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ADDENDUM NO. 1

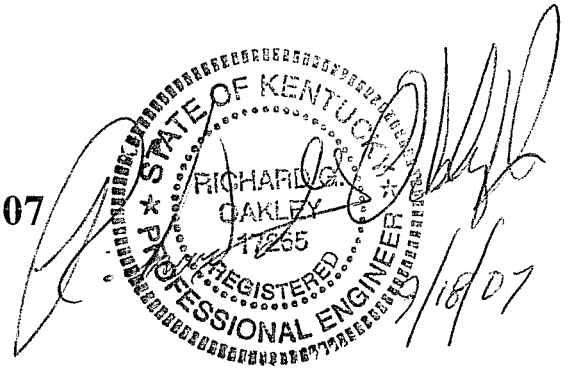
PRELIMINARY ENGINEERING REPORT

WATER SYSTEM IMPROVEMENTS

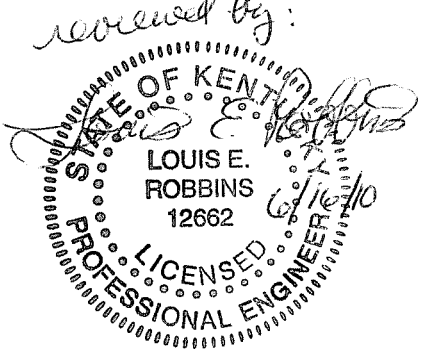
FOR

BARKLEY LAKE WATER DISTRICT

SEPTEMBER 18, 2007



GRW Engineers, Inc.
404 BNA Drive, Suite 201
Nashville TN 37217
Phone: (615) 366-1600; Fax (615) 366-0406



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BARKLEY LAKE WATER DISTRICT
SEPTEMBER 18, 2007

I. INTRODUCTION

The Addendum to the August 2006 Preliminary Engineering Report is presented to revise the project scope of the Water System Improvements project. Scope revisions focus on increasing the water treatment plant capacity from 2.0 MGD to 3.75 MGD. The Commissioners for the Barkley Lake Water District voted to expand the Water Treatment Plant to 3.75 MGD at their September 10, 2007 monthly meeting. The Water Plant was originally constructed in 1967 as a 1.0 MGD facility. In 1988, the water treatment doubled in capacity to 2.0 MGD. Now, another 20 years later, the plant has reached the point of needing to double again.

The summer of 2007 was exceedingly dry in the region. In July and August the water treatment plant pumped at greater than 80 percent capacity for 52 percent of the period. In July and August, water pumped averaged 78 and 86 percent of plant capacity respectively. Wholesale customers' request for more water had to be denied. This prompted the Board to consider expanding the plant capacity.

Table 1
Summary of Water Pumped versus Water Sold – July and August 2007

Month/Year	Average Water Pumped (MGD)	No. of Days > 80% (> 1.6 MGD)	Water Sold (MGD)
July 2007	1.56	10	1.06
August 2007	1.71	22	1.07

Each summer, Trigg County experiences a great influx of temporary residents and tourists/vacationers that enjoy Lake Barkley. It is these months that water production and usage increases dramatically. It is a necessity for the Water District to be able to produce and supply water to meet demand during these months. As previously stated, the Water District had to restrict wholesale customer usage this summer.

Barkley Lake Water District has received a "Letter of Conditions" from Rural Development for funding originally planned for the $4.9 Million of a $5.9 Million dollar Water Treatment Plant Improvements and Distribution System Improvements project. Originally planned for the Water Treatment Plant were: renovations of the filters, construction of a new clearwell and high service building, and improvements at the raw water intake. Distribution System Improvements include construction of

20,000 L.F. of 16" Transmission Main (13,000 L.F. being ductile iron designed for increased system pressures) and a 1.5 MG Elevated Water Tank to replace the 0.2 MG Pete Light stand pipe.

The original project did not include increasing the capacity of the Water Treatment Plant.

Barkley Lake Water District has changed in the last year. Today, the District's normal water sales include between 2 and 3 MG per month each to Christian County Water District and North Stewart Utility District. The Water District is accustomed to peak demands on holiday weekends in the summer, but peak demands were part of mid-week production in summer 2007.

II. DESCRIPTION OF THE REVISIONS TO THE PROJECT SCOPE

A. Distribution System

No changes from the August 2006 PER are proposed for the distribution system.

The Kentucky Transportation Cabinet is working with the Water District to construct the 16-inch transmission main where it does not have to be replaced due to widening Highway 68/80 in the future. The Roadway Drawings are scheduled to be issued in early 2008. The Transportation Cabinet requires that any utility design that they are participating in the cost be on their Roadway Drawings.

The Water District is making application for a Kentucky Rural Water Loan to be used with $789,000 in KIA grant to fund the proposed 1.5 MG water tank. Rural Development funds are not sought for the tank project. The tank design is complete. The Commissioners' desire is for it to be bid as soon as practical. Thus in order to proceed with tank construction, they voted to separate it from the WTP and Transmission Main projects as both have many complicated issues that may take longer to resolve.

The Water District maintains approximately 400 miles of rural water line with approximately 12 customers per mile. As typical with large rural water systems that have limited customers, water loss is an ongoing problem. In 2006, the District began a water line replacement project that would replace and retire approximately 39,000 feet of Asbestos Cement (AC) water line with PVC water line in effort to reduce water loss. The District has approximately 140 miles of AC water line. It will take a number of years to replace all of it. The District has replaced or recalibrated all residential and commercial water meters in order to improve the Water Sold accuracy. Also, all meters have been converted to "Radio Read" meters. This has improved the time differential that was occurring between the "water

pumped" reading versus the "water sold" reading. Other water loss reduction plans that the District is or have implemented are found in an appendix at the end of this report.

B. Water Treatment Plant

In addition to the recommendations of the 2006 PER, Barkley Lake Water District proposes to construct a new chemical mixing (flash) basin, new flocculation basin and new sedimentation basin to increase the plant capacity to 3.75 MGD. The original flocculation and sedimentation basin will be retired from operation. The sedimentation basin constructed in 1989 will remain in operation with a new sludge collection system and the addition of tube settlers. The proposed flocculation basin will be designed for 45 minutes detention time at the design flow. Tube settlers and sludge collectors will be included with the proposed sedimentation basin. Raw water and high service pumps system will be triplex pumps with two pumps running to meet design conditions and the third pump for redundancy.

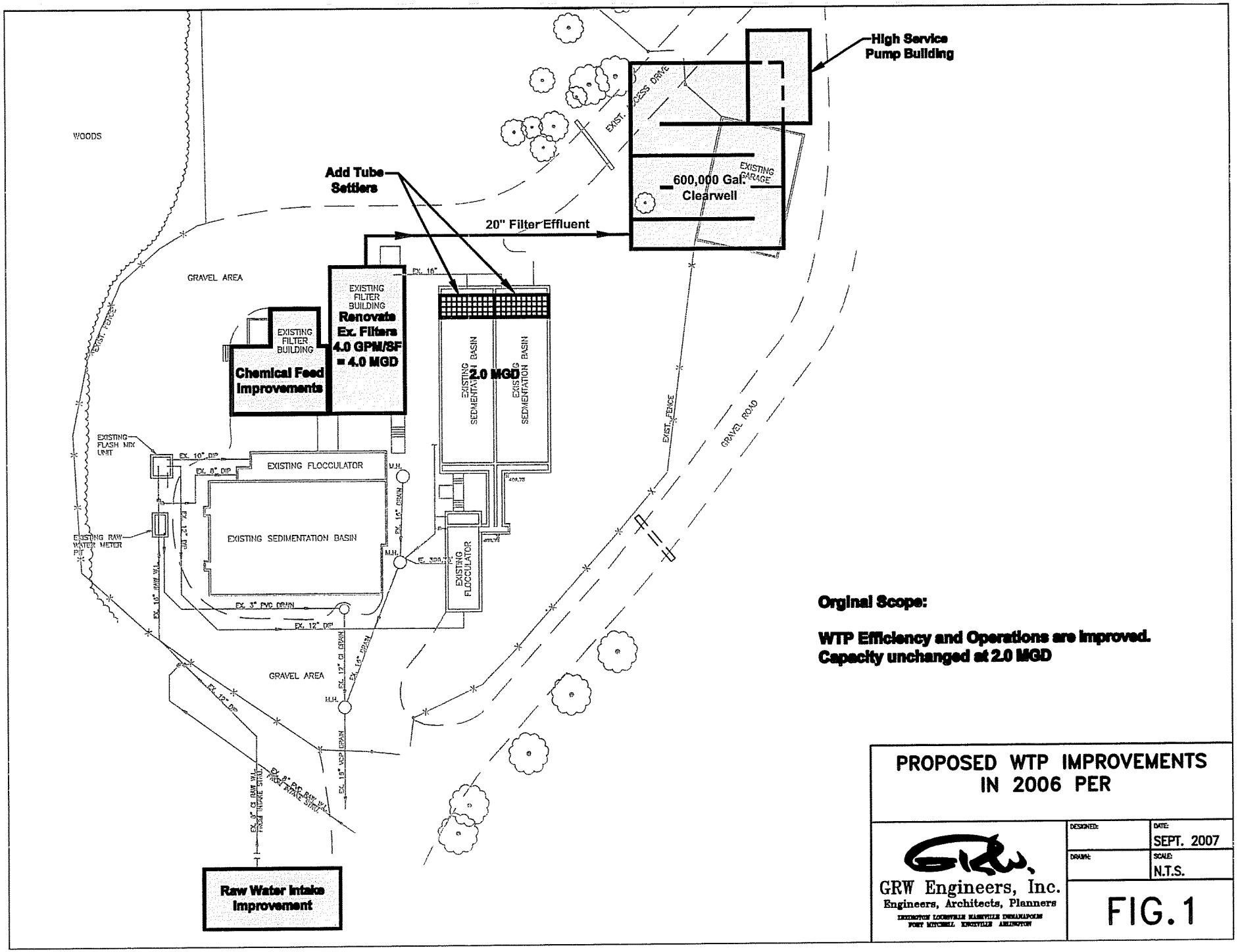
Each process train of the water treatment plant will parallel the other, laying side by side, sharing a common wall. Flow splitting is simplified. The treatment basin footprint is compact. Improvements to the overall treatment process; that is, improved flocculation and settling along with improved sludge collection may improve filter run times. A pump pit that frequently overflows in the pump room is going to be eliminated. The result anticipated is improved treatment capability, improved plant efficiency, and a reduction of water used at the plant.

