PRELIMINARY ENGINEERING REPORT

FOR

ALLEN COUNTY WATER DISTRICT

PHASE 8 – OLD HWY 231 TRANSMISSION PIPELINE AND PUMP STATION

PROJECT NO. 2009119

SEPTEMBER, 2009

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INTRODUCTION

The Allen County Water District (ACWD) was formed to provide a dependable supply of potable water to the rural areas of Allen County. A first phase of construction for the District was completed in the summer of 1978. This construction consisted of approximately 8 miles of 4"-8" waterlines. As a result of the construction of Phase 1A and subsequent expansion by the District, the more densely populated areas of northeast Allen County are now being served.

In 1983, the District received an additional loan/grant from FmHA to serve those customers in the Phase 2 service area. This Phase 2 project added, to the existing system, over 250 customers, 25 miles of water main, one 165,000 gallon storage tank and two master meters.

In 1990, the District completed the Phase 3 expansion project into the southwestern portion of the county. This project consisted of 10 miles of 6- and 4-inch line, two booster pumping stations and two 160,000 gallon storage tanks. This project serves 114 new customers and two Pig Improvement Company (PIC) facilities. Two extensions from this project have been constructed by the District and funded with local contributions serving an additional 70 customers and two additional PIC facilities.

In 1993 the District completed the Phase 4 extension project into the southern portion of the county from Scottsville to the Tennessee state line. This project included 40 miles of water line, booster pump and storage tank.

The Phase 5 extension project included over 30 miles of distribution lines scattered over the entire district area making water service available to an additional 213 rural residential customers and a PIC pig farm.

The Phase 6 project during 2000 provided the pumping, transmission and tie-in facilities to enable the District to purchase virtually all of its water from Glasgow instead of Scottsville. This switch in water suppliers resulted in an immediate significant reduction in water purchase cost. The left-over monies from this project funded approximately 20 miles of lines in the Red Hill / Midway area which was the only geographical area in the county that did not have water service.

The Phase 7 project included 27,000 LF of 4-inch pipeline to provide service to 24 households and connect several dead end lines; 13,000 LF of 12-inch DI transmission main through a bridge crossing of Barren River Lake to complete the planned duplex facilities for the water supply source from Glasgow.

The Phase 8 project extended 47,000 LF of 12-inch D. I. Pipeline along the new US 231 highway from Scottsville to the Warren County line.

The ACWD presently purchases its water from the Cities of Glasgow (97%) and Scottsville (3%), Kentucky. These sources have provided the District a dependable source of potable water.

GEOGRAPHIC LOCATION

Allen County is located in the southwestern part of Kentucky. The county seat is the City of Scottsville, which is located near the geographic center of the county. Scottsville is 25 miles southeast of Bowling Green and 25 miles southwest of Glasgow. The Allen County Water District's service area includes all of Allen County except for certain areas in and around the City of Scottsville. Figure 1 shows the county location.

