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Case No. 2017-00392

FINAL ENGINEERING REPORT
FOR THE

**POWELLS VALLEY WATER DISTRICT
EXPANSION AND IMPROVEMENTS PROJECT**

AUGUST 2017



Engineers Architects and Planners
624 Wellington Way
Lexington, KY 40503



D. Scott Taylor

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Amendment for the Final Engineering Report

PUBLIC SERVICE
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This section is intended to update the Preliminary Engineering Report and provide revised project costs after bids have been received for the construction of the Powells Valley Water District Water System Improvements Project. The bids were received on Contracts 1 and 2 on August 17th, 2017. Attached is a copy of the certified bid tabulation showing the breakdown of the unit pricing for all components of the work for all bids received

Based on the review of the contractors bids and the bidders experience and qualifications, the awards are being offered to the low bidders, Frederick and May Construction Co., Inc. in the amount of their bid of \$517,937 for Contract 1 and to Huffman Tank and Tower, Inc. for Contract 2 in the amount of \$135,500. See the attached revised project budget showing the post-bid estimates and the changes reflecting the construction contracts award amounts.

Since the issuance of the RD Letter of Conditions there have been several changes in the operating budget for the Water District. The District's water supplier raised their wholesale water rate and the District prepared and received a Purchased Water Adjustment to their rates from the Kentucky Public Service Commission. Due to changes in operating costs apparent in their audit , the District requested a review of their budget and calculation of new rates to support their operation's changes and the new RD loan. See the attached revised rate calculations and proposed rates.

See the following exhibits summarizing the project post bid:

1. Pre-Bid Project Update and Budget
2. Bid Tabulation
3. Engineer's Recommendation
4. Revised Project Budget
5. Revised Rate Analysis with Proposed Rates

Pre-Bid Project Update and Budget

Powells Valley Water District
Water Lines, Pump Station and Tanks
Project Update
July 21, 2017

The PER and Summary Addendum were completed in 2012. The project was funded August 30th of the same year. A time extension for completion was granted in 2017. Since the project planning and funding, the costs for project components have changed as have the District's priority for the various project components identified in the PER. This project summary update identifies: 1.) the proposed water lines, 2.) the pump station constructions and renovations and 3.) the tank renovations needed at this time and updates the project cost estimate.

Water Main Extension

The proposed Wells Lane water line extension will eliminate some long parallel service lines along Wells Lane and extend the main to serve new customers past the existing service limits. It was submitted to the Division of Water and approved. After expiration of the initial DOW approval, the water main construction plans were re-submitted and approved and the permit is current. The water main will be constructed in the public right-of-way of this County Road. No State Road permit will be required for this project.

Pump Station Construction and Renovations

The proposed pump station work includes one pump station replacement and 2 pump station renovations. The Beech Fork Pump Station is the main system pump station and will be replaced by a built in place new pump station. It will be built on the existing pump station property and will replace the existing station. The pump station renovations include the Ballard Branch Pump Station and the Happy Top Pump Station. Both stations are being upgraded to change the motors and controls to variable frequency drives and the Happy Top Station is also being upgraded to 3 phase power. All work on the station will be on site and principally inside the existing stations.

Water Tank Renovations

The proposed water tank renovations are designed to improve circulation in selected tanks for improved water quality. The tanks will be fitted with new piping, valves and orifice devices inside the tanks. The tanks selected for the improvements are the Frames Branch Tank, Furnace Mountain Tank and Mulch Plant Tank. The Frames Branch Tank will also be sandblasted and repainted inside and outside. All tank work will be accomplished on the existing tank sites.

Revised Project Cost Estimate

The costs for the project construction components have risen due to inflation. Current cost estimates are shown in the included revised project cost estimate table.

TABLE 1
 POWELLS VALLEY WATER DISTRICT
 PROJECT COST ESTIMATE
 JULY 21, 2017

	Cost Estimate
Water Line Replacements / Extensions	
Wells Lane Water Line Exstension and Services	26,000
Sub-Total	\$26,000
Pump Station Upgrades	
Beech Fork	230,000
Happy Top 3 Phase Conversion	65,000
Happy Top & Ballard Variable Frequency Drives	135,000
Sub-Total	\$430,000
Water Storage Tanks Upgrades	
Frames Branch Painting, Piping and Circulation Valves	\$90,000
Mulch Plant Piping and Circulation Valves	\$50,000
Furnace Mountain Piping and Circulation Valves	\$50,000
Sub-Total	\$190,000
Sub-Total Construction Costs	\$646,000
Non-Construction Items	
Engineering	9.60% \$62,015
Inspection	6.62% 42,765
Engineering Report	7,000
Legal / Bond	8,900
Administrative	2% 12,920
Permits / Environmental / Other	11,000
Property / Easement Surveys / Mapping	7,000
PVWD Admin	2,000
Contingencies	10% 64,600
Sub-Total	\$218,200
Estimated Project Cost	\$864,200

Bid Tabulation

Certified Bid Tabulation
Powells Valley Water District
Bid Opening August 17, 2017, 1:00 p.m.