Figure 1 is a preliminary layout of the proposed improvements from the August 2006 PER. Figure 2 is a revised preliminary layout of the proposed improvements recommended in this Addendum.

III. REVISED PROJECT COST

A. Water Treatment Plant

The revised project results in a revision to the project cost. Table 2 compares the original water treatment plant project cost with the revised project cost.



Orginal Scope:

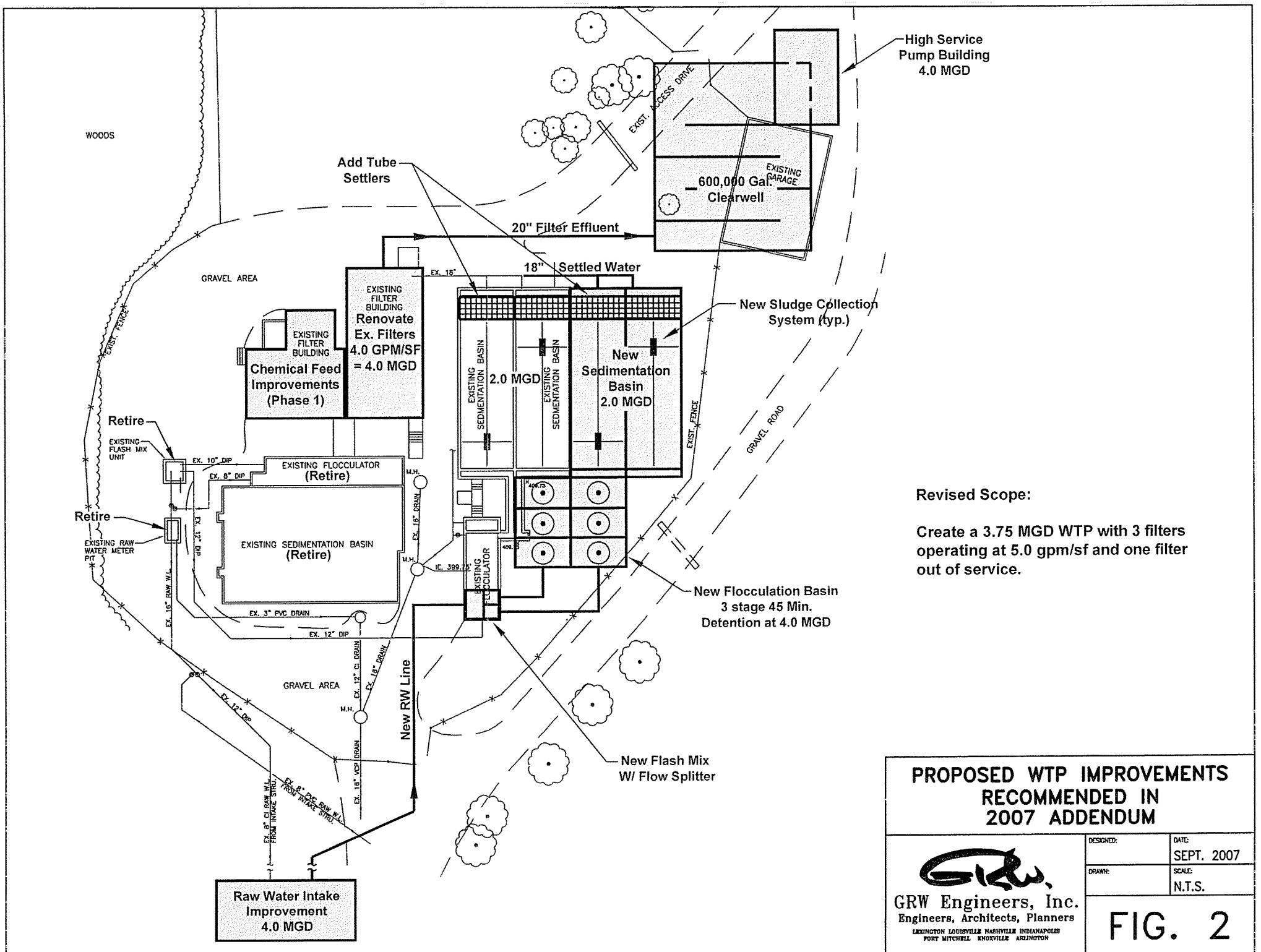
WTP Efficiency and Operations are Improved.
Capacity unchanged at 2.0 MGD

PROPOSED WTP IMPROVEMENTS IN 2006 PER

GRW Engineers, Inc.
Engineers, Architects, Planners
LEXINGTON LOUISVILLE NASHVILLE INDIANAPOLIS
FORT MITCHELL KNOXVILLE ARLINGTON

DESIGNED:	DATE: SEPT. 2007
DRAWN:	SCALE: N.T.S.

FIG. 1



Revised Scope:

Create a 3.75 MGD WTP with 3 filters operating at 5.0 gpm/sf and one filter out of service.

PROPOSED WTP IMPROVEMENTS RECOMMENDED IN 2007 ADDENDUM

GRW Engineers, Inc.
Engineers, Architects, Planners
LEXINGTON LOUISVILLE NASHVILLE INDIANAPOLIS
FORT MITCHELL KNOXVILLE ARLINGTON

DESIGNED:	DATE: SEPT. 2007
DRAWN:	SCALE: N.T.S.

FIG. 2

Table 2 – Revised Project Cost for Water Treatment Plant
(Compared with Original Project)

Description	Funded Project 2.0 MGD	Revised Project 4.0 MGD
WTP Improvements		
RW Intake Improvements, Clearwell and High Service Pump Station, and Filter Renovations	$2,200,000	$2,200,000
WTP Expansion		
In addition to the improvements identified in the previous row, RW Pumps, RW Line, New Flash Mix Basin, New Flocculation and Sedimentation Basin	Not Included	$2,500,000
Total Construction Cost	$2,200,000	$4,700,000
Contingency	$220,000	$470,000
Administration and Legal	35,000	$55,000
Engineering	149,500	$312,300
Other Engineering	$21,000	$21,000
Project Inspection	$110,300	$212,700
Interest During Construction	56,700	143,000
	$2,792,500	$5,914,000

B. Distribution System

The scope of the work has not changed with the distribution system – however, the construction cost is higher than originally budgeted. The budget cost for the elevated water storage tank has risen from $1.4 million to $1.75 million. This is not shown as a negative impact to the total project because the Kentucky Transportation Cabinet has indicated they desire to work with the Water District in properly locating the planned 16-inch water line to avoid relocation in the future. To this end, the Transportation Cabinet is willing to pay for the line cost, where the future right of way dictates the line's alignment. This Addendum values the Transportation Cabinet's project contribution at $350,000 (the increase in price of the water tank).

The Water District has contemplated and determined that they will seek alternative financing for the design and construction of the water tank. An application with Kentucky Rural Water Association has been made for $1,317,800 used in conjunction with KIA Grants totaling $789,400.

Table 3 - Revised Project Cost for Water Distribution System Improvements (Compared with Original Project)

Description	Funded Project 2.0 MGD	Revised Project 4.0 MGD
16-inch DIP Transmission Main (13,000 LF)	$780,000	$780,000
16-inch PVC Transmission Main (7,100 LF)	$320,000	$320,000
1.5 MG Elevated Water Tank	$1,400,000	$1,750,000
Total Construction Cost	$2,500,000	$2,850,000
Contingency	$250,000	$285,000
Administrative and Legal	$40,000	$40,000
Engineering	$170,000	$187,100
Other Engineering	$24,000	$24,000
Project Inspection	$89,000	$105,400
Interest During Construction	$64,500	$86,000
	$3,137,500	$3,577,500

C. Total Project Cost

Tables 2 and 3 are combined in Table 4 to determine the total project cost.

Table 4 – Total Project Cost

Description	Funded Project 2.0 MGD	Revised Project 4.0 MGD
WTP Expansion/Improvements	$2,200,000	$4,700,000
Distribution System Improvements	$2,500,000	$2,850,000
Total Construction Cost	$4,700,000	$7,550,000
Contingency	$470,000	$755,000
Administration and Legal	$75,000	$95,000
Engineering	$319,500	$499,400
Other Engineering	$45,000	$45,000
Project Inspection	$199,300	$318,100
Interest During Construction	$121,200	$229,000
	$5,930,000	$9,491,500

IV. PROJECT FUNDING

Barkley Lake Water District desires to bid construction of the water tank as soon a practical. Even though the possibility exists that the tank cannot be completely filled prior to construction of the entire project, it should hold at least the volume of the existing Pete Light Tank – a 0.2 MG standpipe and, what volume it does hold will be at a pressure equal to or greater than the Pete Light Tank when it is full.

The low water level of the new tank will be at an elevation equal to the Pete Light overflow elevation.

The water tank design is complete. The line work cannot begin until the Transportation Cabinet releases right of way drawings. Rural Development prefers all work to be bid at the same time. This is a conflict with the District's desire to have the tank in service in 2008. As such, the Commissioner's have sought financing from Kentucky Rural Water Association to finance the Water Tank portion of the project. The balance of the project is to be funded through Rural Development. Table 5 delineates the funding component of the proposed project.

Table 5 – Project Funding

Funding Agency	WTP Expansion/ Improvements & Water Transmission Main	1.5 MG Elevated Water Tank
Project Cost	$7,384,300	$2,107,200
Existing RD Loan	$4,002,000	N/A
Existing RD Grant	$900,000	N/A
Additional RD Loan	$1,544,387	N/A
Additional RD Grant	$347,313	N/A
EPA	$240,600	N/A
KIA (2003 and 2006)	N/A	$789,400
KY Rural Water Assoc	N/A	$1,317,800
KY Transportation Cab	$350,000	N/A
Total Project Funding	$7,384,300	$2,107,200

V. REVISED SUMMARY ADDENDUM

Additional debt will be incurred due to the construction of the recommended project. A rate adjustment is necessary to pay the additional debt and adequately fund a reserve account for the expanded project. No additional labor or power cost is anticipated from the expanded project.