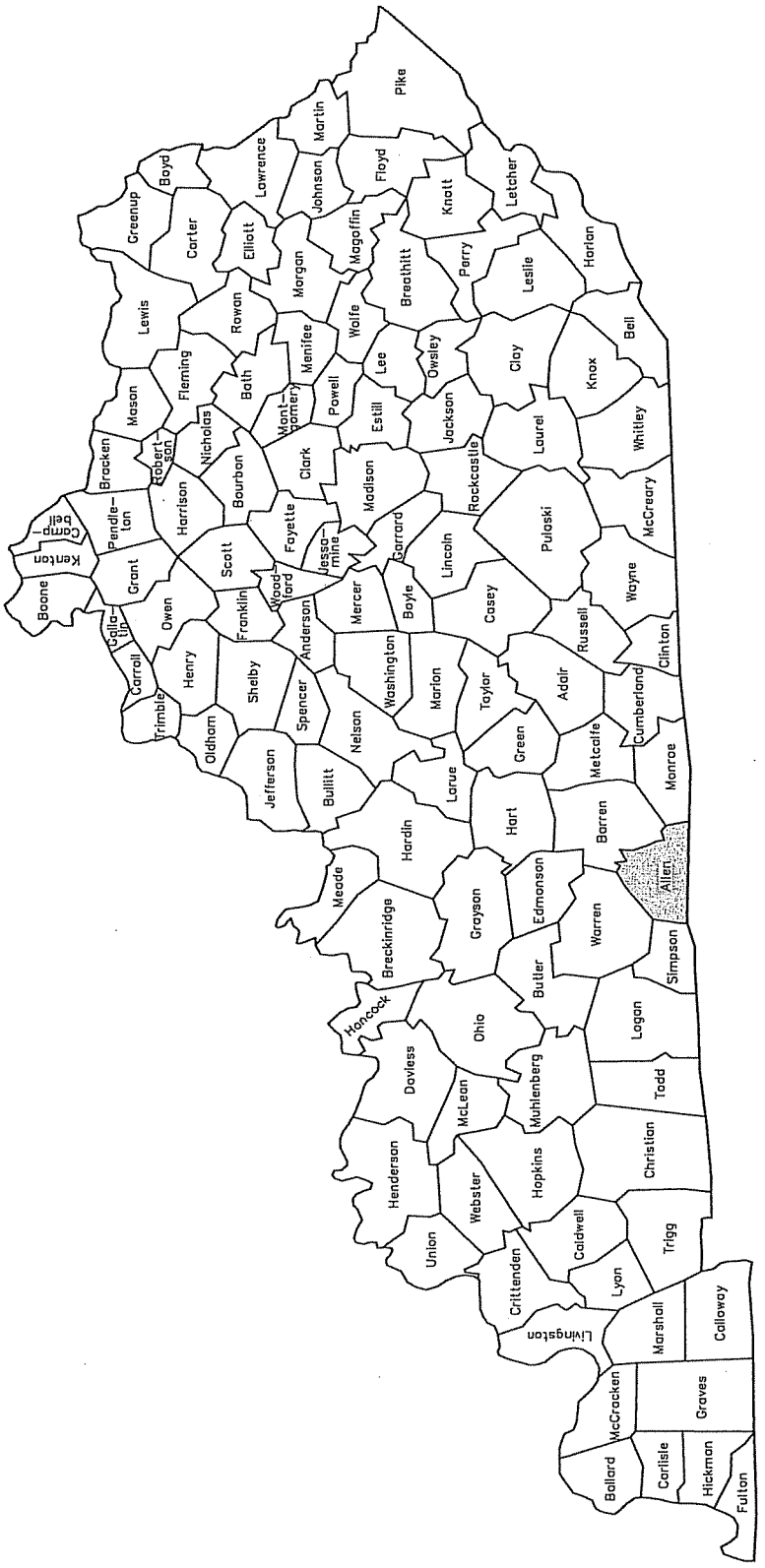
PROJECT NEED

The only sources of water available to county residents are wells, springs and cisterns. Widespread contamination of wells has been thoroughly documented. Over seventy percent of the wells tested in the district's service area have been judged unfit for human consumption. The health and welfare of the county depends on a good water supply. Extension of the District's facilities throughout the county is the only source of potable water available.

The New US 231 four lane highway had been constructed from Scottsville to Bowling Green to replace the old curvy two lane road. This US 231 corridor through the Allen County Water District service area will be a high growth location. A new 12-inch pipeline was constructed along the right-of-way of the new road.

The 44,954 LF installed quantity of the 12-Inch ductile iron pipeline extends along the New US 231 from Scottsville to the Allen/Warren County Line and contains a volume of approximately 292,000 gallons. The average demand on the old Bowling Green Road and the entire area east to Hwy 101 and 234 and north to the county line and the service areas of the Lambert Road and Walker Chapel tanks is approximately 300,000 gallons per day. The area described above is presently in the service area of the Lambert Road tank. This tank is filled through a gravity feed from the Hwy 98 tank with the fill/drawdown operation controlled with a valve that opens and closes in response to a radio telemetry signal. This valve is housed in the Lambert Road pump station facility. The Lambert Road tank provides suction supply to the Red Hill pump station which fills the Walker Chapel tank.

The initial use of the Lambert Road pump station filled the Lambert Road tank and received the suction side supply through a Scottsville master meter. The construction of the Hwy 98 tank and the 12-inch transmission main from the Hwy 98 tank to Lambert Road rendered the need for the pump station obsolete. The overflow elevation of the Hwy 98 tank relative to the Lambert Road tank overflow elevation enabled a gravity feed between the tanks. The pumps were removed and a valve installed that operates utilizing existing telemetry. Water flows from the Hwy 98 tank to the Lambert Road tank and this operation serves the entire area to the county line.



KENVIRONS, INC.

452 VERSAILLES ROAD, FRANKFORT, KENTUCKY

(502) 695-4357

ALLEN COUNTY WATER DISTRICT
FIGURE 1
OLD US 231 TRANMISSION MAIN & PUMP STATION
ALLEN COUNTY, KENTUCKY

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When the 12-inch pipeline on the New US 231 was placed in service, the system was valved so the Old Hwy 231 and surrounding areas were cut off from the Lambert Road tank and served directly from the Hwy 98 tank through the new 12-inch main. During the construction of the 12-inch main, Johnson Road, KY Hwy 1332, Spears Road and Old E. State Road were connected to the pipeline. When the pipeline was placed in service, these connections were opened. Water flowed directly into these side lines and along Old Hwy 231 from the 12-inch main. The length of 12-inch pipe from KY Hwy 1332 to the county line was left with only the demand on Johnson Road. Problems began to occur regarding the maintenance of an appropriate chlorine residual in the new pipeline due to inadequate turnover. Customers are beginning to request service on the new 12-inch main, hence the present dilemma. In order to utilize this pipeline, existing demands must be re-directed through it to accomplish adequate turnover until new growth along the new highway occurs.

ALTERNATIVES

There are only two sources of water for Allen County, namely the treatment facilities of Glasgow and Scottsville. The water supply for both treatment facilities is the Barren River Lake which is essentially unlimited. There are no other alternatives. Scottsville and ACWD are interconnected so the lake crossings provided by ACWD provide a significant back-up for Scottsville in the event of an emergency. Duplicity in these lake crossings greatly enhance the reliability of supply.

Various scenarios were extensively analyzed utilizing the system KYPIPE hydraulic computer model. The results and recommendations are contained in the remainder of this report.

The length of 12-inch pipe from the beginning of the project to KY Hwy 1332 is approximately 28,000 LF with a volume of 183,000 gallons. The remaining length from KY Hwy 1332 to the county line is approximately 17,000 LF with a volume of 108,000 gallons.