Contract 1 - Water Line and Pump Station Renovations

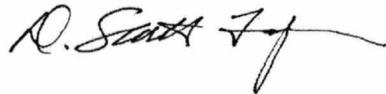
- Item -				Frederick and May Construction Co., Inc.	
No.	Description	Unit	Quantity	Unit Price	Extension
1	A 3" PVC Class 200 Pipe	L.F.	2,000	26.00	\$52,000.00
2	A 3" Gate Valve Assembly.	Ea.	1	800.00	\$800.00
3	A Casing Pipe for 3" Main, Open Cut	L.F.	30	65.00	\$1,950.00
4	A Type "A" Crossing with casing pipe	L.F.	12	65.00	\$780.00
5	A Air Release Valves	Ea.	2	1,500.00	\$3,000.00
6	A New Water Meter Assembly	Ea.	2	2,000.00	\$4,000.00
7	A Water Meter Reconnection	Ea.	3	500.00	\$1,500.00
8	A 3" Blow-off Assembly	Ea.	1	2,500.00	\$2,500.00
9	A 3" Tie-in w/ tapping valve & sleeve	Ea.	2	3,500.00	\$7,000.00
10	A Light Duty Bituminous Pavement	S.Y.	64	25.00	\$1,600.00
	B Crushed Stone Pavement	L.F.	500	6.00	\$3,000.00
					\$78,130.00
	Deductive Alternates				
A	Renovation of Happy Top Pump Station.	L.F.	1	77,807.00	\$77,807.00
	Power Company 3 Phase Extension Allowance	S.Y.	1	55,000.00	\$55,000.00
B	Renovation of Ballard Pump Station	Ea.	1	120,000.00	\$120,000.00
C	Beech Fork Pump Station	L.F.	1	187,000.00	\$187,000.00
					\$517,937.00

Contract 2 - Water Storage Tank Renovations

- Item -				Huffman Tank and Tower, Inc.		Currens Construction Services, Inc.	
No.	Description	Unit	Quantity	Unit Price	Extension	Unit Price	Extension
1	Sandblast and Repaint Frames Branch Tank	L.S.	1	96,000.00	\$96,000.00	99,500.00	\$99,500.00
	Deductive Alternates						
A	Furnace Mountain Tank Mixing System	L.S.	1	39,500.00	\$39,500.00	41,850.00	\$41,850.00
B	Mulch Plant Tank Mixing System	L.S.	1	37,000.00	\$37,000.00	32,200.00	\$32,200.00
					\$172,500.00		\$173,550.00

I hereby certify that this is an accurate tabulation of bids as received.

MSE of Kentucky
D. Scott Taylor, P.E.



Engineer's Recommendation

August 31, 2017

Steve Everman, Chairman
Powells Valley Water District
31 Adams Ridge Road
Clay City, Kentucky 40312

624 Wellington Way
Lexington,
Kentucky 40503
859-223-5694
FAX 859-223-2607
mseinc@mselex.com

Re: Powells Valley Water District - Water System Improvements Project
Engineer's Recommendation of Award
MSE Project No. 9524-11

Dear Steve,

As you know, bids were received on the above referenced project on August 17, 2017 at 1:00 pm at the Powell County Courthouse. We checked with the Post Office and the Water District office for late arrivals but there were none. In accordance with the Instructions to Bidders Article 19, Evaluation of Bids and Award of Contracts, after receipt of all bids and prior to opening any bids, we announced that the base bid budget for Contract 1 was \$440,000 and Contract 2 was \$200,000.

Only one bid was received on Contract 1 and it was from Frederick and May Construction Co., Inc. in the amount of \$517,937. We have had several projects with them in the past and based on their references and qualifications, we recommend the award of Contract 1 to Frederick and May Construction Co., Inc. in the amount of their bid of \$517,937.

There were two bids on Contract 2 and both were within the announced base bid budget. The low bid was from Huffman Tank and Tower, Inc in the amount of \$172,500 and therefore based on the comparative process described in Article 19 referenced above and on the bidders qualifications, responsiveness and responsibility, Huffman Tank and Tower, Inc is the low bidder on Contract 2. Our review of all of the bids and preparation of the bid tabulations did not reveal any errors in any of the bid forms bid calculations.

The total of the base bids for both contracts is over budget which would result in reducing the project contingencies to below 5% as needed to begin construction. After review of the total project funds with your management and RD, it was determined that one of the deductive alternates would need to be accepted and that the least needed deductive alternate was the Furnace Mountain Tank Mixing System. We recommend awarding Contract 2 including the first deductive alternate A, the Furnace Mountain Tank Mixing System to Huffman Tank and Tower, Inc. for the bid amount minus the deduct or \$135,500.

If you have any questions about this item, please contact us.