Assuming the following water sales identified herein, a water rate increase of $0.58/1,000 gallons is advised. This is in addition to the rates identified in the May 2007 Letter of Conditions.[1] The Revised Summary Addendum provides the details necessary for the increase. Table 6 is presented to compare the cost of water to customers at 1,000 gallon intervals. It compares existing rates to those proposed in the May 2007 Letter of Conditions to those recommended herein.

[1] Note – The rate adjustment is for the WTP expansion only. The May 14, 2007 Letter of Conditions included a necessary rate adjustment for the WTP Improvements (less expansion), Transmission Main, and the 1.5 MG Elevated Water Tank. Therefore, the Water Tank construction can proceed without delay, due to the fact that the rates are in place to support the project.

Table 6 - Barkley Lake Water District - Water Rate Comparison

			Existing Rates		
Water Rate	Min. @	2,000	Gallons	$17.22	
	Next	98,000	Gallons @	$5.62	per 1,000 Gallons
	Next	400,000	Gallons @	$4.37	per 1,000 Gallons
	All Over	500,000	Gallons @	$3.12	per 1,000 Gallons
	Wholesale			$1.65	per 1,000 Gallons
			Proposed Rate with 2.0 MGD Project		
Water Rate	Min. @	2,000	Gallons	$18.22	
	Next	98,000	Gallons @	$6.12	per 1,000 Gallons
	Next	400,000	Gallons @	$4.87	per 1,000 Gallons
	All Over	500,000	Gallons @	$3.40	per 1,000 Gallons
	Wholesale			$1.65	per 1,000 Gallons
			Proposed Rate with 4.0 MGD Project		
Water Rate	Min. @	2,000	Gallons	$19.38	
	Next	98,000	Gallons @	$6.70	per 1,000 Gallons
	Next	400,000	Gallons @	$5.45	per 1,000 Gallons
	All Over	500,000	Gallons @	$3.98	per 1,000 Gallons
	Wholesale			$2.23	per 1,000 Gallons

Usage		Current Bill		2.0 MGD Project Bill		4.0 MGD Project Bill	
Minimum		$17.22	/mo	$18.22	/mo	$19.38	/mo
3,000	gal	$22.84	/mo	$24.34	/mo	$26.08	/mo
4,000	gal	$28.46	/mo	$30.46	/mo	$32.78	/mo
5,000	gal	$34.08	/mo	$36.58	/mo	$39.48	/mo
6,000	gal	$39.70	/mo	$42.70	/mo	$46.18	/mo
7,000	gal	$45.32	/mo	$48.82	/mo	$52.88	/mo
8,000	gal	$50.94	/mo	$54.94	/mo	$59.58	/mo
9,000	gal	$56.56	/mo	$61.06	/mo	$66.28	/mo
10,000	gal	$62.18	/mo	$67.18	/mo	$72.98	/mo
100,000	gal	$567.98	/mo	$617.98	/mo	$675.98	/mo
500,000	gal	$2,315.98	/mo	$2,565.98	/mo	$2,855.98	/mo
Wholesale 50 gpm =		$1.65	/1,000	$1.65	/1,000	$2.23	/1,000
2,160,000	gal	$3,564.00	/mo	$3,564.00	/mo	$4,816.80	/mo

KENTUCKY GUIDE 7
MAY 1998

SUMMARY ADDENDUM

TO

PRELIMINARY ENGINEERING REPORT

DATED 8/3/2006 (Revised September 14, 2007)

FOR

Barkley Lake Water District, Trigg Co., KY,
Water Treatment Plant and Distribution System Improvements
(Name of Project)

APPLICANT CONTACT PERSON Terry Goins, General Manager

APPLICANT PHONE NUMBER 270-522-8425

APPLICANT TAX IDENTIFICATION NUMBER (TIN) 61-0678683

ITEMS IN BOLD ITALIC PRINT ARE APPLICABLE TO SEWER SYSTEMS.

In order to avoid unnecessary delays in application processing, the applicant and its consulting engineer should prepare a summary of the preliminary report in accordance with this Guide.

Please complete the applicable sections of the Summary Addendum. ***Please note, if water and sewer revenue will <u>both</u> be taken as security for the loan, all user information and characteristics of <u>both</u> utility systems will be needed even though the project will benefit only <u>one</u> utility.***

Feasibility reviews and <u>grant determinations</u> may be processed more accurately and more rapidly if the Summary/Addendum is submitted simultaneously with the preliminary engineering report, or as soon thereafter as possible.

I. GENERAL

A. Proposed Project: Provide a brief description of the proposed project. In addition to this summary, the applicant/engineer should submit a project map of the service area.

The proposed project consists of improvements and expansion to the Water Treatment Plant and the Distribution System with the focus on improving water treatment capabilities and improving distribution of water from the Treatment Plant to the District customers. The project cost is estimated at $9,491,500. The WTP Improvements consist of:

1) Increase Raw Water Pumping Capability from 2.0 MGD to 3.75 MGD

2) Renovation of Existing Settling Basin; Renovation of the Filters

3) Upgrade Chemical Feed Systems

4) New Flocculation and Sedimentation Basin.

4) New Clearwell and High Service Pump Building

Distribution System Improvements include:

1) 20,000 LF of 16-in transmission main from the WTP to the ex. **Pete Lgt BPS**

2) New 1.5 MG Elevated Water Storage Tank - Funded separately by KY Rural Wa

3) Abandoning the Pete Light Springs BPS and the Gresham Road BPS

II. FACILITY CHARACTERISTICS OF EXISTING SEWER SYSTEM

A. Sewage Treatment: N/A

1. Type _____

2. Method of Sludge Disposal _____

_____

3. Cost per 1,000 gallons if sewage treatment is contracted:

$0.00

4. Date Contructed _____

B. Treatment Capacity of Sewage Treatment Plant N/A

C. Type of Sewage Collector System (Describe) N/A

_____

_____

D. Number and Capacity of Sewage Lift Stations N/A

E. Sewage Collection System: N/A

Lineal Feet of Collector Lines, by size *6"* _____ *8"* _____

10" _____ *12"* _____ *Larger* _____

Date(s) Constructed _____

F. Conditions of Existing System: Briefly describe the conditions and suitability for continued use of facility now owned by the applicant. Include any major renovation that will be needed within five to ten years. N/A

III. FACILITY CHARACTERISTICS OF EXISTING WATER SYSTEM

A. Water Source: Describe adequacy of source (quality and quantity). Include an explanation of raw water source, raw water intake structure, treatment plant capacity and current level of production (WTP). Also describe the adequacy of Water Purchase Contract if applicable.

The Raw Water Source is Lake Barkley (The Cumberland River) at approximate River Mile 62.5. The flow of the River at this point is approximately 7,742 MGD (80% of time) which does not include lake storage capacity. The existing WTP is rated at 2.0 MGD with expansion to 3.75 MGD proposed

If the applicant purchases water: N/A

Seller(s):

1. _____
2. _____
3. _____

Price/1,000 gallons:

1. _____
2. _____
3. _____

Present Estimated Market Value of Existing System $10,434,090

B. Water Storage:

Type: Ground Storage Tank:	1	Elevated Tank	2
Standpipe	3	Other	
Number of Storage Structures	6		
Total Storage Volume Capacity	1,650,000		
Date Storage Tank(s) Constructed	1968, 1977, 1985, 1992, 2005		

C. Water Distribution System:

Pipe Material	Asbestos Cement (AC), PVC, Ductile Iron, Cast Iron		
Lineal Feet of Pipe: 3" Diameter	374,880	4"	596,640
6"	675,840	8"	242,880
10"	31,680	>=12"	36,960

Date(s) Water Lines Constructed	1968, 1978, 1985, 1988, 1992-1994, 1996, 2002-2005
Number and Capacity of Pump Station(s)	Five (5): Pete Lgt 900 gpm; McUpton 300 gpm, Cerulean 150 gpm; So. Rd. 280 gpm; Gresham Rd. 200 gpm

D. Condition of Existing Water System:

Briefly describe the condition and suitability for continued use of facility now owned by the applicant. Include any major renovation that will be needed within five to ten years.

The system is in satisfactory condition with future renovations of the distribution system needed to maintain and meet present and future demands. The proposed project described in the PER will improve the condition of the System. BLWD is and will continue to be agressive in reducing water loss.

E. Percentage of Water Loss Existing System 38%

IV. EXISTING LONG-TERM INDEBTEDNESS

A. List of Bonds and Notes: *Principal Balance as of 12/31/05*

Date of Issue	Bond/ Note Holder	Principal Balance	Payment Date	Bond Type Water / Sewer*		Amount on Deposit in Reserve Account
1969 Issue	EDA	$173,000	11/1/06	100%	0%	%
1976 Issue	RECD	$51,000	11/1/06	100%	0%	%
1993 Issue	RECD	$1,835,000	11/1/06	100%	0%	%
1998 Issue	Individ	$1,559,000	11/1/06	100%	0%	%
2005 Issue	RECD	$1,185,000	11/1/06	100%	0%	%

*If a combined issue, show attributable portion to each system.

B. Principal and Interest Payments: (Begin with Next Fiscal Year Payment)

Date of Issue	Bond/ Note Holder	Payment Year 2007 Principal Payment	Payment Year 2007 Interest Payment	Payment Year 2008 Principal Payment	Payment Year 2008 Interest Payment	Payment Year 2009 Principal Payment	Payment Year 2009 Interest Payment
1969 Issue	EDA						
1976 Issue	RECD						
1993 Issue	RECD						
1998 Issue	Individ						
2005 Issue	RECD	$0	$51,844	$12,500	$51,844	$13,000	$51,297
	Combined	$ 118,000	$ 223,857	$ 106,500	$ 218,324	$ 115,000	$ 213,222

V. EXISTING LONG-TERM INDEBTEDNESS

A. List of All Short Term Debts: (Do Not Show Any Debt Listed in Paragraph IV Above)

Lender or Lessor	Date of Issue (Month & Year)	Principal Balance	Purpose (Water and/ or Sewer)	Payment Date	Principal & Interest (Payment (P&I)	Date to Be Paid In Full
		$0.00				
		$0.00				
		$0.00				
		$0.00				
		$0.00				
		$0.00				

VI. LAND AND RIGHTS - EXISTING SYSTEM(S)

Number of Treatment Plant Sites:	Water	1	***Sewer***	N/A
Number of Storage Tank Sites:	Water	7	***Sewer***	N/A
Number of Pump Stations:	Water	6	***Sewer***	N/A
Total Acreage:	Water	+/-6 Acres	***Sewer***	Acres
Purchase Price:	Water	Unknown	***Sewer***	N/A

VII. NUMBER OF EXISTING USERS

	Water	***Sewer***
Residential (In Town)*	N/A	N/A
Residential (Out of Town)*	4,761	N/A
Non-Residential (In Town)	N/A	N/A
Non-Residential (Out of Town)	187	N/A
Total	4,948	N/A
Number to Total Potential Users Living in the Service Area	5,200	N/A

* Note: Residential Users: Classify by type of user regardless of quantity of water used. This classification should include those meters serving individual rural residence.