Alternative 1: This analysis assumed an 8-inch extension of approximately 6,500 LF between the 12-inch at the county line and the terminus of the 4-inch on Old Hwy 231 at Johnson Road. All connections to the 12-inch pipe were closed. The 8-inch pipe on Old Hwy 231 was closed immediately north of the Old Hwy 231/Lambert Road intersection. Water then flows through the valve station to Lambert Road Tank but cannot flow along Old Hwy 231. All of the area demand is forced to the county line through the 12-inch pipeline and is conveyed back down Old Hwy 231 to the connected roads. The problem with this scenario is the demand for the entire area is returned through the 4-inch pipeline segment on Old Hwy 231. The pressure loss is so great that water actually flows into Old Hwy 231 from KY Hwy 1332 supplied from Hwy 101. This scenario did not work.

Alternative 2: The next scenario assumed the 8-inch tie-in as described in Scenario No. 1 with all connections to the 12-inch closed except KY Hwy 1332. A valve in the 4-inch pipeline is closed on the north side of the Old Hwy 231 and KY Hwy 1332

intersection. The 8-inch line is valved off north of the Old Hwy 231/Lambert Road intersection as described in Scenario No. 1. The total area demand is forced in the 12-inch main to KY Hwy 1332. Flow is directed back down the 8-inch to serve Old Hwy 231 and side roads and through KY Hwy 1332 to serve the area east of Old Hwy 231. The remaining demand for the 4-inch along Old Hwy 231 and Johnson Road is forced through the remaining 12-inch to the county line and returned in the proposed 8-inch and 4-inch to supply the 4-inch portion of Old Hwy 231 and connected side roads. The estimated average daily demand for this northeast area is 150,000 gallons. As previously calculated, the pipeline volume from the beginning of the new 12-inch main to Hwy 1332 is 183,000 gallons. This section of the 12-inch should turn over between 1 and 2 days. The remaining section of 12-inch from Hwy 1332 to the county line conveys the supply for the Old Hwy 231 4-inch pipeline and side roads. The average daily demand for this section is 30,000 gallons. The volume for this 12-inch pipe section is 108,000 gallons indicating a turnover time of about 3.6 days. Depending on several variables, the turnover time of 3.6 days could be sufficient. Periodic flushing could be required. The only new construction required is the highway bore and connection of the 12-inch and 4-inch at the county line and Johnson Road respectively. Lambert Road tank would continue to be filled through the valve station. This supply scenario reduces the gravity flow through the valve station from about 320 GPM to 220 GPM, because the Old Hwy 231 demand would be flowing through the new 12-inch line on the New US 231 instead of through the Lambert Road valve station. This flow appears to be marginally adequate with the existing Red Hill pumps. Any upgrade of the Red Hill pump capacity would necessitate reactivation of the Lambert Road pump station.

Alternative 3: If the chlorine residual in the 12-inch section between Hwy 1332 and the county line cannot be maintained without excessive flushing, the implementation of Scenario No. 3 is required. This scenario includes closing all connections to the 12-inch to force the entire demand for the areas along Old Hwy 231 and east to Hwy 101 through the 12-inch to the county line. The flow would return through the proposed and existing 8-inch pipeline to distribute the demands. An additional 11,000 LF of 8-inch pipeline is required from Johnson Road to the existing 8-inch pipeline that terminates at Hwy 1332. Lambert Road tank would continue to be supplied through the valve station. The flow rate through the valve station would reduce from 320 GPM to 220 GPM, because the Old Hwy 231 demand would be flowing through the new 12-inch line on the New Hwy 231 instead of through the Lambert Road valve station. If additional flow capacity is needed for future demands, reactivation of the pump station would be required. The exact average demand for the Old Hwy 231 system area is not known. A conservative estimate of 150,000 GPD relative to a pipeline volume of 292,000 gallons indicates a turnover time of about two (2) days. This is normally adequate.

Alternative 4: If a chlorine residual continues to resist, the only alternative for more flow in the 12-inch line is to include the service areas of the Lambert Road/Walker Chapel tanks in the 12-inch pipe flow. This alternative requires the installation of a pump station on the proposed 8-inch pipeline at or north of Johnson Road. This pump station should be designed to include the upgrade of the Red Hill pump station to approximately 300-320 GPM. This Red Hill pumping rate would dictate a pumping rate of 500 GPM for a proposed Old Hwy 231 pump station. A high point in the system near

the Lambert Road tank on Newman Road, which is on the suction side of the Red Hill pumps, limits the maximum pumping rate for the Red Hill pump station to approximately 200 GPM. This low pressure issue would need to be addressed if a higher flow rate is required in the future.

EXISTING FACILITIES

The ACWD began operations in 1977. The existing facilities consist of approximately:

40,131 feet of 2-inch pipe
332,000 feet of 3-inch pipe
1,387,000 feet of 4-inch pipe
593,000 feet of 6-inch pipe
75,700 feet of 8-inch pipe
28,000 feet of 10-inch pipe
165,600 feet of 12-inch pipe
3 - 169,000 gallon standpipe
1 - 230,000 gallon standpipe
1 - 300,000 gallon Elevated Tank
2 - Master Meter Stations
4 - Booster Pump Stations
2 - Control Valve Stations

The District purchases most of its water from the City of Glasgow (97%) for $1.95 per thousand gallons. Water is purchased from the City of Scottsville (3%) for the customers along 31-E for $2.03 per 1000 gallons. The facilities of the District are in good condition with an unaccounted for water loss of 7.8% including system flushing and fire fighting use. ACWD is physically and economically sound.