Sincerely,
MSE of Kentucky



D. Scott Taylor, P.E.

Cc: Greg Pridemore

Revised Project Budget

TABLE 1
 POWELLS VALLEY WATER DISTRICT
 PROJECT COST ESTIMATE
 August 31, 2017

	Pre-Bid	Post Bid		
Water Line Replacements / Extensions				
Wells Lane Water Line Exstension and Services	26,000	78,130		
Sub-Total	\$26,000	\$78,130		
Pump Station Upgrades				
A Happy Top & Ballard Variable Frequency Drives	135,000	77,807		
A Happy Top 3 Phase Conversion	65,000	55,000		
B Ballard Branch		120,000		
C Beech Fork	230,000	187,000		
Sub-Total	\$430,000	\$439,807		
Contract 1 Sub-Total	\$456,000	\$517,937		
Water Storage Tanks Upgrades				
Frames Branch Painting, Piping and Circulation Valves	\$90,000	\$96,000		
A Furnace Mountain Piping and Circulation Valves	\$50,000			
B Mulch Plant Piping and Circulation Valves	\$50,000	\$39,500		
Contact 2 Sub-Total	\$190,000	\$135,500		
Sub-Total Construction Costs	\$646,000	\$653,437		
Non-Construction Items				
Engineering	9.60%	9.58%	\$62,015	\$62,599
Inspection	6.62%	6.59%	42,765	\$43,061
Engineering Report			7,000	\$7,000
Legal / Bond			8,900	\$9,000
Administrative	2%	0%	12,920	
Interim Financing				\$14,920
Permits / Environmental / Other			11,000	\$11,000
Property / Easement Surveys / Mapping			7,000	\$7,000
PVWD Admin			2,000	\$2,000
Contingencies	10%	10%	64,600	\$54,183
Sub-Total			\$218,200	\$210,763
Estimated Project Cost			\$864,200	\$864,200

Powells Valley Water District Water System Improvements Project

Revised Rate Analysis with Proposed Rates
and
Revised RD Summary Addendum Forms

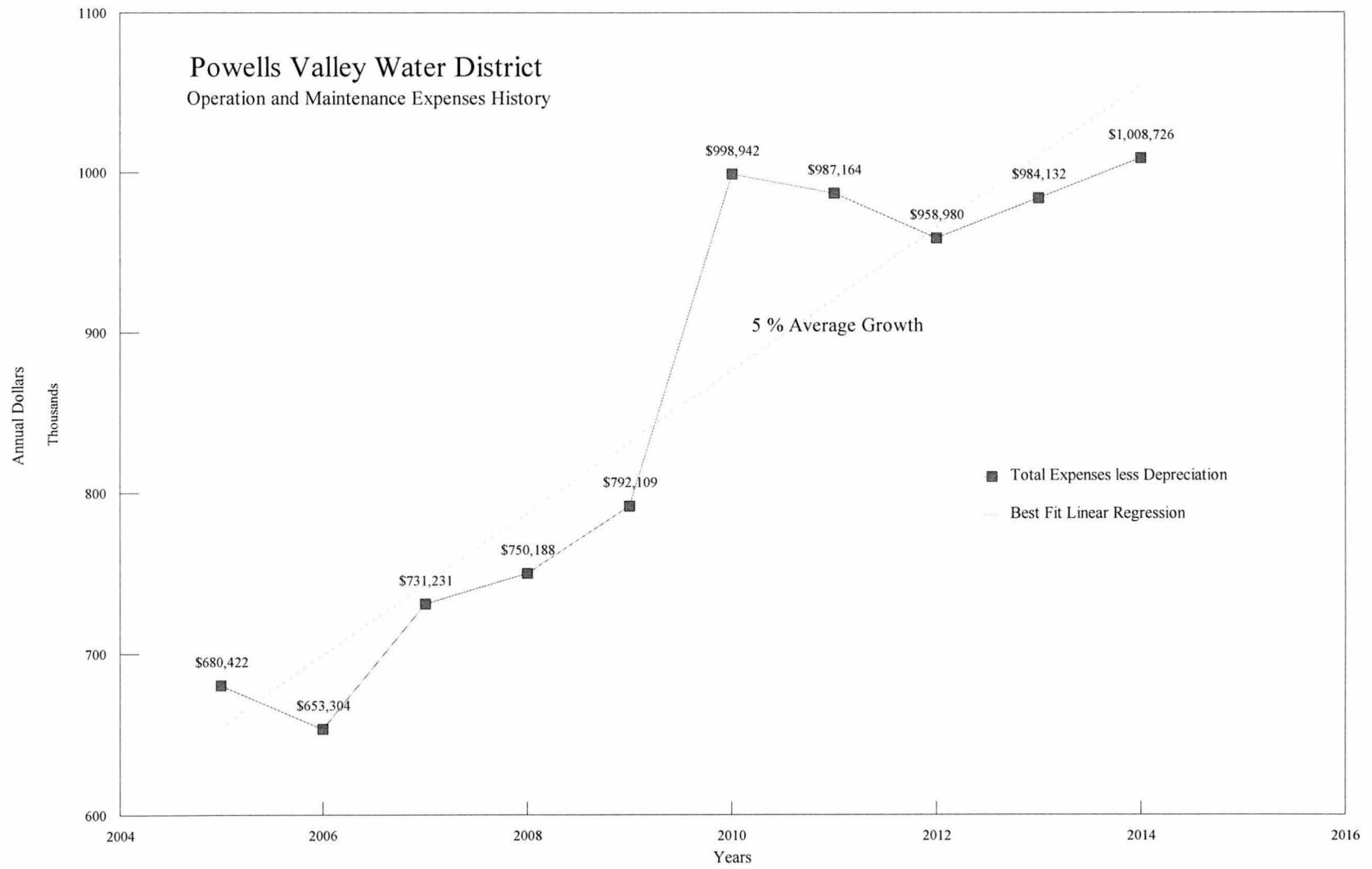
POWELLS VALLEY WATER DISTRICT
Annual Audit Figures