VIII. CURRENT WATER AND SEWER CONNECTION FEES FOR EACH SIZE WATER METER CONNECTION

Meter Size	Water Connection Fee	*Sewer Connection Fee*
5/8" x 3/4"	$450.00	N/A
1-Inch	at cost	N/A

IX. ***SEWER RATES - EXISTING SYSTEM*** N/A

Percentage of Water Bill ____ *%* ***Minimum Charge*** *$0.00*

Other: (If Charge Not Based on Water Bill) ____

Date This Rate Went Into Effect ____

X. WATER RATES - EXISTING SYSTEM

Existing Rate Schedule:

First	2,000	Gallons @	$17.22	Minimum.
Next	98,000	Gallons @	$5.62	Per 1,000 Gallons.
Next	400,000	Gallons @	$4.37	Per 1,000 Gallons.
Next		Gallons @	$0.00	Per 1,000 Gallons.
Next		Gallons @	$0.00	Per 1,000 Gallons.
Next		Gallons @	$0.00	Per 1,000 Gallons.
All Over	500,000	Gallons @	$3.12	Per 1,000 Gallons.

Date This Rate Went into Effect Feb-05

If More Than One Rate Schedule, Please Include All Schedules.

XI. *ANALYSIS OF ACTUAL SEWER USAGE - EXISTING SYSTEM - 12 MONTH PERIOD*

For Period _____ *to* N/A

All Meter Sizes	Monthly Sewer Usage	Average	Residential		Non-Residential	
			No. of Users	Usage (1000)	No. of Users	Usage (1000)
	0 - 2,000 Gallons	1,000		0		0
	2,000 - 3,000 Gallons	2,500		0		0
	3,000 - 4000 Gallons	3,500		0		0
	4,000 - 5,000 Gallons	4,500		0		0
	5,000 - 6,000 Gallons	5,500		0		0
	6,000 - 7,000 Gallons	6,500		0		0
	7,000 - 8,000 Gallons	7,500		0		0
	8,000 - 9,000 Gallons	8,500		0		0
	9,000 - 10,000 Gallons	9,500		0		0
	10,000 - 11,000 Gallons	10,500		0		0
	11,000 - 12,000 Gallons	11,500		0		0
	12,000 - 13,000 Gallons	12,500		0		0
	13,000 - 14,000 Gallons	13,500		0		0
	14,000 - 15,000 Gallons	14,500		0		0
	15,000 - 16,000 Gallons	15,500		0		0
	16,000 - 17,000 Gallons	16,500		0		0
	17,000 - 18,000 Gallons	17,500		0		0
	18,000 - 19,000 Gallons	18,500		0		0
	19,000 - 20,000 Gallons	19,500		0		0
	Gallons					
	Gallons					
	Gallons					
		Total	0	( )	0	( )
		Average Usage		0		0

XII. ANALYSIS OF ACTUAL WATER USAGE - EXISTING SYSTEM - 12 MONTH PERIOD

For Period Jan. 05 to Dec. 05

All Meter Sizes	Monthly Water Usage	Average	Residential		Non-Residential	
			No. of Users	Usage (1000)	No. of Users	Usage (1000)
	0 - 2,000 Gallons	1,000	1,345	1,345,000	10	10,000
	2,000 - 3,000 Gallons	2,500	925	2,312,500	23	57,500
	3,000 - 4000 Gallons	3,500	911	3,188,500	21	73,500
	4,000 - 5,000 Gallons	4,500	559	2,515,500	4	18,000
	5,000 - 6,000 Gallons	5,500	357	1,963,500	6	33,000
	6,000 - 7,000 Gallons	6,500	208	1,352,000	1	6,500
	7,000 - 8,000 Gallons	7,500	134	1,005,000	6	45,000
	8,000 - 9,000 Gallons	8,500	107	909,500	5 *	42,500
	9,000 - 10,000 Gallons	9,500	71	674,500	5 *	47,500
	10,000 - 11,000 Gallons	10,500	50	525,000	1	10,500
	11,000 - 12,000 Gallons	11,500	24	276,000	43 *	494,500
	12,000 - 13,000 Gallons	12,500	20	250,000	43 *	537,500
	13,000 - 14,000 Gallons	13,500	14	189,000	1	13,500
	14,000 - 15,000 Gallons	14,500	10	145,000	-	-
	15,000 - 16,000 Gallons	15,500	6	93,000	1	15,500
	16,000 - 17,000 Gallons	16,500	7	115,500	-	-
	17,000 - 18,000 Gallons	17,500	6	105,000	-	-
	18,000 - 19,000 Gallons	18,500	3	55,500	1	18,500
	19,000 - 20,000 Gallons	19,500	4	78,000	-	-
	20,000 - 100,000 Gallons	35,000			12 *	420,000
	100,000 - 500,000 Gallons	460,000			4 *	1,840,000
	Gallons					
		Total	4,761	17,098,000	187	3,683,500
		Average Usage		3,591		19,698

Total Water Purchased and/or Produced	33,965,000	gal/month
Total Water Sold	20,781,500	gal/month

* 1-inch meters = 86 @ 12,000 gpmo
1 1/2-inch meters = 10 @ 9,000 gpmo
2-inch meters = 12 @ 35,000 gpmo
4-inch meters = 4 @ 460,000 gpmo

XIII. FACILITY CHARACTERISTICS OF PROPOSED SEWER SYSTEM N/A

A. *Sewage Treatment:*

1. *Type* _____

2. *Method of Sludge Disposal* _____

_____

3. *Cost per 1,000 gallons if sewage treatment is contracted:*

$0.00

B. *Treatment Capacity of Sewage Treatment Plant* _____

_____

C. *Type of Sewage Collector System (Describe)* _____

_____

_____

D. *Number and Capacity of Sewage Lift Stations* _____

_____

E. *Sewage Collection System:*

Lineal Feet of Collector Lines, by size *6"* _____ *8"* _____

10" _____ *12"* _____ *Larger* _____

XIV. LAND AND RIGHTS - PROPOSED SEWER SYSTEM

Number of Treatment Plant Sites _____

Number of Pump Sites _____

Number of Other Sites _____

Total Acreage _____ *Acres*

Purchase Price *$0.00*

XV. FACILITY CHARACTERISTICS OF PROPOSED WATER SYSTEM

A. Water Source: Describe adequacy of source (quality and quantity). Include an explanation of raw water source, raw water intake structure, treatment plant capacity, and current level of production (WTP). Also describe the adequacy of Water Purchase Contract if applicable.

The Raw Water Source is Lake Barkley (The Cumberland River) at approx. River Mile 62.5. The flow of the River at this point is approx. 7,742 MGD (80% of time) which does not include lake storage capacity. This is essentially an unlimited source. The RW Intake is capable of drawing 2.0 MGD from the lake. It will be renovated and upgraded to a 3.75 MGD pumping capability. The WTP is rated at 2.0 MGD and current pumping averages 1.14 MGD. Pumping in July and August 2007 routinely exceeded 80 percent of plant capacity. The WTP will be expanded to 3.75 MGD with the addition of a new flocculation/sedimentation basin, filter renovations, new clearwell and high service pump building. Chemical feed improvements will be included in the project.

B. Water Storage:

Type:	Ground Storage Tank		Elevated Tank	X
	Standpipe		Other	
Number of Storage Structures		1		
Total Storage Volume Capacity		1,500,000 gallons		

C. Water Distribution System:

Pipe Material		13,000 LF Ductile Iron; 7,000 LF PVC		
Lineal Feet of Pipe:	3" Diameter		4"	
	6"		8"	
	10"		16"	20,000
Number and Capacity of Pump Station(s)		No (0) pump stations proposed		

XVI. LAND AND RIGHTS - PROPOSED WATER SYSTEM

Number of Treatment Plant Sites	N/A - All work on existing WTP Site
Number of Pump Sites	N/A - No Pump Sites
Number of Other Sites	1 - Water Tank Site (Transferred for Cadiz-Trigg Reg WA)
Total Acreage	1 Acres
Purchase Price	

XVII. NUMBER OF NEW SEWER USERS N/A

*Residential (In Town)** _____

*Residential (Out of Town)** _____

Non-Residential (In Town) _____

Non-Residential (Out of Town) _____

Total _____

Number to Total Potential Users Living in the Service Area _____

***Note: Residential Users:** Classify by type of user regardless of quantity of water used. This classification should include those meters serving individual rural residences.*

XVIII. PROPOSED SEWER CONNECTION FEES FOR EACH SIZE WATER METER CONNECTION N/A

Meter Size	Connection Fee
5/8" x 3/4"	
1 - Inch	
1-1/2 Inch	
2 - Inch	
3 - Inch	
4 - Inch	
5 - Inch	
6 - Inch	

XIX. NUMBER OF NEW WATER USERS

Residential (In Town)*	N/A
Residential (Out of Town)*	N/A
Non-Residential (In Town)	N/A
Non-Residential (Out of Town)	N/A
Total	No Additional Customers are proposed in this infrastructure improvements projects

Number to Total Potential Users Living in the Service Area N/A

*Note: Residential Users: Classify by type of user regardless of quantity of water used. This classification should include those meters serving individual rural residences.