PROPOSED FACILITIES

The decision of the water district is to install Alternative 4, which consists of 16,000 LF of 8-inch PVC pipe; 1,200 LF of 8-inch D.I. pipe; and one pump station. There are no new customer additions.

The preliminary estimate of project cost is $1,147,000. The District will contribute up to $150,000. The remainder is being sought in the form of a $698,000 loan and $299,000 grant from the U.S. Department of Agriculture, Rural Development.

The solid waste for Allen County residents is picked-up by Ausbrooks Disposal, W & W Disposal, Sann Disposal and Presley Disposal and hauled to the Allen County Transfer Station. The ultimate destination of the trash is the Barren County Landfill, KY Permit No. 005.00001.

Portions of U.S.G.S. topographic maps and a general highway map, are bound in this report showing the locations of the project elements. Exhibit 1 contains an itemized cost estimate.

WATER SYSTEM OPERATION

A detailed hydraulic computer model is utilized to size pipelines and to determine the need for booster pumping and the location and overflow elevations of water storage tanks.

The system was designed and sized to meet the anticipated peak demand conditions and to allow for normal growth. The maps in the back of this report show all water lines recommended as a part of this construction project. The system has been designed so that water pressures at the meters of individual customers will not be less than 30 psi at peak flow conditions. Where static pressures exceed 100 psi, individual pressure regulators will be required to protect fixtures from high pressure.

Storage tanks are used in the water system to stabilize the pressure throughout the system, to provide sufficient water to take care of instantaneous peak requirements, to provide water in the event of temporary failure of the source and to provide water during peak days if the water demand exceeds the capacity of the source. The tanks must be of sufficient elevation to maintain a minimum of 30 psi pressure in the zone they serve and to provide for a two-day water requirement under average conditions for a minimum storage of 300 gallons per meter served.

The existing tanks are filled by pumping stations equipped with duplicate pumps which run alternately.

Pumps are designed to maintain an operating level in the tanks about 10 to 12 feet lower than the overflow level of the tanks. This requires pumping to begin when the water level in the tanks drop to the operating level; pumping stops when the tanks are refilled to the overflow level. This procedure provides adequate pressure stabilization of the system. The pumps are controlled by telemetering with electric check valves to damper pressure surges during pump cut-on and cut-off.

LAND, WATER AND OTHER RIGHTS AND PERMITS

LAND

One (1) site will need to be acquired for a pump station approximately 60' x 60' in size.

WATER

Allen County Water District's purchases, during January through December, 2008, were 342,588,300 gallons from the city of Glasgow and 5,299,700 from the city of Scottsville. The present Glasgow water treatment capacity is 12 MGD at the lake facility and 2.5 MGD at the in-town facility. The present production at the lake facility is an average of 7 MGD with a peak of 8 MGD. The present water purchase contract with Glasgow provides for One (1.0) MGD and has 19 years remaining. The average daily demand of ACWD from the Glasgow system during 2008 was 938,598 GPD (0.94 MGD).

OTHER RIGHTS AND PERMITS

The pipeline will be installed on private easements. This will require both a permanent easement and a temporary construction easement; both are usually combined on one easement form. A description of the easements necessary will be prepared by the engineer. From these descriptions, the attorney will prepare the easement and right-of-way documents. ACWD will then be responsible for obtaining the signatures of property owners, conveying these easements. If for any unforeseen reason private easements cannot be obtained, water mains may be constructed on highway rights-of-way. A permit for this type of construction must be obtained from the affected highway department (either state or county). This permit can be incorporated into the permit necessary for line crossings of highways. The engineer will provide the necessary information and apply for these permits.

Several other permits and approvals will be necessary before completion of the project. Among these are: Kentucky Division of Water; a permit for stream crossing from the Kentucky Department for Natural Resources and Environmental Protection and Kentucky Public Service Commission. The District's attorney, engineer and the Rural Development county supervisor will advise and assist in procuring the necessary and proper permits and approvals.

There are no railroad crossings required.

EXHIBIT NO. 1
ALLEN COUNTY WATER DISTRICT
REINFORCEMENTS FOR UTILIZATION OF US 231 12-INCH PIPE
OPINION OF PROBABLE COST

				TOTALS	
ITEM NO.	ITEM DESCRIPTION	UNIT	UNIT COST	QUANTITIES	COST
1	8" D.I. Pipe with Nitrol Gaskets		$30.00	1,200	$36,000.00
2	8" PVC SDR 17 Pipe	LF	16.00	16,400	256,000.00
3	8" Gate Valve	EA	1,000.00	8	10,000.00
4	Highway 231 Bored Encasement	LF	180.00	300	54,000.00
5	Bored Encasement for 8" Pipe	LF	100.00	500	50,000.00
6	Blue Line Stream Crossing	EA	18,000.00	1	18,000.00
7	Tie-In	EA	2,000.00		10,000.00
8	Fire Hydrant	EA	3,000.00	5	15,000.00
9	Final Pipe Clean-Up	LF	1.00	17,000	17,200.00
10	Free Bore for 8" Pipe	LF	50.00	300	15,000.00
11	Private Sewer Crossing	LF	20.00	200	4,000.00
12	Pavement Replacement	LF	10.00	1,600	16,000.00
13	Pump Station	LS	250,000.00	1	250,000.00
14	Telemetry Controls	LS	30,000.00	1	30,000.00
15	Ditch Stabilization	Ton	50.00	500	25,000.00
16	Pressure Reducing Station	EA	15,000.00	2	30,000.00
17	Private Sewer Crossing	LF	20.00	200	4,000.00
	TOTAL CONSTRUCTION COST				**$840,200.00**