Income / Expenses	Water		Sewer		Total		
	2014 Audit	2013 Audit	2014 Audit	2013 Audit	2014 Audit	2013 Audit	
Revenues							
Users Fees	1,087,638	1,065,793	79,820	84,449	1,167,458	1,150,242	
Other Water Revenues	42,088	40,402	0	0	42,088	40,402	
Sub-total	1,129,726	1,106,195	79,820	84,449	1,209,546	1,190,644	
Expenses							
Water Purchased	361,064	336,950	0	0	361,064	336,950	
Salaries & Wages	237,730	231,083	0	0	237,730	231,083	
Office	12,656	11,935	327	973	12,983	12,908	
Insurance	13,884	27,121	14,650	2,170	28,534	29,291	
Taxes	21,590	22,218	935	0	22,525	22,218	
Outside Services	40,384	33,977	3,265	3,785	43,649	37,762	
Employee Benefits	187,493	197,938	0	0	187,493	197,938	
Misc	2,466	2,325	210	4,503	2,676	6,828	
Depreciation	187,574	187,574	19,610	19,438	207,184	207,012	
Supplies	53,257	49,212	28,974	25,633	82,231	74,845	
Utilities	71,403	70,090	18,440	17,818	89,843	87,908	
Vehicle Expense	28,389	23,501	0	0	28,389	23,501	
Sub-total	1,217,890	1,193,924	86,411	74,320	1,304,301	1,268,244	
Operating Income (Loss)	(\$88,164)	(\$87,729)	(\$6,591)	\$10,129	(\$94,755)	(\$77,600)	
Non-Operating Revenues (Expenses)							
Grants	\$0	\$0	\$0	\$0	0	0	
Misc Income	\$2,992	\$10,537	(\$59)	(\$609)	2,933	9,928	
Settlement in Lawsuit		0			0	0	
Interest Income	\$1,353	\$1,351	\$61	\$68	1,414	1,419	
Interest Expense	(\$71,772)	(\$73,473)	(\$12,312)	(\$13,215)	(\$84,084)	(\$86,688)	
Net Non-Op Revenues	(\$67,427)	(\$61,585)	(\$12,310)	(\$13,756)	(\$79,737)	(\$75,341)	
Net Change In Assets	(\$155,591)	(\$149,314)	(\$18,901)	(\$3,627)	(\$174,492)	(\$152,941)	
How Will RD Look at it:							
Revenues	Charges	\$1,129,726	\$1,106,195	\$79,820	\$84,449	\$1,209,546	\$1,190,644
	Interest Income	\$1,353	\$1,351	\$61	\$68	\$1,414	\$1,419
	Misc Income	\$2,992	\$10,537	(\$59)	(\$609)	\$2,933	\$9,928
O&M w/out Depreciation		(\$1,030,316)	(\$1,006,350)	(\$66,801)	(\$54,882)	(\$1,097,117)	(\$1,061,232)
Debt	Principal	(\$45,500)	(\$43,500)	\$0	\$0	(\$45,500)	(\$43,500)
	Interest	(\$71,772)	(\$73,473)	(\$12,312)	(\$12,312)	(\$84,084)	(\$85,785)
	Coverage	10% (\$11,727)	(\$11,697)	(\$1,231)	(\$1,231)	(\$12,958)	(\$12,929)
Balance		(\$25,244)	(\$16,937)	(\$522)	\$15,483	(\$25,766)	(\$1,455)

TABLE 2

FmHA Summary / Addendum Tables XVI, XVII & XVIII - Pages 31, 32 & 33

Project Operating Budget	2014		Difference
	Current Operation	Proposed Operation	"Extension Only"
A. Operating Income:			
Water Sales 10.16%	\$1,080,874	\$1,190,707	\$109,833
Disconnect/Reconnect/Late Charge Fees	48,852	48,852	0
Other (Describe)		0	0
Less Allowances & Deductions	0	0	0
Total Operating Income	\$1,129,726	\$1,239,559	109,833
B. Operation and Maintenance Expenses:	2014 PSC	Projected	Difference
Salaries, Wages & Benefits	414,423	426,856	12,433
Utilities	421,702	434,353	12,651
Materials & Supplies	32,632	33,611	979
Contractual Services	0	29,849	29,849
Equipment Expense	9,193	9,469	276
Other Expenses	141,566	145,813	4,247
Administrative	10,800	11,124	324
Total Operating Expenses	\$1,030,316	\$1,091,074	\$60,758
Net Operating Income	\$99,410	\$148,484	49,074
C. Non-Operating Income:			
Interest on Deposits	1,353	1,353	0
Other (Identify)	2,992	2,992	0
Total Non-Operating Income	4,345	4,345	0
D. Net Income	\$103,755	\$152,829	49,074
E. Debt Repayment:			
FmHA Interest	72,821	82,368	9,546
FmHA Principal	45,500	56,302	10,802
Non-FmHA Interest	0	0	0
Non-FmHA Principal	0	0	0
Total Debt Repayment	\$118,321	\$138,670	\$20,348
F. Balance available for Coverage and Depreciation	(\$14,566)	\$14,160	28,726
H. Replacement Reserves and Coverage			
Coverage on Existing Debt 0.1	11,832	11,832	0
Coverage on New Debt		2,035	2,035
Short Lived Assets Reserve	0	0	0
Total Replacement Reserves and Coverage	\$11,832	\$13,867	\$2,035
G. Balance after Reserves	(\$26,398)	\$293	\$26,691