XX. PROPOSED WATER CONNECTION FEES FOR EACH SIZE WATER METER CONNECTION:

Meter Size	Connection Fee
5/8" x 3/4"	$500.00
1 - Inch	At Cost
1-1/2 Inch	At Cost
2 - Inch	At Cost
3 - Inch	At Cost
4 - Inch	At Cost
5 - Inch	At Cost
6 - Inch	At Cost

XXI. ***SEWER RATES - PROPOSED*** N/A

A. Proposed Rate Schedule without RUS Grant:

Percentage of Water Bill _____ *%* *Minimum Charge* *$0.00*

Other: If Charge Not Based on Water Bill _____

Proposed Rate Schedule: (Without RUS Grant)

First	_____	*Gallons @*	_____ *Minimum.*
Next	_____	*Gallons @*	_____ *per 1,000 Gallons.*
Next	_____	*Gallons @*	_____ *per 1,000 Gallons.*
Next	_____	*Gallons @*	_____ *per 1,000 Gallons.*
Next	_____	*Gallons @*	_____ *per 1,000 Gallons.*
Next	_____	*Gallons @*	_____ *per 1,000 Gallons.*
All Over	_____	*Gallons @*	_____ *per 1,000 Gallons.*

The above proposed rate, without RUS grant, must be completed for each grant. If the applicant/engineer desires, there is no objection to recommending a proposed rate with an estimated RUS grant in the Table below. However, the preparer should remember that the Table (A) above must be completed prior to Table (B).

B. Recommended Rate Schedule with RUS Grant: N/A

Percentage of Water Bill _____ *%* *Minimum Charge* _____

Other: If Charge Not Based on Water Bill _____

Recommended Rate Schedule: (With RUS Grant)

First	_____	*Gallons @*	_____ *Minimum.*
Next	_____	*Gallons @*	_____ *per 1,000 Gallons.*
Next	_____	*Gallons @*	_____ *per 1,000 Gallons.*
Next	_____	*Gallons @*	_____ *per 1,000 Gallons.*
Next	_____	*Gallons @*	_____ *per 1,000 Gallons.*
Next	_____	*Gallons @*	_____ *per 1,000 Gallons.*
All Over	_____	*Gallons @*	_____ *per 1,000 Gallons.*

If more than one rate, use additional sheets.

XXII. WATER RATES - PROPOSED

A. Proposed Rate Schedule without RUS Grant:

First	2,000	Gallons @	$19.54	Minimum.
Next	98,000	Gallons @	$6.76	per 1,000 Gallons.
Next	400,000	Gallons @	$5.50	per 1,000 Gallons.
Next		Gallons @	$0.00	per 1,000 Gallons.
Next		Gallons @	$0.00	per 1,000 Gallons.
Next		Gallons @	$0.00	per 1,000 Gallons.
All Over	500,000	Gallons @	$4.01	per 1,000 Gallons.

Wholesale Rate $2.25 per 1,000 Gallons.

The above proposed rate, without RUS grant, must be completed for each grant. If the applicant/engineer desires, there is no objection to recommending a proposed rate with an estimated RUS grant in the Table below. However, the preparer should remember that the Table (A) above must be completed prior to Table (B).

B. Recommended Rate Schedule with RUS Grant:

First	2,000	Gallons @	$19.38	Minimum.
Next	98,000	Gallons @	$6.70	per 1,000 Gallons.
Next	400,000	Gallons @	$5.45	per 1,000 Gallons.
Next		Gallons @	$0.00	per 1,000 Gallons.
Next		Gallons @	$0.00	per 1,000 Gallons.
Next		Gallons @	$0.00	per 1,000 Gallons.
All Over	500,000	Gallons @	$3.98	per 1,000 Gallons.

Wholesale Rate $2.23 per 1,000 Gallons.

If more than one rate, use additional sheets.

XXIII. FORECAST OF ACTUAL SEWER USAGE -INCOME - EXISTING SYSTEM - EXISTING USERS

N/A

Meter Size*	Monthly Sewer Usage	Average	Average Rate	Residential			Non-Residential		
				No. of Users **	Usage (1000)	Income	No. of Users	Usage (1000)	Income
	0 - 2,000 Gallons	1,000				$0.00			$0.00
	2,000 - 3,000 Gallons	2,500				$0.00			$0.00
	3,000 - 4000 Gallons	3,500				$0.00			$0.00
	4,000 - 5,000 Gallons	4,500				$0.00			$0.00
	5,000 - 6,000 Gallons	5,500				$0.00			$0.00
	6,000 - 7,000 Gallons	6,500				$0.00			$0.00
	7,000 - 8,000 Gallons	7,500				$0.00			$0.00
	8,000 - 9,000 Gallons	8,500				$0.00			$0.00
	9,000 - 10,000 Gallons	9,500				$0.00			$0.00
5/8	10,000 - 11,000 Gallons	10,500				$0.00			$0.00
x	11,000 - 12,000 Gallons	11,500				$0.00			$0.00
3/4	12,000 - 13,000 Gallons	12,500				$0.00			$0.00
Inch	13,000 - 14,000 Gallons	13,500				$0.00			$0.00
	14,000 - 15,000 Gallons	14,500				$0.00			$0.00
	15,000 - 16,000 Gallons	15,500				$0.00			$0.00
	16,000 - 17,000 Gallons	16,500				$0.00			$0.00
	17,000 - 18,000 Gallons	17,500				$0.00			$0.00
	18,000 - 19,000 Gallons	18,500				$0.00			$0.00
	19,000 - 20,000 Gallons	19,500				$0.00			$0.00
	Gallons					$0.00			$0.00
	Gallons					$0.00			$0.00
	Gallons					$0.00			$0.00
	Sub- Total			( )	( )	$0.00	( )	( )	$0.00
	Average Monthly Rate		( )						
	Average Monthly Usage				( )			( )	

** Breakdown of meter size usage is <u>not</u> required unless different sewer rates are charged based on size of water meter.*

*** Number of users should reflect the actual number of "meter settings".*

*Meter Size**	*Monthly Sewer Usage*	*Average*	*Average Rate*	*Residential*			*Non-Residential*		
				*No. of Users***	*Usage (1000)*	*Income*	*No. of Users*	*Usage (1000)*	*Income*
	Gallons					*$0.00*			*$0.00*
	Gallons					*$0.00*			*$0.00*
1-	*Gallons*					*$0.00*			*$0.00*
Inch	*Gallons*					*$0.00*			*$0.00*
	Gallons					*$0.00*			*$0.00*
	Gallons					*$0.00*			*$0.00*
	Sub- Total			( )	( )	*$0.00*	( )	( )	*$0.00*
	Gallons					*$0.00*			*$0.00*
	Gallons					*$0.00*			*$0.00*
1-1/2	*Gallons*					*$0.00*			*$0.00*
Inch	*Gallons*					*$0.00*			*$0.00*
	Gallons					*$0.00*			*$0.00*
	Gallons					*$0.00*			*$0.00*
	Sub- Total			( )	( )	*$0.00*	( )	( )	*$0.00*
	Gallons					*$0.00*			*$0.00*
	Gallons					*$0.00*			*$0.00*
2-	*Gallons*					*$0.00*			*$0.00*
Inch	*Gallons*					*$0.00*			*$0.00*
	Gallons					*$0.00*			*$0.00*
	Gallons					*$0.00*			*$0.00*
	Sub- Total			( )	( )	*$0.00*	( )	( )	*$0.00*
	Gallons					*$0.00*			*$0.00*
	Gallons					*$0.00*			*$0.00*
3-	*Gallons*					*$0.00*			*$0.00*
Inch	*Gallons*					*$0.00*			*$0.00*
	Gallons					*$0.00*			*$0.00*
	Gallons					*$0.00*			*$0.00*
	Sub- Total			( )	( )	*$0.00*	( )	( )	*$0.00*
	Gallons					*$0.00*			*$0.00*
	Gallons					*$0.00*			*$0.00*
4-	*Gallons*					*$0.00*			*$0.00*
Inch	*Gallons*					*$0.00*			*$0.00*
	Gallons					*$0.00*			*$0.00*
	Gallons					*$0.00*			*$0.00*
	Sub- Total			( )	( )	*$0.00*	( )	( )	*$0.00*

** Breakdown of meter size usage is <u>not</u> required unless different sewer rates are charged based on size of water meter.*

*** Number of users should reflect the actual number of "meter settings".*

Meter Size*	Monthly Sewer Usage	Average	Average Rate	Residential			Non-Residential		
				No. of Users**	Usage (1000)	Income	No. of Users	Usage (1000)	Income
	Gallons					$0.00			$0.00
	Gallons					$0.00			$0.00
5-	Gallons					$0.00			$0.00
Inch	Gallons					$0.00			$0.00
	Gallons					$0.00			$0.00
	Gallons					$0.00			$0.00
	Sub- Total			( )	( )	$0.00	( )	( )	$0.00
	Gallons					$0.00			$0.00
	Gallons					$0.00			$0.00
6-	Gallons					$0.00			$0.00
Inch	Gallons					$0.00			$0.00
	Gallons					$0.00			$0.00
	Gallons					$0.00			$0.00
	Sub- Total			( )	( )	$0.00	( )	( )	$0.00
	TOTALS			( )	( )	( )	( )	( )	( )

MULTI-FAMILY AND APARTMENT USER ANALYSIS

If billed as a typical user, the information should be included in the residential information above. If not billed as a typical residential user, please explain below.