EXHIBIT 2

OPINION OF PROBABLE PROJECT COST AND FUNDING

I. Project Cost

1.	CONSTRUCTION COST		$840,200
2.	ENGINEERING		
	Preliminary Engineering Report	$12,000	
	Design	77,000	
	Construction Observation	49,500	
	Environmental	15,000	
			$153,500
3.	LEGAL		
	Local Counsel	$4,700	
	Bond Counsel	7,600	
			$12,300
4.	CAPITALIZED INTEREST		37,000
5.	CONTINGENCIES		84,000
6.	ADMINISTRATION		5,000
7.	LAND AND RIGHTS-OF-WAY		15,000
	TOTAL PROJECT COST		**$1,147,000**

II. Project Funding

Rural Development Loan	$698,000
Rural Development Grant	299,000
Owner Contribution	150,000
Total Project Funding	**$1,147,000**

EXHIBIT 3

REVENUES AND REVENUE REQUIREMENT FOR 2008
(Source: 2008 Annual Report)

1.	REVENUES	
	Water Sales	$1,819,588
	Forfeited Discounts	40,249
	Misc. Service Revenues	58,980
	Interest Income	171,408
	TOTAL REVENUES	$2,090,225
2.	OPERATING & MAINTENANCE EXPENSES	
	2.1 Source of Supply	$610,247
	2.2 Pumping	44,720
	2.3 Water Treatment	---
	2.4 Transmission & Distribution	147,262
	2.5 Customer Accounts	157,457
	2.6 Administrative & General	546,748
	Subtotal	$1,506,434
	2.7 Interest on Customer Deposits	446
	2.8 Unamortized Debt Discount	2,275
	2.9 Taxes other than Income	34,774
	TOTAL O&M EXPENSE	$1,543,929
3.	DEPRECIATION	$342,695
4.	DEBT SERVICE	
	Interest	$241,188
	Principal	64,500
5.	DEBT SERVICE COVERAGE @ 10%	$30,569
	TOTAL 2008 REVENUE REQUIREMENT	**$2,222,881**

EXHIBIT 4

ADJUSTMENTS TO 2012

1. EXPENSES

1.1 HEALTH INSURANCE

Increase 8% per year	
$120,000 per year x 1.08^4	$163,258
2008 Health Insurance Premium	120,000
EXPENSE ADJUSTMENT	**$43,258**

1.2 SALARY INCREASE

Increase 4% per year	
$353,062 x 1.04^4	$413,033
2008 Salary Expense	353,062
EXPENSE ADJUSTMENT	**$59,971**

1.3 ADDED CUSTOMERS

Customer Count per Nov., 2009	4,892
Average Customer Count during 2008	4,862
Added Customers	30

Expenses:

Purchased Water: 4.0 M Gals x 30 x 12 ÷ .85 = 1,224 M Gals	
1,224 M Gals x $1.95 per M Gal =	$2,387
Pumping: 1,224 M Gals x $0.15 =	184
Customer Accounts: 30 x $32 =	960
EXPENSE ADJUSTMENT	**$3,531**

1.4 WATER PURCHASED FROM GLASGOW

Jan. – June, 2008	162,146	M Gals x $1.40 =	$227,004
July – Dec., 2008	176,397	M Gals x $1.75 =	308,695
	338,543	M Gals	$535,699

Annualized Cost of Glasgow Water = $1.95 x 338,543 M Gals = $660,159
Glasgow Water Purchase Expense Adjustment = $660,159 - $535,699 = **$124,460**

EXHIBIT 4
(Continued)

2.1 WATER PURCHASED FROM SCOTTSVILLE

9,345.1 M Gals x $3.31 per 1,000 Gals =	$30,932
Less 9,345.1 M Gals x $2.03 per 1,000 Gals =	(-) 18,970
Scottsville Water Purchase Expense Adjustment	**$11,962**
TOTAL EXPENSES ADJUSTMENT	**$243,182**

2. REVENUES

2.1 WATER SOLD TO SCOTTSVILLE

23,655 M Gals x $3.31 per 1,000 Gals =	$78,331
Less 23,655 M Gals x $2.34 per 1,000 Gals =	(-) 55,353
	$22,978

2.2 ADDED CUSTOMER REVENUE

30 cust. x 12 x 27.76 =	**$9,394**

2.3 ADDED REVENUE PER JULY, 2009 RATE ADJUSTMENT

2008 Water Sales = $1,819,588	
$1,819,588 x 1.108 =	$2,016,104
Less 2008 Water Sales	(-) 1,819,588
	$196,516
TOTAL REVENUE ADJUSTMENT	**$228,888**

