



Case No. 2006-00308

Transmittal Letter

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To:	Public Service Commission		
	211 Sower Blvd		
	Frankfort, KY 40601		
Date:	June 28, 2006	Project No.:	2-340126
Attention:	Mike Burford		
RE:	Estill County Water District		

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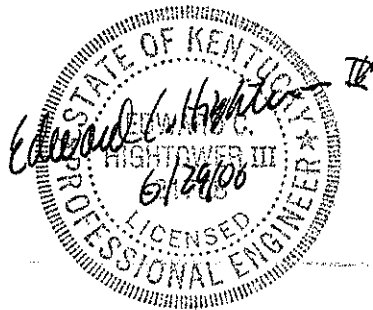
**Final Engineering
Report – Phase 9
Water System
Expansion**

**Estill County
Water District, KY**

May 2006

Final Engineering Report for Estill County Water District

Phase 9 Water System Expansion



Prepared by:

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May 2006



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SECTION 1
PURPOSE OF REPORT

This report updates the Preliminary Engineering Report dated January 2005, of the proposed Phase 9 Water System Expansion Project.

SECTION 2
FINANCIAL

A. Construction and Project Costs

Construction and project cost estimates based on the bids dated April 13, 2006, are presented in Table 1, located in the Appendix. The total estimated construction cost, including meters, is \$2,620,357.60. The total project cost is \$3,139,707.60.

B. Project Budget

A summary of the project funding is presented in Table 2, located in the Appendix. Funding is comprised of grants (Rural Development - \$540,000; ARC - \$350,000; Tobacco Development - \$600,000; IEDF \$318,000), connection fees (\$25,000), and a Rural Development loan of \$945,000. Total Funds available are \$2,778,000. There is a shortfall of funds for the project of \$361,707.60 (\$3,139,707.60 - \$2,778,000). A change order will be issued at the time of construction signing to eliminate one section of line, change size and material type of several sections of water line and eliminate some of the radio read meters. The change order will be for \$361,707.60. This will bring the construction budget within the available funds for the project.

C. Rate Analysis

Estill County Water District served 3,430 customers as of May 2002. Currently (May 2006), Estill County Water District serves 3,615 customers. Based on growth in recent years, an average of 46 new county customers will be added each year. The expected annual income, based on existing rates and recent billing data provided by Estill County Water District is presented in Table 3 located in the Appendix. The average monthly bill for county residential customers is \$21.15 (3,800 gallons) based on a calculated average of all the customers over the past 12 months.

SECTION 3
SUMMARY AND CONCLUSIONS

The Phase 9 Water System Improvement Project consists of extensions to areas outside the county currently not served by a public water supply system. These extensions will make service available to 91 new customers.

The 2006 Proposed Operating Budgets for the existing system and the Phase 9 at the current rates extensions are presented in the Appendix. The total projected deficit for the entire system in 2006 with the existing rates is approximately \$64,525. Based upon these projections, a 15% rate increase would be needed to cover this deficit.

Table 1
Estill County Water District
Phase 9 Water System Improvements
Total Project Cost
April 2006

Contract 1-2004 Water Main Extensions Division A		\$1,670,606.31
Contract 1-2004 Water Main Extensions Division B		360,251.29
Contract 2-2005 Water Storage Tank (250,000 gal)		589,500.00
Total Construction		\$2,620,357.60
Engineering		\$274,350.00
Preliminary Study and Report Phase	\$18,000.00	
Final Design	96,845.00	
Advertise & Bid	13,835.00	
General Services	27,670.00	
Additional Services	47,500.00	
Resident Observation	70,500.00	
Land and Rights		30,000.00
Legal and Administrative		60,000.00
Interest During Construction		10,000.00
Construction Contingencies		145,000.00
TOTAL PROJECT COST		\$3,139,707.60

Table 2
Estill County Water District
Phase 9 Water System Improvements
Total Project Funding
April 2006

RUS Loan	\$945,000
RUS Grant	\$540,000
ARC Grant	\$350,000
State of Kentucky Tobacco Development Fund Grant	\$600,000
Connection Fees	\$25,000
IEDF Grant	\$318,000
TOTAL PROJECT FUNDING	\$2,778,000

Table 3
Current Annual Income (Estimated for Fiscal Year Ended 2005, Existing Rates)

ECWC 5/8" x 3/4" Meter	3661 Res. x	\$ 21.15	x 12 mos. =	\$ 929,162
	119 Non Res.x	\$ 37.67	x 12 mos. =	<u>\$ 53,793</u>
	Subtotal			\$ 982,955
ECWC 1" Meter	4 Res. x	\$ 137.09	x 12 mos. =	\$ 6,580
	4 Non Res.x	\$ 108.94	x 12 mos. =	<u>\$ 5,229</u>
	Subtotal			\$ 11,809
ECWC 2" Meter	4 Res. x	\$ 149.10	x 12 mos. =	\$ 7,157
	8 Non Res.x	\$ 138.35	x 12 mos. =	<u>\$ 13,282</u>
	Subtotal			\$ 20,438
Sales to Powell Valley Water District	1 Non Res.x	\$ 85.19	x 12 mos. =	<u>\$ 1,022</u>
	Subtotal			\$ 1,022
ECWC 5/8" x 3/4" Meter (Cobhill)	212 Res. x	\$ 21.73	x 12 mos. =	\$ 55,281
	2 Non Res.x	\$ 17.00	x 12 mos. =	<u>\$ 408</u>
	Subtotal			\$ 55,689
ECWC 2" Meter (Cobhill)	1 Res. x	\$ 209.51	x 12 mos. =	\$ 2,514
	Subtotal			\$ 2,514
Other Operating Income	(Connection Fees, Bulk, Sprinkler, and and Penalties)			\$ 36,792
Total Operating Revenue				\$ 1,111,220
Total Residential Customers	3,882			
Total Non-Residential Customers	133			