Name of Unit	Number of Units	Number of Meters	Revenue Calculations

** Breakdown of meter size usage is <u>not</u> required unless different sewer rates are charged based on size of water meter.*

*** Number of users should reflect the actual number of "meter settings".*

XXIV. ***FORECAST OF SEWER USAGE -INCOME - NEW USERS - EXTENSION ONLY*** **N/A**

*Meter Size**	*Monthly Sewer Usage*	*Average*	*Average Rate*	*Residential*			*Non-Residential*		
				*No. of Users***	*Usage (1000)*	*Income*	*No. of Users*	*Usage (1000)*	*Income*
	0 - 2,000 Gallons	*1,000*				*$0.00*			*$0.00*
	2,000 - 3,000 Gallons	*2,500*				*$0.00*			*$0.00*
	3,000 - 4000 Gallons	*3,500*				*$0.00*			*$0.00*
	4,000 - 5,000 Gallons	*4,500*				*$0.00*			*$0.00*
	5,000 - 6,000 Gallons	*5,500*				*$0.00*			*$0.00*
	6,000 - 7,000 Gallons	*6,500*				*$0.00*			*$0.00*
	7,000 - 8,000 Gallons	*7,500*				*$0.00*			*$0.00*
	8,000 - 9,000 Gallons	*8,500*				*$0.00*			*$0.00*
	9,000 - 10,000 Gallons	*9,500*				*$0.00*			*$0.00*
5/8	*10,000 - 11,000 Gallons*	*10,500*				*$0.00*			*$0.00*
x	*11,000 - 12,000 Gallons*	*11,500*				*$0.00*			*$0.00*
3/4	*12,000 - 13,000 Gallons*	*12,500*				*$0.00*			*$0.00*
Inch	*13,000 - 14,000 Gallons*	*13,500*				*$0.00*			*$0.00*
	14,000 - 15,000 Gallons	*14,500*				*$0.00*			*$0.00*
	15,000 - 16,000 Gallons	*15,500*				*$0.00*			*$0.00*
	16,000 - 17,000 Gallons	*16,500*				*$0.00*			*$0.00*
	17,000 - 18,000 Gallons	*17,500*				*$0.00*			*$0.00*
	18,000 - 19,000 Gallons	*18,500*				*$0.00*			*$0.00*
	19,000 - 20,000 Gallons	*19,500*				*$0.00*			*$0.00*
	Gallons					*$0.00*			*$0.00*
	Gallons					*$0.00*			*$0.00*
	Gallons					*$0.00*			*$0.00*
	Sub- Total			*( )*	*( )*	*$0.00*	*( )*	*( )*	*$0.00*
	Average Monthly Rate		*( )*						
	Average Monthly Usage				*( )*			*( )*	

** Breakdown of meter size usage is <u>not</u> required unless different sewer rates are charged based on size of water meter.*

*** Number of users should reflect the actual number of "meter settings".*

*Meter Size**	*Monthly Sewer Usage*	*Average*	*Average Rate*	*Residential*			*Non-Residential*		
				*No. of Users***	*Usage (1000)*	*Income*	*No. of Users*	*Usage (1000)*	*Income*
	Gallons					*$0.00*			*$0.00*
1-	*Gallons*					*$0.00*			*$0.00*
Inch	*Gallons*					*$0.00*			*$0.00*
	Gallons					*$0.00*			*$0.00*
	Gallons					*$0.00*			*$0.00*
	Sub- Total			( )	( )	*$0.00*	( )	( )	*$0.00*
	Gallons					*$0.00*			*$0.00*
	Gallons					*$0.00*			*$0.00*
1-1/2	*Gallons*					*$0.00*			*$0.00*
Inch	*Gallons*					*$0.00*			*$0.00*
	Gallons					*$0.00*			*$0.00*
	Gallons					*$0.00*			*$0.00*
	Sub- Total			( )	( )	( )	( )	( )	( )
	Gallons					*$0.00*			*$0.00*
	Gallons					*$0.00*			*$0.00*
2-	*Gallons*					*$0.00*			*$0.00*
Inch	*Gallons*					*$0.00*			*$0.00*
	Gallons					*$0.00*			*$0.00*
	Gallons					*$0.00*			*$0.00*
	Sub- Total			( )	( )	*$0.00*	( )	( )	*$0.00*
	Gallons					*$0.00*			*$0.00*
	Gallons					*$0.00*			*$0.00*
3-	*Gallons*					*$0.00*			*$0.00*
Inch	*Gallons*					*$0.00*			*$0.00*
	Gallons					*$0.00*			*$0.00*
	Gallons					*$0.00*			*$0.00*
	Sub- Total			( )	( )	*$0.00*	( )	( )	*$0.00*
	Gallons					*$0.00*			*$0.00*
	Gallons					*$0.00*			*$0.00*
4-	*Gallons*					*$0.00*			*$0.00*
Inch	*Gallons*					*$0.00*			*$0.00*
	Gallons					*$0.00*			*$0.00*
	Gallons					*$0.00*			*$0.00*
	Sub- Total			( )	( )	*$0.00*	( )	( )	*$0.00*

** Breakdown of meter size usage is <u>not</u> required unless different sewer rates are charged based on size of water meter.*

*** Number of users should reflect the actual number of "meter settings".*

Meter Size*	Monthly Sewer Usage	Average	Average Rate	Residential			Non-Residential		
				No. of Users**	Usage (1000)	Income	No. of Users	Usage (1000)	Income
	Gallons					$0.00			$0.00
5-	Gallons					$0.00			$0.00
Inch	Gallons					$0.00			$0.00
	Gallons					$0.00			$0.00
	Gallons					$0.00			$0.00
	Sub- Total			( )	( )	$0.00	( )	( )	$0.00
	Gallons					$0.00			$0.00
	Gallons					$0.00			$0.00
6-	Gallons					$0.00			$0.00
Inch	Gallons					$0.00			$0.00
	Gallons					$0.00			$0.00
	Gallons					$0.00			$0.00
	Sub- Total			( )	( )	$0.00	( )	( )	$0.00
	TOTALS			( )	( )	( )	( )	( )	( )

MULTI-FAMILY AND APARTMENT USER ANALYSIS

If billed as a typical user, the information should be included in the residential information above. If not billed as a typical residential user, please explain below.

Name of Unit	Number of Units	Number of Meters	Revenue Calculations

** Breakdown of meter size usage is <u>not</u> required unless different sewer rates are charged based on size of water meter.*

*** Number of users should reflect the actual number of "meter settings".*

XXV. FORECAST OF WATER USAGE -INCOME - EXISTING SYSTEM - EXISTING USERS
EXISTING RATES

Meter Size*	Monthly Water Usage	Average	Average Rate	Residential			Non-Residential		
				No. of Users**	Usage (1000)	Income	No. of Users	Usage (1000)	Income
	0 - 2,000 Gallons	1,000	17.22	1345	1,345,000	$23,161	10	10,000	$172
	2,000 - 3,000 Gallons	2,500	20.03	925	2,312,500	$18,528	23	57,500	$461
	3,000 - 4000 Gallons	3,500	25.65	911	3,188,500	$23,367	21	73,500	$539
	4,000 - 5,000 Gallons	4,500	31.27	559	2,515,500	$17,480	4	18,000	$125
	5,000 - 6,000 Gallons	5,500	36.89	357	1,963,500	$13,170	6	33,000	$221
	6,000 - 7,000 Gallons	6,500	42.51	208	1,352,000	$8,842	1	6,500	$43
	7,000 - 8,000 Gallons	7,500	48.13	134	1,005,000	$6,449	6	45,000	$289
	8,000 - 9,000 Gallons	8,500	53.75	107	909,500	$5,751	0	-	$0
	9,000 - 10,000 Gallons	9,500	59.37	71	674,500	$4,215	0	-	$0
5/8	10,000 - 11,000 Gallons	10,500	64.99	50	525,000	$3,250	1	10,500	$65
x	11,000 - 12,000 Gallons	11,500	70.61	24	276,000	$1,695	0	-	$0
3/4	12,000 - 13,000 Gallons	12,500	76.23	20	250,000	$1,525	0	-	$0
Inch	13,000 - 14,000 Gallons	13,500	81.85	14	189,000	$1,146	1	13,500	$82
	14,000 - 15,000 Gallons	14,500	87.47	10	145,000	$875	0	-	$0
	15,000 - 16,000 Gallons	15,500	93.09	6	93,000	$559	1	15,500	$93
	16,000 - 17,000 Gallons	16,500	98.71	7	115,500	$691	0	-	$0
	17,000 - 18,000 Gallons	17,500	104.33	6	105,000	$626	0	-	$0
	18,000 - 19,000 Gallons	18,500	109.95	3	55,500	$330	1	18,500	$110
	19,000 - 20,000 Gallons	19,500	115.57	4	78,000	$462	0	0	$0
	Gallons					$0			$0
	Gallons					$0			$0
	Gallons					$0			$0
	Sub- Total			4,761	17,098,000	$132,120	75	301,500	$2,199
	Average Monthly Rate		$ 27.77						
	Average Monthly Usage				3,591			4,020	

* Breakdown of meter size usage is not required unless different water rates are charged based on size of water meter.

** Number of users should reflect the actual number of "meter settings".

Meter Size*	Monthly Water Usage	Average	Average Rate	Residential			Non-Residential		
				No. of Users**	Usage (1000)	Income	No. of Users	Usage (1000)	Income
1-	0 - 4,000 Gallons	2,000	$31.27		0	$0.00	0	0	$0.00
Inch	4,000 - 100,000 Gallons	12,000	$76.23			$0.00	86	1,032,000	$6,556
	Gallons					$0.00			$0.00
	Gallons					$0.00			$0.00
	Gallons					$0.00			$0.00
	Sub- Total			( )	( )	$0.00	( )	( )	$6,556
1-1/2	0 - 8,000 Gallons	4,000	$58.49			$0.00			$0.00
Inch	8,000 - 100,000 Gallons	8,800	$62.99			$0.00	8	70,400	$504
	Gallons					$0.00			$0.00
	Gallons					$0.00			$0.00
	Sub- Total			( )	( )	$0.00	( )	( )	$504
2-	0 - 15,000 Gallons	7,500	$107.19			$0.00			$0.00
Inch	15,000 - 100,000 Gallon:	35,000	$219.59			$0.00	12	420,000	$2,635
	Gallons					$0.00			$0.00
	Gallons					$0.00			$0.00
	Sub- Total			( )	( )	$0.00	( )	( )	$2,635
4-	0 - 25,000 Gallons		$191.70			$0.00			$0
Inch	25,000 - 100,000 Gallon:	100,000	$613.20			$0.00			$0.00
	100,000 - 500,000 Gallo	500,000	$2,361.20			$0.00		-	$0
	Gallons	2,092,000	$ 7,328.24			$0.00	1	2,092,000	$7,328
	Sub- Total			( )	( )	$0.00	( )	( )	$7,328
Wholesale Rate		Aver/1,000 gal	Avg Rate						
1.65 /	1,000 Gallons (N. Stewart)	1,103	$1,820			$0.00	1	1,103	$1,820
1.65 /	1,000 Gallons (Chris. Co)	1,717	$2,833			$0.00	1	1,717	$2,833
	Gallons					$0.00			$0.00
	Sub- Total			( )	( )	$0.00	( )	( )	$4,653

* Breakdown of meter size usage is <u>not</u> required unless different water rates are charged based on size of water meter.