EXHIBIT 5

PROPOSED PROJECT EXPENSES

1.	Power for Pumping: 300 M Gals x 365 x $0.15	$16,425
2.	Transmission & Distribution: 3.4 inch-miles x $100	3,400
3.	Debt Service: $698,000 @ 4% for 38 years	36,114
4.	Debt Service Coverage:	3,611
5.	Depreciation: $840,000 ÷ 40 years	21,000
	TOTAL PROPOSED EXPENSES	**$80,550**

EXHIBIT 6

REVENUE REQUIREMENT

	Existing 2008	Adjustments (Exhibit 4)	Proposed Project (Exhibit 5)	Proforma 2012
1. OPERATION AND MAINTENANCE				
Source of Supply	$610,247	$138,809	---	$749,056
Pumping	44,720	184	$16,425	61,329
Water Treatment	---	---	---	---
Transmission & Distribution	147,262	34,410	3,400	185,072
Customer Accounts	157,457	35,370	---	192,827
Administration & General	546,748	34,409	---	581,157
Interest on Customer Deposits	446	---	---	446
Unamortized Debt Discount	2,275	---	---	2,275
Taxes other than Income	34,774	---	---	34,774
	$1,543,929	$243,182	$19,825	**$1,806,936**
2. DEPRECIATION	$342,695	---	$21,000	**$363,695**
3. DEBT SERVICE				
Interest	$241,188	(19,280)	$27,914	$249,822
Principal	64,500	32,500	8,200	105,200
	$305,688	$13,220	$36,114	**$355,022**
4. DEBT SERVICE COVERAGE	30,569	1,322	3,611	**35,502**
TOTAL REVENUE REQUIREMENT	**$2,222,881**	**$257,724**	**$80,550**	**$2,561,155**

EXHIBIT 7

PROPOSED RATES AND COMPARISON OF RATES

GENERAL CUSTOMERS

	Existing		Proposed		% Increase
First 2,000 gallons	$17.47	(Min.)	$19.29	(Min.)	10.4
Next 3,000 gallons	6.86	per 1,000 gals.	7.58	per 1,000 gals.	10.5
Next 5,000 gallons	5.81	per 1,000 gals.	6.42	per 1,000 gals.	10.5
Next 60,000 gallons	5.31	per 1,000 gals.	5.86	per 1,000 gals.	10.4
Over 70,000 gallons	4.86	per 1,000 gals.	5.37	per 1,000 gals.	10.5
Average Bill for 4,000 Gallons	$31.19		$34.45		10.5

CORPS OF ENGINEERS

First 55,000 gallons	$330.55	(Min.)	$365.26	(Min.)	10.5
Next 15,000 gallons	5.31	per 1,000 gals.	5.86	per 1,000 gals.	10.4
Over 70,000 gallons	4.86	per 1,000 gals.	5.37	per 1,000 gals.	10.5

TRAILER PARKS

First 10,000 gallons	$61.20	(Min.)	$67.63	(Min.)	10.5
Next 60,000 gallons	5.31	per 1,000 gals.	5.86	per 1,000 gals.	10.4
Over 70,000 gallons	4.96	per 1,000 gals.	5.37	per 1,000 gals.	10.5

EXHIBIT 8

ALLEN COUNTY WATER DISTRICT
BILLING ANALYSIS

GENERAL CUSTOMERS

Rate Structure	Bills	Gallons	First 2,000	Next 3,000	Next 5,000	Next 60,000	Over 70,000
First 2,000 Gallons	13,639	16,987	16,987				
Next 3,000 Gallons	24,905	85,226	49,810	35,416			
Next 5,000 Gallons	10,715	72,972	21,430	32,145	19,397		
Next 60,000 Gallons	2,414	40,495	4,828	7,242	12,070	16,355	
Over 70,000 Gallons	141	51,172	282	423	705	8,460	41,302
	51,814	266,852	93,337	75,226	32,172	24,815	41,302

	Rates		Bills	Gallons	Annual Revenue
First 2,000 Gallons	$16.17	(Min.)	51,814	---	$837,832
Next 3,000 Gallons	6.21	per 1,000 gals.		75,226	467,153
Next 5,000 Gallons	5.16	per 1,000 gals.		32,172	166,007
Next 60,000 Gallons	4.66	per 1,000 gals.		24,815	115,638
Over 70,000 Gallons	4.21	per 1,000 gals.		41,302	173,881
					$1,760,511

EXHIBIT 8
(Continued)

CORPS OF ENGINEERS

Rate Structure	Bills	Gallons	First 55,000	Next 15,000	Over 70,000	Total
First 55,000 Gallons	9	70	70			
Next 15,000 Gallons	2	131	110	21		
Over 70,000 Gallons	1	77	55	15	7	
	12	278	235	36	7	
Rate	$294.80			$4.66	$4.21	
Annual Revenue	$3,528.00			$168.00	$29.00	$3,725.00

City of Scottsville
$2.34 per 1,000 Gals. x 23,655 MGals. $55,353.00

TOTAL WATER SALES FOR 2008 **$1,819,589.00**

EXHIBIT 9

PROJECTED REVENUES FOR 2012

GENERAL CUSTOMERS

	Rates		Bills	Gallons	Annual Revenue
First 2,000 Gallons	$19.29	(Min.)	51,814	---	$999,492
Next 3,000 Gallons	7.58	per 1,000 gals.		75,226	570,213
Next 5,000 Gallons	6.42	per 1,000 gals.		32,172	206,544
Next 60,000 Gallons	5.86	per 1,000 gals.		24,815	145,416
Over 70,000 Gallons	5.37	per 1,000 gals.		41,302	221,792
					$2,143,457