Proposed Phase 9: Project (New Customers)

Signed	91 Resid. x	\$ 21.15	x 12 mos. =	\$ 23,096
	Projected	\$ 21.15	x 12 mos. =	<u>\$ 2,284</u>
	Subtotal			\$ 25,380
Projected Operating Revenue				\$ 1,136,600

Table 4
Current Annual Income (Estimated for Fiscal Year Ended 2005, New Rates)

ECWC 5/8" x 3/4" Meter	3615 Res. x	\$ 24.32	x 12 mos. =	\$ 1,055,110
	119 Non Res.x	\$ 43.32	x 12 mos. =	\$ <u>61,862</u>
	Subtotal			\$ 1,116,972
ECWC 1" Meter	4 Res. x	\$ 157.65	x 12 mos. =	\$ 7,567
	4 Non Res.x	\$ 125.28	x 12 mos. =	\$ <u>6,013</u>
	Subtotal			\$ 13,581
ECWC 2" Meter	4 Res. x	\$ 171.47	x 12 mos. =	\$ 8,230
	8 Non Res.x	\$ 159.10	x 12 mos. =	\$ <u>15,274</u>
	Subtotal			\$ 23,504
Sales to Powell Valley Water District	1 Non Res.x	\$ 97.97	x 12 mos. =	\$ <u>1,176</u>
	Subtotal			\$ 1,176
ECWC 5/8" x 3/4" Meter (Cobhill)	212 Res. x	\$ 24.99	x 12 mos. =	\$ 63,573
	2 Non Res.x	\$ 19.55	x 12 mos. =	\$ <u>469</u>
	Subtotal			\$ 64,042
ECWC 2" Meter (Cobhill)	1 Res. x	\$ 240.94	x 12 mos. =	\$ 2,891
	Subtotal			\$ 2,891
Other Operating Income	(Connection Fees, Bulk, Sprinkler, and and Penalties)			\$ 36,792
Total Operating Revenue				\$ 1,258,958
Total Residential Customers	3,836			
Total Non-Residential Customers	133			

Proposed Phase 9: Project (New Customers)

Signed	91 Resid. x	\$ 24.32	x 12 mos. =	\$ 26,560
Projected	9 Resid. x	\$ 24.32	x 12 mos. =	\$ <u>2,627</u>
	Subtotal			\$ 29,187
Projected Operating Revenue				\$ 1,288,145

<u>OPERATING BUDGET</u>		Year Ending	<u>2006</u>
(With Existing Rates)			
A.	Operating Income: With Existing Rates	\$	1,136,600
	Total Income	\$	1,136,600
B.	Operation and Maintenance Expenses:		
	Source of Supply Expenses	\$	477,716
	Transmission and Distribution Expense	\$	94,896
	Customer Accounts Expense	\$	45,103
	Administrative and General Expense	\$	361,477
	Total Operating Expenses	\$	979,192
	Net Income	\$	157,408
C.	Non-Operating Income		
	Interest Income	\$	5,454
	Net Income	\$	162,862
D.	Debt Repayment		
	Interest (2005)	\$	107,002
	Principal (2005)	\$	50,600
	New Interest (Phase 9)	\$	25,489
	New Pricipal (Phase 9)	\$	23,625
	Total Debt Repayment	\$	206,716
E.	Balance Available for Coverage and Depreciation	\$	(43,854)
F.	Required Coverage @ 10%	\$	20,672
G.	Surplus (Deficit)	\$	(64,525)

<u>OPERATING BUDGET</u>		Year Ending	<u>2008</u>
(with 15% Rate Increase)			
A.	Operating Income: With New Rates	\$	1,288,145
	Total Income	\$	1,288,145
B.	Operation and Maintenance Expenses:		
	Source of Supply Expenses	\$	499,430
	Transmission and Distribution Expense	\$	103,934
	Customer Accounts Expense	\$	49,398
	Administrative and General Expense	\$	377,194
	Total Operating Expenses	\$	1,029,955
	Net Income	\$	258,190
C.	Non-Operating Income		
	Interest Income	\$	5,454
	Net Income	\$	263,644
D.	Debt Repayment		
	Interest (2005)	\$	107,002
	Principal (2005)	\$	50,600
	New Interest (Phase 9)	\$	25,489
	New Pricipal (Phase 9)	\$	23,625
	Total Debt Repayment	\$	206,716
E.	Balance Available for Coverage and Depreciation	\$	56,928
F.	Required Coverage @ 10%	\$	20,672
G.	Surplus (Deficit)	\$	36,256