** Number of users should reflect the actual number of "meter settings".

Meter Size*	Monthly Water Usage	Average	Average Rate	Residential			Non-Residential		
				No. of Users**	Usage (1000)	Income	No. of Users	Usage (1000)	Income
	Gallons					$0.00			$0.00
	Gallons					$0.00			$0.00
	Gallons					$0.00			$0.00
	Gallons					$0.00			$0.00
	Gallons					$0.00			$0.00
	Sub- Total			( )	( )	$0.00	( )	( )	$0.00
	Gallons					$0.00			$0.00
	Gallons					$0.00			$0.00
	Gallons					$0.00			$0.00
	Gallons					$0.00			$0.00
	Gallons					$0.00			$0.00
	Gallons					$0.00			$0.00
	Sub- Total			( )	( )	$0.00	( )	( )	$0.00
	TOTALS			( )	( )	$0.00	( )	( )	$0.00

MULTI-FAMILY AND APARTMENT USER ANALYSIS

If billed as a typical user, the information should be included in the residential information above. If not billed as a typical residential user, please explain below.

Name of Unit	Number of Units	Number of Meters	Revenue Calculations

* Breakdown of meter size usage is not required unless different water rates are charged based on size of water meter.

** Number of users should reflect the actual number of "meter settings".

XXVI. FORECAST OF WATER USAGE -INCOME - ~~NEW USERS - EXTENSION ONLY~~

EXISTING USERS - NEW PROJECT/NEW RATES

Meter Size*	Monthly Water Usage	Average	Average Rate	Residential			Non-Residential		
				No. of Users**	Usage (1000)	Income	No. of Users	Usage (1000)	Income
	0 - 2,000 Gallons	1,000	19.38	1345	1,345,000	$26,066	10	10,000	$194
	2,000 - 3,000 Gallons	2,500	22.73	925	2,312,500	$21,025	23	57,500	$523
	3,000 - 4000 Gallons	3,500	29.43	911	3,188,500	$26,811	21	73,500	$618
	4,000 - 5,000 Gallons	4,500	36.13	559	2,515,500	$20,197	4	18,000	$145
	5,000 - 6,000 Gallons	5,500	42.83	357	1,963,500	$15,290	6	33,000	$257
	6,000 - 7,000 Gallons	6,500	49.53	208	1,352,000	$10,302	1	6,500	$50
	7,000 - 8,000 Gallons	7,500	56.23	134	1,005,000	$7,535	6	45,000	$337
	8,000 - 9,000 Gallons	8,500	62.93	107	909,500	$6,734	0	-	$0
	9,000 - 10,000 Gallons	9,500	69.63	71	674,500	$4,944	0	-	$0
5/8	10,000 - 11,000 Gallons	10,500	76.33	50	525,000	$3,817	1	10,500	$76
x	11,000 - 12,000 Gallons	11,500	83.03	24	276,000	$1,993	0	-	$0
3/4	12,000 - 13,000 Gallons	12,500	89.73	20	250,000	$1,795	0	-	$0
Inch	13,000 - 14,000 Gallons	13,500	96.43	14	189,000	$1,350	1	13,500	$96
	14,000 - 15,000 Gallons	14,500	103.13	10	145,000	$1,031	0	-	$0
	15,000 - 16,000 Gallons	15,500	109.83	6	93,000	$659	1	15,500	$110
	16,000 - 17,000 Gallons	16,500	116.53	7	115,500	$816	0	-	$0
	17,000 - 18,000 Gallons	17,500	123.23	6	105,000	$739	0	-	$0
	18,000 - 19,000 Gallons	18,500	129.93	3	55,500	$390	1	18,500	$130
	19,000 - 20,000 Gallons	19,500	136.63	4	78,000	$547	0	0	$0
	Gallons					$0			$0
	Gallons					$0			$0
	Gallons					$0			$0
	Sub- Total			4,761	17,098,000	$152,039	75	301,500	$2,536
	Average Monthly Rate		$ 31.96						
	Average Monthly Usage				3,591			4,020	

* Breakdown of meter size usage is not required unless different sewer rates are charged based on size of water meter.

** Number of users should reflect the actual number of "meter settings".

Meter Size*	Monthly Water Usage	Average	Average Rate	Residential			Non-Residential		
				No. of Users**	Usage (1000)	Income	of User	Usage (1000)	Income
	0 - 4,000 Gallons	2,000	$35.59		0	$0.00	0	0	$0.00
1-	4,000 - 100,000 Gal.	12,000	$89.19			$0.00	86	1,032,000	$7,670
Inch	Gallons					$0.00			$0.00
	Gallons					$0.00			$0.00
	Gallons					$0.00			$0.00
	Sub- Total			( )	( )	$0.00	(	( )	$7,670
1-1/2	0 - 8,000 Gallons	4,000	$67.13			$0.00			$0.00
Inch	8,000 - 100,000 Gal.	8,800	$72.49			$0.00	8	70,400	$580
	Gallons					$0.00			$0.00
	Gallons					$0.00			$0.00
	Sub- Total			( )	( )	$0.00	(	( )	$580
2-	0 - 15,000 Gallons	7,500	$123.39			$0.00			$0.00
Inch	15,000 - 100,000 Gal.	35,000	$257.39			$0.00	12	420,000	$3,089
	Gallons					$0.00			$0.00
	Gallons					$0.00			$0.00
	Sub- Total			( )	( )	$0.00	(	( )	$3,089
4-	0 - 25,000 Gallons		$218.70			$0.00		0	$0
Inch	25,000 - 100,000 Gal.	100,000	$721.20			$0.00			$0.00
	100,000 - 500,000 Gal.	500,000	$2,901.20			$0.00		-	$0
	Gallons	1,840,000	$ 8,234.40			$0.00	1	1,840,000	$8,234
	Sub- Total			( )	( )	$0.00	(	( )	$8,234
Wholesale Rate		Aver/1,000 gal	Avg Rate						
$2.23	/ 1,000 Gallons (N. Stewart)	1,103	$2,460			$0.00	1	1,103	$2,460
$2.23	/ 1,000 Gallons (Chris. Co)	1,717	$3,828			$0.00	1	1,717	$3,828
	Gallons					$0.00			$0.00
	Sub- Total			( )	( )	$0.00	(	( )	$6,288

* Breakdown of meter size usage is <u>not</u> required unless different sewer rates are charged based on size of water meter.

** Number of users should reflect the actual number of "meter settings".

Meter Size*	Monthly Water Usage	Average	Average Rate	Residential			Non-Residential		
				No. of Users**	Usage (1000)	Income	No. of Users	Usage (1000)	Income
	Gallons					$0.00			$0.00
5-	Gallons					$0.00			$0.00
Inch	Gallons					$0.00			$0.00
	Gallons					$0.00			$0.00
	Gallons					$0.00			$0.00
	Sub- Total			( )	( )	$0.00	(	( )	$0.00
	Gallons					$0.00			$0.00
	Gallons					$0.00			$0.00
6-	Gallons					$0.00			$0.00
Inch	Gallons					$0.00			$0.00
	Gallons					$0.00			$0.00
	Gallons					$0.00			$0.00
	Sub- Total			( )	( )	$0.00	(	( )	$0.00
	TOTALS			( )	( )	$0.00	(	( )	$0.00

MULTI-FAMILY AND APARTMENT USER ANALYSIS

If billed as a typical user, the information should be included in the residential information above. If not billed as a typical residential user, please explain below.

Name of Unit	Number of Units	Number of Meters	Revenue Calculations

* Breakdown of meter size usage is not required unless different sewer rates are charged based on size of water meter.

** Number of users should reflect the actual number of "meter settings".

XXVII. *CURRENT OPERATING BUDGET - (SEWER SYSTEM)* N/A

(As of the last full operating year.)

A. Operating Income:

Sewer Revenue	*$0.00*
Late Charge Fees	*$0.00*
Other (Describe)	*$0.00*
Less Allowances and Deductions	*$0.00*
Total Operating Income	*$0.00*

B. Operation and Maintenance Expenses:

(Based on Uniform Systems of Accounts prescribed by National Association of Regulatory Utility Commissioners)

Operation Expense	*$0.00*
Maintenance Expense	*$0.00*
Customer Accounts Expense	*$0.00*
Administrative and General Expense	*$0.00*
Total Operating and Maintenance Expenses	*$0.00*
Net Operating Income	*$0.00*

C. Non-Operating Income:

Interest on Deposits	*$0.00*
Other (Identify)	*$0.00*
Total Non-Operating Income	*$0.00*

D. Net Income *$0.00*

E. Debt Repayment:

RUS Interest	*$0.00*
RUS Principal	*$0.00*
Non-RUS Interest	*$0.00*
Non-RUS Principal	*$0.00*
Total Debt Repayment	*$0.00*

F. Balance Available for Coverage *$0.00*

XXVIII. ***PROPOSED OPERATING BUDGET - (SEWER SYSTEM) - EXISTING SYSTEM AND NEW USERS*** *1st Full Year of Operation) Year Ending* N/A

A.	*Operating Income:*	
	Sewer Revenue	*$0.00*
	Late Charge Fees	*$0.00*
	Other (Describe)	*$0.00*
	Less Allowances and Deductions	( )
	Total Operating Income	*$0.00*
B.	*Operation and Maintenance Expenses:* *(Based on Uniform Systems of Accounts prescribed by National Association of Regulatory Utility Commissioners)*	
	Operation Expense	*$0.00*
	Maintenance Expense	*$0.00*
	Customer Accounts Expense	*$0.00*
	Administrative and General Expense	*$0.00*
	Total Operating and Maintenance Expenses	*$0.00*
	Net Operating Income	*$0.00*
C.	*Non-Operating Income:*	
	Interest on Deposits	*$0.00*
	Other (Identify)	*$0.00*
	Total Non-Operating Income	*$0.00*
D.	*Net Income*	*$0.00*
E.	*Debt Repayment:*	
	RUS Interest	*$0.00*
	RUS Principal	*$0.00*
	Non-RUS Interest	*$0.00*
	Non-RUS Principal	*$0.00*
	Total Debt Repayment	*$0.00*
F.	*Balance Available for Coverage*	*$0.00*