CORPS OF ENGINEERS

First 55,000 Gallons	$365.26	(Min.)	12	---	$4,383
Next 15,000 Gallons	5.86	per 1,000 gals.		36	211
Over 70,000 Gallons	5.37	per 1,000 gals.		7	38
					$4,632

City of Scottsville

$3.31 per 1,000 Gals. x 23,655 MGals. **$78,298**

Added Customer Revenue

See Exhibit 4, Item 1.3

$34.45 x 30 cust. x 12 mo. **12,402**

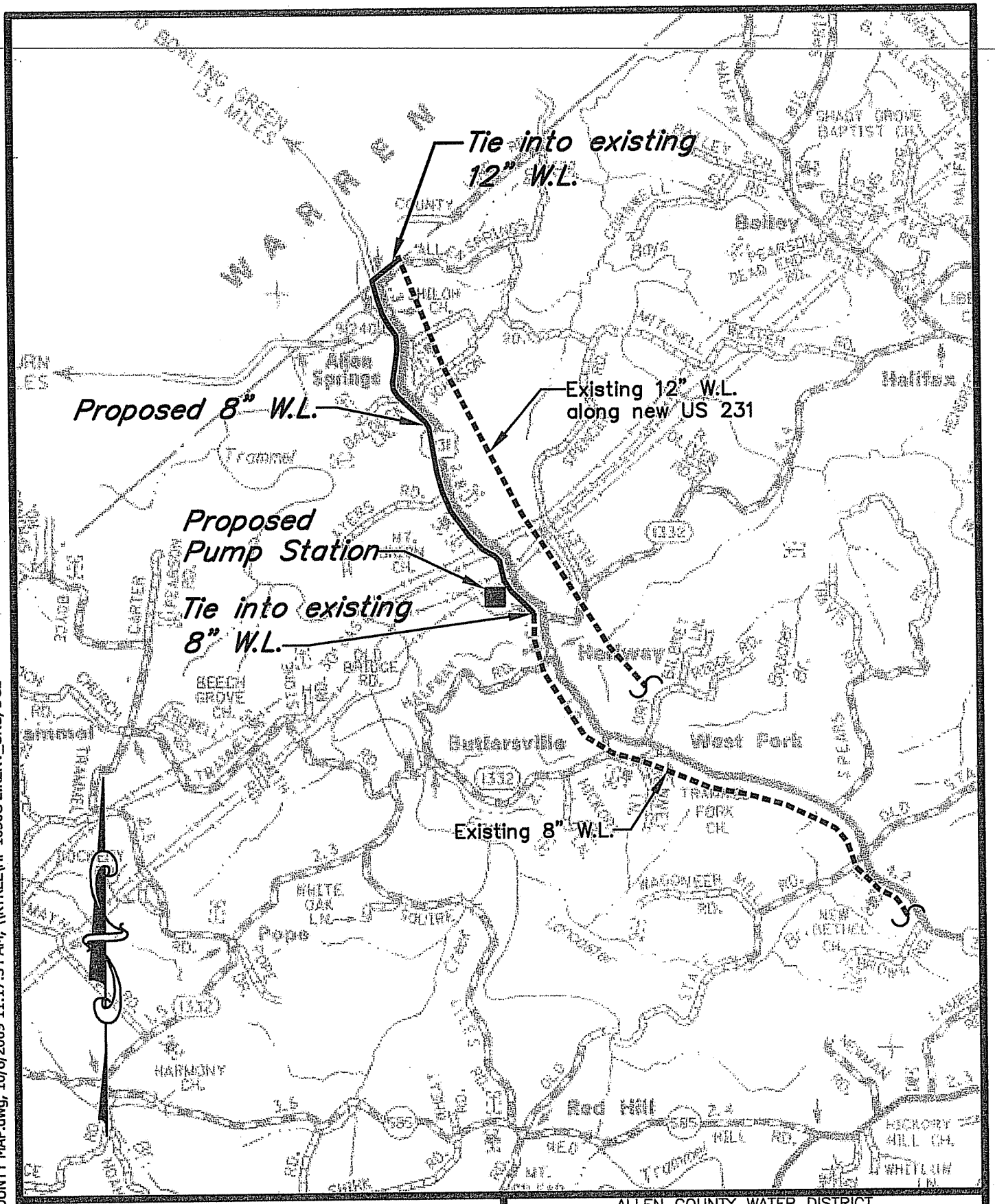
$2,238,460

MISCELLANEOUS REVENUES

Forfeited Discounts	$40,249
Miscellaneous Service Revenues	58,980
Interest Income	150,000
	$249,229