POWELLS VALLEY WATER DISTRICT

Schedule of Rates

RATE BLOCK		EXISTING	PROPOSED	INCREASE
First	2,000 Gallons	\$21.08	\$23.22	10%
Next	2,000 Gallons	\$9.13	\$10.06	10%
Next	2,000 Gallons	\$8.23	\$9.07	10%
Over	6,000 Gallons	\$7.70	\$8.48	10%

EXHIBIT 13

POWELLS VALLEY WATER DISTRICT

Existing Billing Analysis

Monthly Water Usage		Residential				Non-Residential / Commercial			
		Average Usage	Average Rate	No. of Bills	Usage	Income	No. of Bills	Usage	Income
0 -	2,000	1,000	\$21.08	9476	9,476,000	\$199,754.08	621	621,000	13,090.68
2,000 -	3,000	2,500	25.65	5542	13,855,000	142,124.59	204	510,000	5,231.58
3,000 -	4,000	3,500	34.78	4247	14,864,500	147,689.43	108	378,000	3,755.70
4,000 -	5,000	4,500	43.46	2807	12,631,500	121,978.19	53	238,500	2,303.12
5,000 -	6,000	5,500	51.69	1703	9,366,500	88,019.56	32	176,000	1,653.92
6,000 -	7,000	6,500	59.65	984	6,396,000	58,695.60	44	286,000	2,624.60
7,000 -	8,000	7,500	67.35	588	4,410,000	39,601.80	26	195,000	1,751.10
8,000 -	9,000	8,500	75.05	338	2,873,000	25,366.90	21	178,500	1,576.05
9,000 -	10,000	9,500	82.75	190	1,805,000	15,722.50	16	152,000	1,324.00
10,000 -	11,000	10,500	90.45	143	1,501,500	12,934.35	15	157,500	1,356.75
11,000 -	12,000	11,500	98.15	101	1,161,500	9,913.15	20	230,000	1,963.00
12,000 -	13,000	12,500	105.85	80	1,000,000	8,468.00	15	187,500	1,587.75
13,000 -	14,000	13,500	113.55	64	864,000	7,267.20	7	94,500	794.85
14,000 -	15,000	14,500	121.25	30	435,000	3,637.50	8	116,000	970.00
15,000 -	16,000	15,500	128.95	22	341,000	2,836.90	8	124,000	1,031.60
16,000 -	17,000	16,500	136.65	19	313,500	2,596.35	8	132,000	1,093.20
17,000 -	18,000	17,500	144.35	16	280,000	2,309.60	3	52,500	433.05
18,000 -	19,000	18,500	152.05	17	314,500	2,584.85	3	55,500	456.15
19,000 -	20,000	19,500	159.75	11	214,500	1,757.25	1	19,500	159.75
20,000 -	25,000	22,500	182.85	44	990,000	8,045.40	19	427,500	3,474.15
25,000 -	30,000	27,500	221.35	16	440,000	3,541.60	12	330,000	2,656.20
30,000 -	35,000	32,500	259.85	11	357,500	2,858.35	9	292,500	2,338.65
35,000 -	40,000	37,500	298.35	6	225,000	1,790.10	7	262,500	2,088.45
40,000 -	45,000	42,500	336.85	2	85,000	673.70	7	297,500	2,357.95
45,000 -	50,000	47,500	375.35	2	95,000	750.70	2	95,000	750.70
50,000 -	60,000	55,000	433.10	3	165,000	1,299.30	14	770,000	6,063.40
60,000 -	70,000	65,000	510.10	4	260,000	2,040.40	8	520,000	4,080.80
70,000 -	80,000	75,000	587.10	3	225,000	1,761.30	5	375,000	2,935.50
80,000 -	90,000	85,000	664.10	1	85,000	664.10	4	340,000	2,656.40
90,000 -	100,000	95,000	741.10	1	95,000	741.10	4	380,000	2,964.40
								0	0.00
Sub-total				26,471	85,125,500	\$917,423.84	1,304	7,994,000	\$75,523
LARGE USERS > 100,000 G									
1	133,850	\$1,040.25	1	133,850	\$1,040.25	0	0	\$0.00	
2	511,785	3,950.34	0	0	0.00	22	11,259,260	86,907.50	
3		21.08	0	0	0.00	0	0	0.00	
4		21.08	0	0	0.00	0	0	0.00	
5		21.08	0	0	0.00	0	0	0.00	
Sub-total				1	133,850	\$1,040.25	22	11,259,260	\$86,907.50
TOTAL FOR ALL USERS				26,472	85,259,350	\$918,464	1326	19,253,260	\$162,431
PSC Report Figures 2014				26,472	84,742,000	\$918,672	1344	19,702,000	\$162,202
Grand Total All Users							27,798	104,512,610	\$1,080,895.03

