,666.52
ENGINEERING DESIGN	182,873.14
ENGINEERING INSPECTION	106,287.34
LEGAL & ADMINISTRATION	30,000.00
INTEREST	40,000.00
ENVIRONMENTAL ASSESSMENT	10,000.00
PRELIMINARY ENGINEERING REPORT	10,000.00
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<b>TOTAL PROJECT COSTS</b>	<b>\$3,079,000.00</b>

**PROJECT FINANCING**

USDA RURAL DEVELOPMENT LOAN	\$2,225,000.00
USDA RURAL DEVELOPMENT GRANT	854,000.00
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<b>TOTAL PROJECT FINANCING</b>	<b>\$3,079,000.00</b>