XXIX. ***PROPOSED OPERATING BUDGET - (SEWER SYSTEM) - NEW USERS - EXTENSION ONLY*** *(1st Full Year of Operation) Year Ending* N/A

A.	*Operating Income:*	
	Sewer Revenue	*$0.00*
	Late Charge Fees	*$0.00*
	Other (Describe)	*$0.00*
	Less Allowances and Deductions	*$0.00*
	Total Operating Income	*$0.00*
B.	*Operation and Maintenance Expenses:* *(Based on Uniform Systems of Accounts prescribed by National Association of Regulatory Utility Commissioners)*	
	Operation Expense	*$0.00*
	Maintenance Expense	*$0.00*
	Customer Accounts Expense	*$0.00*
	Administrative and General Expense	*$0.00*
	Total Operating and Maintenance Expenses	*$0.00*
	Net Operating Income	*$0.00*
C.	*Non-Operating Income:*	
	Interest on Deposits	*$0.00*
	Other (Identify)	*$0.00*
	Total Non-Operating Income	*$0.00*
D.	*Net Income*	*$0.00*
E.	*Debt Repayment:*	
	RUS Interest	*$0.00*
	RUS Principal	*$0.00*
	Non-RUS Interest	*$0.00*
	Non-RUS Principal	*$0.00*
	Total Debt Repayment	*$0.00*
F.	*Balance Available for Coverage*	*$0.00*

XXX. CURRENT OPERATING BUDGET - (WATER SYSTEM)
(As of the last full operating year.)

A. Operating Income:

Water Sales		$1,790,292.00
Disconnect/Reconnect/Late Charge Fees		$31,962.00
Other (Describe)		$0.00
Less Allowances and Deductions	Taxes other than income	($44,346.00)
Total Operating Income		$1,777,908.00

B. Operation and Maintenance Expenses:
(Based on Uniform Systems of Accounts prescribed by National Association of Regulatory Utility Commissioners)

Source of Supply Expense	incl Pumping Exp	$212,300.00
Pumping Expense		$0.00
Water Treatment Expense		$293,203.00
Transmission and Distribution Expense		$258,908.00
Customer Accounts Expense		$196,781.00
Administrative and General Expense		$275,961.00
Total Operating Expenses		$1,237,153.00
Net Operating Income		$540,755.00

C. Non-Operating Income:

Interest on Deposits		$30,936.00
Other (Identify)	Miscellaneous Receipts	$20,666.00
Total Non-Operating Income		$51,602.00

D. Net Income $592,357.00

E. Debt Repayment:

RUS Interest	$152,658.00
RUS Principal	$83,000.00
Non-RUS Interest	$80,284.00
Non-RUS Principal	$38,000.00
Total Debt Repayment	$353,942.00

F. Balance Available for Coverage $238,415.00

XXXI. PROPOSED OPERATING BUDGET - (WATER SYSTEM) - EXISTING SYSTEM ~~AND NEW USERS~~ (1st Full Year of Operation) Year Ending 2009
(PROJECTED 2009 INCOME/PROJECTED 2009 EXPENSES WITHOUT PROJECT)

A.	Operating Income:		
	Water Sales	Increase Sales at 1.0%/yr	$1,844,539.64
	Disconnect/Reconnect/Late Charge Fees		$10,000.00
	Other (Describe)		$0.00
	Less Allowances and Deductions		($44,346.00)
	Total Operating Income		$1,810,193.64
B.	Operation and Maintenance Expenses:	Each Expense Increased at 2.5%/yr	
	(Based on Uniform Systems of Accounts prescribed by National Association of Regulatory Utility Commissioners)		
	Source of Supply Expense		$228,623.88
	Pumping Expense		$0.00
	Water Treatment Expense		$315,747.56
	Transmission and Distribution Expense		$278,815.60
	Customer Accounts Expense		$211,911.61
	Administrative and General Expense		$297,179.81
	Total Operating Expenses		$1,332,278.47
	Net Operating Income		$477,915.17
C.	Non-Operating Income:		
	Interest on Deposits		$30,936.00
	Other (Identify)	Miscellaneous Receipts	$10,000.00
	Total Non-Operating Income		$40,936.00
D.	Net Income		$518,851.17
E.	Debt Repayment:		
	RUS Interest	Series 2005 Issue	$51,297.00
	RUS Principal	Series 2005 Issue	$13,000.00
	RUS Interest	Estimated	$88,950.00
	RUS Principal	Estimated	$55,000.00
	Non-RUS Interest	Estimated	$72,975.00
	Non-RUS Principal	Estimated	$47,000.00
	Total Debt Repayment		$328,222.00
F.	Balance Available for Coverage		$190,629.17

XXXII. PROPOSED OPERATING BUDGET - (WATER SYSTEM) - ~~NEW USERS - EXTENSION ONLY~~ (1st Full Year of Operation) Year Ending 2009

SYSTEM IMPROVEMENTS COMPLETE - NEW RATES IN EFFECT

A. Operating Income:

Water Sales	Increase at 1.0%/yr + New Rates	$2,165,230.00
Disconnect/Reconnect/Late Charge Fees		$10,000.00
Other (Describe)		$0.00
Less Allowances and Deductions		($44,346.00)
Total Operating Income		$2,130,884.00

B. Operation and Maintenance Expenses: Each Expense Increased at 2.5%/yr

(Based on Uniform Systems of Accounts prescribed by National Association of Regulatory Utility Commissioners)

Source of Supply Expense	$228,623.88
Pumping Expense	$0.00
Water Treatment Expense	$315,747.56
Transmission and Distribution Expense	$278,815.60
Customer Accounts Expense	$211,911.61
Administrative and General Expense	$297,179.81
Total Operating Expenses	$1,332,278.47
Net Operating Income	$798,605.53

C. Non-Operating Income:

Interest on Deposits		$30,936.00
Other (Identify)	Miscellaneous Receipts	$10,000.00
Total Non-Operating Income		$40,936.00

D. Net Income $839,541.53

E. Debt Repayment:

RUS Interest	$369,047.00
RUS Principal	$130,740.00
Non-RUS Interest	$138,865.00
Non-RUS Principal	$66,840.00
Total Debt Repayment	$705,492.00

F. Balance Available for Coverage $134,049.53 19%

XXXIII. ***ESTIMATED PROJECT COST - SEWER*** N/A

(Round to nearest $100)

	Collection	*Treatment*	*Total*
Development	*$0.00*	*$0.00*	*$0.00*
Land and Rights	*$0.00*	*$0.00*	*$0.00*
Legal	*$0.00*	*$0.00*	*$0.00*
Engineering	*$0.00*	*$0.00*	*$0.00*
Interest	*$0.00*	*$0.00*	*$0.00*
Contingencies	*$0.00*	*$0.00*	*$0.00*
Initial Operating and Maintenance	*$0.00*	*$0.00*	*$0.00*
Other	*$0.00*	*$0.00*	*$0.00*
TOTAL	*$0.00*	*$0.00*	*$0.00*

XXXIV. ***PROPOSED PROJECT FUNDING - SEWER***

	Collection	*Treatment*	*Total*
Applicant - User Contribution Fees	*$0.00*	*$0.00*	*$0.00*
Other - Applicant Contribution	*$0.00*	*$0.00*	*$0.00*
RUS Loan	*$0.00*	*$0.00*	*$0.00*
RUS Grant	*$0.00*	*$0.00*	*$0.00*
ARC Grant (If applicable)	*$0.00*	*$0.00*	*$0.00*
CDBG (If applicable)	*$0.00*	*$0.00*	*$0.00*
Other (Specify)	*$0.00*	*$0.00*	*$0.00*
Other (Specify)	*$0.00*	*$0.00*	*$0.00*

XXXV. ESTIMATED PROJECT COST - WATER

Development	$7,550,000.00
Land and Rights	$0.00
Legal	$45,000.00
Engineering	$862,500.00
Interest	$229,000.00
Contingencies	$755,000.00
Initial Operating and Maintenance	$0.00
Other Administrative	$50,000.00
TOTAL	$9,491,500.00

XXXVI. PROPOSED PROJECT FUNDING

RD (WTP and Transmission Main)	Original Funding	Additional Funding	Total RD Funding
Applicant - User Connection Fees			
Other Applicant Contribution	$0.00		$0.00
RUS Loan	$4,002,000.00	$1,544,390	$5,546,390.00
RUS Grant	$900,000.00	$347,310	$1,247,310.00
ARC Grant (If applicable)	$0.00		$0.00
CDBG (If applicable)	$0.00		$0.00
Other (Specify) KY Transportation Cab.	$350,000.00		$350,000.00
Other (Specify) EPA (2005)	$240,600.00		$240,600.00
TOTAL	$5,492,600.00	$1,891,700	$7,384,300.00

KY Rural Water (1.5 MG Water Tank)

Applicant - User Connection Fees	
Other Applicant Contribution	$0.00
RUS Loan	$0.00
RUS Grant	$0.00
ARC Grant (If applicable)	$0.00
CDBG (If applicable)	$0.00
Other (Specify) KIA (2003, 2006)	$789,400.00
Other (Specify) KY Rural Water	$1,317,800.00
TOTAL	$2,107,200.00

Appendix
Barkley Lake Water District
Water Loss Prevention Program

Barkley Lake Regional Water District

Water loss prevention program

September 10, 2007

In the past three years all residential meters have been replaced.

The district is currently in the process of replacing all commercial and wholesale meters.

The District intends to increase periodic night checks in all areas of the system to help identify abnormal flows in what should be a low flow period. This will be done by isolating sections of water mains and choking valves to determine the flow rate. Some key areas are already equipped with flow meters.

As funding and or time becomes available the District intends to:

Purchase leak detection equipment. (Aqua Scope listening device)

Install master meters in several locations of the county and maintain daily flow readings to establish a history and comparison report.

Designate at least one employee to focus only on the water loss program.

Replace asbestos water mains with PVC.

Inspect and replace storage control valves as needed.

Winterize all meter boxes to prevent meter bottoms from freezing and bursting.

Install pressure reducing valves in excessively high pressure areas.

Try to prevent unauthorized uses of flush plugs in rural areas.