EXHIBIT 15

POWELLS VALLEY WATER DISTRICT

Proposed Billing Analysis

Existing Customers

			Residential				Non-Residential / Commercial		
Monthly Water Usage	Average	Average Rate	No. of Bills	Usage	Income	No. of Bills	Usage	Income	
0 - 2,000	1,000	\$23.22	9476	9,476,000	\$220,032.72	621	621,000	\$14,419.62	
2,000 - 3,000	2,500	\$28.25	5542	13,855,000	156,561.50	204	510,000	5,763.00	
3,000 - 4,000	3,500	\$38.31	4247	14,864,500	162,702.57	108	378,000	4,137.48	
4,000 - 5,000	4,500	\$47.88	2807	12,631,500	134,385.13	53	238,500	2,537.38	
5,000 - 6,000	5,500	\$56.95	1703	9,366,500	96,977.34	32	176,000	1,822.24	
6,000 - 7,000	6,500	\$65.72	984	6,396,000	64,668.48	44	286,000	2,891.68	
7,000 - 8,000	7,500	\$74.20	588	4,410,000	43,629.60	26	195,000	1,929.20	
8,000 - 9,000	8,500	\$82.68	338	2,873,000	27,945.84	21	178,500	1,736.28	
9,000 - 10,000	9,500	\$91.16	190	1,805,000	17,320.40	16	152,000	1,458.56	
10,000 - 11,000	10,500	\$99.64	143	1,501,500	14,248.52	15	157,500	1,494.60	
11,000 - 12,000	11,500	\$108.12	101	1,161,500	10,920.12	20	230,000	2,162.40	
12,000 - 13,000	12,500	\$116.60	80	1,000,000	9,328.00	15	187,500	1,749.00	
13,000 - 14,000	13,500	\$125.08	64	864,000	8,005.12	7	94,500	875.56	
14,000 - 15,000	14,500	\$133.56	30	435,000	4,006.80	8	116,000	1,068.48	
15,000 - 16,000	15,500	\$142.04	22	341,000	3,124.88	8	124,000	1,136.32	
16,000 - 17,000	16,500	\$150.52	19	313,500	2,859.88	8	132,000	1,204.16	
17,000 - 18,000	17,500	\$159.00	16	280,000	2,544.00	3	52,500	477.00	
18,000 - 19,000	18,500	\$167.48	17	314,500	2,847.16	3	55,500	502.44	
19,000 - 20,000	19,500	\$175.96	11	214,500	1,935.56	1	19,500	175.96	
20,000 - 25,000	22,500	\$201.40	44	990,000	8,861.60	19	427,500	3,826.60	
25,000 - 30,000	27,500	\$243.80	16	440,000	3,900.80	12	330,000	2,925.60	
30,000 - 35,000	32,500	\$286.20	11	357,500	3,148.20	9	292,500	2,575.80	
35,000 - 40,000	37,500	\$328.60	6	225,000	1,971.60	7	262,500	2,300.20	
40,000 - 45,000	42,500	\$371.00	2	85,000	742.00	7	297,500	2,597.00	
45,000 - 50,000	47,500	\$413.40	2	95,000	826.80	2	95,000	826.80	
50,000 - 60,000	55,000	\$477.00	3	165,000	1,431.00	14	770,000	6,678.00	
60,000 - 70,000	65,000	\$561.80	4	260,000	2,247.20	8	520,000	4,494.40	
70,000 - 80,000	75,000	\$646.60	3	225,000	1,939.80	5	375,000	3,233.00	
80,000 - 90,000	85,000	\$731.40	1	85,000	731.40	4	340,000	2,925.60	
90,000 - 100,000	95,000	\$816.20	1	95,000	816.20	4	380,000	3,264.80	
		\$23.22	0			0	0	0.00	
Sub-total			26,471	85,125,500	\$1,010,660.21	1,304	7,994,000	\$83,189.16	
								1093849.365	
LARGE USERS									
1	133,850	\$1,145.65	1	133,850	\$1,145.65	0	0	\$0.00	
2	511,785	\$4,350.53	0	0	0.00	22	11,259,260	\$95,711.72	
3	0	\$23.22	0	0	0.00	0	0	\$0.00	
4	0	\$23.22	0	0	0.00	0	0	\$0.00	
5	0	\$23.22	0	0	0.00	0	0	\$0.00	
Sub-total			1	133,850	\$1,145.65	22	11,259,260	\$95,711.72	
TOTAL FOR EX. USERS			26,472	85,259,350	\$1,011,806	1,326	19,253,260	\$178,900.88	
Grand Total All Users						27798	104,512,610	\$1,190,706.74	

POWELLS VALLEY WATER DISTRICT

FmHA Summary / Addendum Tables XVII, XVIII & XIX - Pages 28, 29 & 30

Project Operating Budget	2014		Difference
	Current <u>Operation</u>	Proposed <u>Operation</u>	Extension <u>Only</u>
A. Operating Income:			
Sewer Revenue	\$79,820	\$87,564	7,744
Late charge Fees	0	\$0	0
Other (Describe)		\$0	0
Less Allowances & Deductions	0	\$0	0
Total Operating Income	\$79,820	\$87,564	7,744
B. Operation and Maintenance Expenses:	2014 PSC	Projected	Difference
Operation Expense	21,705	22,356	651
Maintenance Expense	28,974	29,843	869
Customer Accounts Expense	327	337	10
Administrative and General Expense	15,795	16,269	474
		0	0
		0	0
		0	0
Total Operating Expenses	\$66,801	\$68,805	\$2,004
Net Operating Income	\$13,019	\$18,759	5,740
C. Non-Operating Income:			
Interest on Deposits	61	61	0
Other (Identify)	(59)	(59)	0
Total Non-Operating Income	2	2	0
D. Net Income	\$13,021	\$18,761	5,740
E. Debt Repayment:			
FmHA Interest (Audit)	12,312	12,312	0
FmHA Principal (PSC)	4,700	4,700	0
Non-FmHA Interest	0	0	0
Non-FmHA Principal	0	0	0
Total Debt Repayment	\$17,012	\$17,012	\$0
F. Balance available for Coverage and Depreciation	(\$3,991)	\$1,749	5,740
H. Replacement Reserves and Coverage			
Coverage on Existing Debt	0.1 1,701	1,701	0
Coverage on New Debt		0	0
Short Lived Assets Reserve	0	0	0
Total Replacement Reserves and Coverage	\$1,701	\$1,701	\$0
G. Balance after Reserves	(\$5,692)	\$48	\$5,740

Sewer Loan Information

PSC Annual Report 2014 Sewer							Calculated Values		
Orig Issue	Issue	Maturity	Outstanding Balance	Interest Amt (f)	Calc'd Int	Period	Avg P&I		
92-11	300,000	01-Nov-2002	01-Jan-2042	262,000	4.500%	\$11,891	\$11,790	39.2	\$16,426
92-17	27,000	16-Oct-2006	01-Jan-2045	24,800	4.375%	\$421	\$1,085	38.2	\$1,466
	<u>327,000</u>			<u>286,800</u>		<u>\$12,312</u>	<u>\$12,875</u>		<u>\$17,892</u>
PSC Report 2013									
92-11	300,000	01-Nov-2002	01-Jan-2042	\$266,500	4.500%	\$12,274	\$11,993	39.2	\$16,426
92-17	27,000	16-Oct-2006	01-Jan-2045	\$25,000	4.375%	\$941	\$1,094	38.2	\$1,466
	<u>327,000</u>			<u>\$291,500</u>		<u>\$13,215</u>	<u>\$13,086</u>		<u>\$17,892</u>
			Bond Payment			Change in Interest			
			Difference in Outstanding Balance 92-11	\$4,500		\$383			
			Difference in Outstanding Balance 92-17	\$200		\$520			
			Assumed to be the Bond Principal Payment	\$4,700		\$903			
Estimate of Payments									
			Average P&I	\$17,892					
			Bond Payment	- 4,700					
			Interest	\$13,192					

POWELLS VALLEY WATER DISTRICT
Schedule of Sewer Rates

RATE BLOCK		EXISTING	PROPOSED	INCREASE
First	2,000 Gallons	\$25.12	\$27.57	10%
All Over	2,000 Gallons	\$12.56	\$13.78	10%

POWELLS VALLEY WATER DISTRICT

Existing Sewer Billing Analysis

Monthly Water Usage	Average Usage	Average Rate	No. of Bills	Residential		Non-Residential / Commercial		
				Usage	Income	No. of Bills	Usage	Income
0 - 2,000	1,000	\$25.12	345	345,000	\$8,666.40	242	242,000	6,079.04
2,000 - 3,000	2,500	31.40	173	432,500	5,432.20	56	140,000	1,758.40
3,000 - 4,000	3,500	43.96	105	367,500	4,615.80	31	108,500	1,362.76
4,000 - 5,000	4,500	56.52	81	364,500	4,578.12	24	108,000	1,356.48
5,000 - 6,000	5,500	69.08	42	231,000	2,901.36	11	60,500	759.88
6,000 - 7,000	6,500	81.64	19	123,500	1,551.16	20	130,000	1,632.80
7,000 - 8,000	7,500	94.20	10	75,000	942.00	14	105,000	1,318.80
8,000 - 9,000	8,500	106.76	7	59,500	747.32	12	102,000	1,281.12
9,000 - 10,000	9,500	119.32	6	57,000	715.92	9	85,500	1,073.88
10,000 - 11,000	10,500	131.88	5	52,500	659.40	5	52,500	659.40
11,000 - 12,000	11,500	144.44	5	57,500	722.20	8	92,000	1,155.52
12,000 - 13,000	12,500	157.00	4	50,000	628.00	9	112,500	1,413.00
13,000 - 14,000	13,500	169.56	0	0	0.00	2	27,000	339.12
14,000 - 15,000	14,500	182.12	0	0	0.00	1	14,500	182.12
15,000 - 16,000	15,500	194.68	0	0	0.00	3	46,500	584.04
16,000 - 17,000	16,500	207.24	1	16,500	207.24	3	49,500	621.72
17,000 - 18,000	17,500	219.80	0	0	0.00	2	35,000	439.60
18,000 - 19,000	18,500	232.36	0	0	0.00	1	18,500	232.36
19,000 - 20,000	19,500	244.92	0	0	0.00	0	0	0.00
20,000 - 25,000	22,500	282.60	0	0	0.00	11	247,500	3,108.60
25,000 - 30,000	27,500	345.40	0	0	0.00	5	137,500	1,727.00
30,000 - 35,000	32,500	408.20	0	0	0.00	2	65,000	816.40
35,000 - 40,000	37,500	471.00	0	0	0.00	1	37,500	471.00
40,000 - 45,000	42,500	533.80	0	0	0.00	2	85,000	1,067.60
45,000 - 50,000	47,500	596.60	0	0	0.00	1	47,500	596.60
50,000 - 60,000	55,000	690.80	0	0	0.00	5	275,000	3,454.00
60,000 - 70,000	65,000	816.40	0	0	0.00	4	260,000	3,265.60
70,000 - 80,000	75,000	942.00	0	0	0.00	2	150,000	1,884.00
80,000 - 90,000	85,000	1,067.60	0	0	0.00	1	85,000	1,067.60
90,000 - 100,000	95,000	1,193.20	0	0	0.00	2	190,000	2,386.40
							0	0.00
Sub-total			803	2,232,000	\$32,367.12	489	3,109,500	\$42,095
LARGE USERS > 100,000 G								
1	100,470	\$1,261.90	1	100,470	\$1,261.90	0	0	\$0.00
2	108,167	1,358.57	0	0	0.00	3	324,500	4,075.72
3		25.12	0	0	0.00	0	0	0.00
4		25.12	0	0	0.00	0	0	0.00
5		25.12	0	0	0.00	0	0	0.00
Sub-total	0		1	100,470	\$1,261.90	3	324,500	\$4,075.72
TOTAL FOR ALL USERS			804	2,332,470	\$33,629	492	3,434,000	\$46,171
Grand Total All Users						1,296	5,766,470	\$79,799.58

POWELLS VALLEY WATER DISTRICT

Proposed Sewer Billing Analysis

Existing Customers

			Residential				Non-Residential / Commercial		
Monthly Water Usage	Average	Average Rate	No. of Bills	Usage	Income	No. of Bills	Usage	Income	
0 - 2,000	1,000	\$27.57	345	345,000	\$9,511.65	242	242,000	\$6,671.94	
2,000 - 3,000	2,500	\$34.46	173	432,500	5,961.58	56	140,000	1,929.76	
3,000 - 4,000	3,500	\$48.24	105	367,500	5,065.20	31	108,500	1,495.44	
4,000 - 5,000	4,500	\$62.02	81	364,500	5,023.62	24	108,000	1,488.48	
5,000 - 6,000	5,500	\$75.80	42	231,000	3,183.60	11	60,500	833.80	
6,000 - 7,000	6,500	\$89.58	19	123,500	1,702.02	20	130,000	1,791.60	
7,000 - 8,000	7,500	\$103.36	10	75,000	1,033.60	14	105,000	1,447.04	
8,000 - 9,000	8,500	\$117.14	7	59,500	819.98	12	102,000	1,405.68	
9,000 - 10,000	9,500	\$130.92	6	57,000	785.52	9	85,500	1,178.28	
10,000 - 11,000	10,500	\$144.70	5	52,500	723.50	5	52,500	723.50	
11,000 - 12,000	11,500	\$158.48	5	57,500	792.40	8	92,000	1,267.84	
12,000 - 13,000	12,500	\$172.26	4	50,000	689.04	9	112,500	1,550.34	
13,000 - 14,000	13,500	\$186.04	0	0	0.00	2	27,000	372.08	
14,000 - 15,000	14,500	\$199.82	0	0	0.00	1	14,500	199.82	
15,000 - 16,000	15,500	\$213.60	0	0	0.00	3	46,500	640.80	
16,000 - 17,000	16,500	\$227.38	1	16,500	227.38	3	49,500	682.14	
17,000 - 18,000	17,500	\$241.16	0	0	0.00	2	35,000	482.32	
18,000 - 19,000	18,500	\$254.94	0	0	0.00	1	18,500	254.94	
19,000 - 20,000	19,500	\$268.72	0	0	0.00	0	0	0.00	
20,000 - 25,000	22,500	\$310.06	0	0	0.00	11	247,500	3,410.66	
25,000 - 30,000	27,500	\$378.96	0	0	0.00	5	137,500	1,894.80	
30,000 - 35,000	32,500	\$447.86	0	0	0.00	2	65,000	895.72	
35,000 - 40,000	37,500	\$516.76	0	0	0.00	1	37,500	516.76	
40,000 - 45,000	42,500	\$585.66	0	0	0.00	2	85,000	1,171.32	
45,000 - 50,000	47,500	\$654.56	0	0	0.00	1	47,500	654.56	
50,000 - 60,000	55,000	\$757.91	0	0	0.00	5	275,000	3,789.55	
60,000 - 70,000	65,000	\$895.71	0	0	0.00	4	260,000	3,582.84	
70,000 - 80,000	75,000	\$1,033.51	0	0	0.00	2	150,000	2,067.02	
80,000 - 90,000	85,000	\$1,171.31	0	0	0.00	1	85,000	1,171.31	
90,000 - 100,000	95,000	\$1,309.11	0	0	0.00	2	190,000	2,618.22	
		\$27.57	0			0	0	0.00	
Sub-total			803	2,232,000	\$35,519.09	489	3,109,500	\$46,188.56	
								81707.65	
LARGE USERS									
1	100,470	\$1,384.49	1	100,470	\$1,384.49	0	0	\$0.00	
2	108,167	\$1,490.55	0	0	0.00	3	324,500	\$4,471.64	
3	0	\$25.12	0	0	0.00	0	0	\$0.00	
4	0	\$25.12	0	0	0.00	0	0	\$0.00	
5	0	\$25.12	0	0	0.00	0	0	\$0.00	
Sub-total			1	100,470	\$1,384.49	3	324,500	\$4,471.64	
TOTAL FOR EX. USERS			804	2,332,470	\$36,904	492	3,434,000	\$50,660.20	
Grand Total All Users						1296	5,766,470	\$87,563.78	