TOTAL PROJECTED REVENUES **$2,488,018**

MAPS FOR PROPOSED PROJECT



ALLEN COUNTY MAP

ALLEN COUNTY WATER DISTRICT
OLD HWY 231 TRANSMISSION MAIN AND PUMP STATION
ALLEN COUNTY, KY

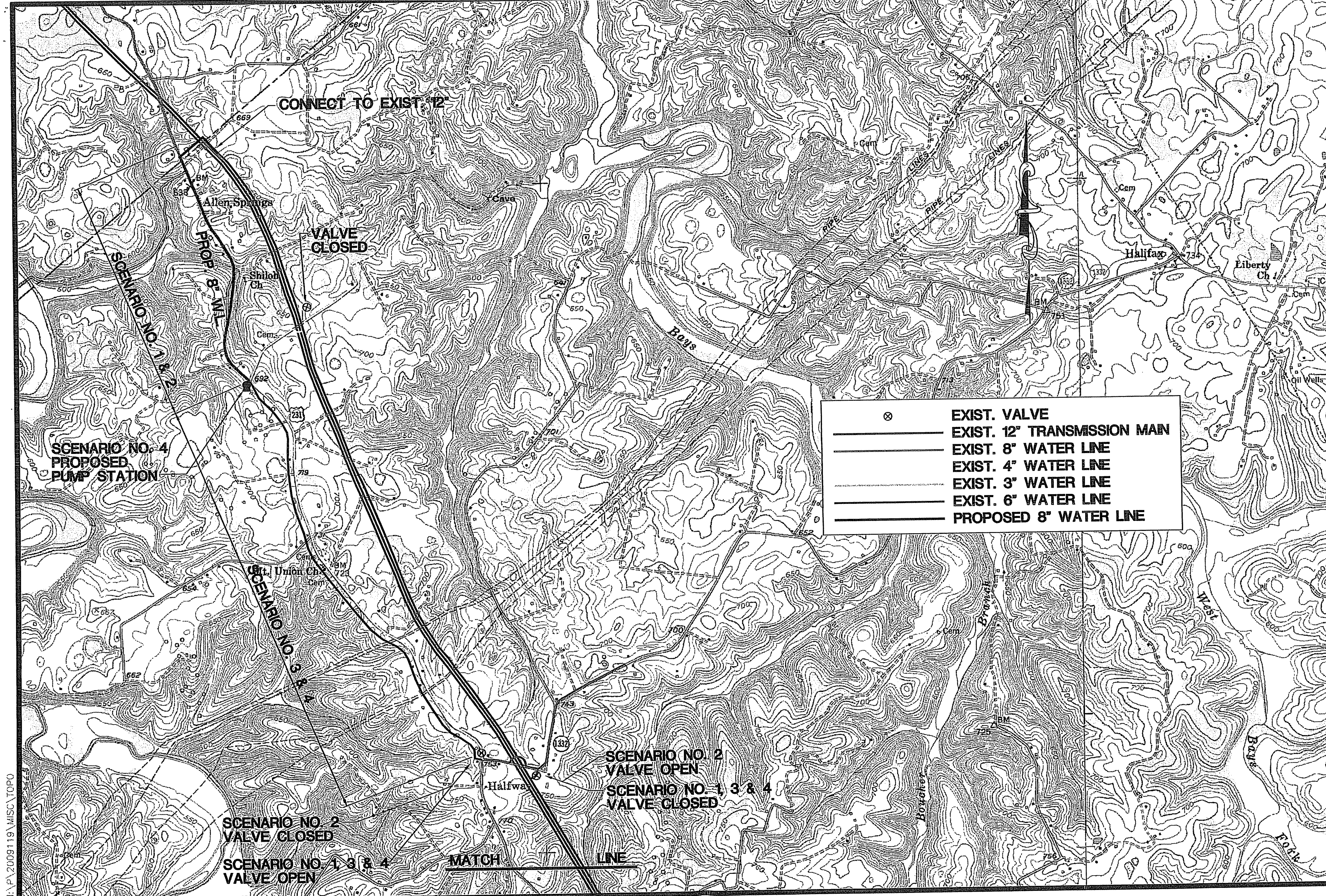
SCALE IN MILES

0 1/2 1 2

KENVIRONS, INC.

452 VERSAILLES ROAD, FRANKFORT, KENTUCKY
(502) 695-4357

N:\P\2009119\misc\COUNTY MAP.dwg, 10/8/2009 11:17:54 AM, \\KTREE\HP 1050C-2.KENV_ORG, DGL


CONNECT TO EXIST. 12"
VALVE CLOSED
PROP 8" W.L.
SCENARIO NO. 1 & 2
SCENARIO NO. 4 PROPOSED PUMP STATION
SCENARIO NO. 3 & 4
SCENARIO NO. 2 VALVE OPEN
SCENARIO NO. 1, 3 & 4 VALVE CLOSED
SCENARIO NO. 2 VALVE CLOSED
SCENARIO NO. 1, 3 & 4 VALVE OPEN
MATCH LINE
EXIST. VALVE
EXIST. 12" TRANSMISSION MAIN
EXIST. 8" WATER LINE
EXIST. 4" WATER LINE
EXIST. 3" WATER LINE
EXIST. 6" WATER LINE
PROPOSED 8" WATER LINE
Allen Springs
Shiloh Ch
Mt. Union Ch
Halfway
Halifax
Liberty Ch
Bays
Boucher Branch
West Bays Fork
PIPE LINES
Cave
Oil Wells

ALLEN COUNTY WATER DISTRICT
OPERATION OF 12" TRANSMISSION MAIN
ALLEN COUNTY, KENTUCKY

DRAWN BY: JKP
CHECKED BY: CFM
CHECKED BY:
DATE: 08/03/09
SCALE: 1"=2,000'
REV:

KENVIRONS, INC.
FRANKFORT, KENTUCKY

PROJECT NO. 2009119

SHEET NO. 1 of 2

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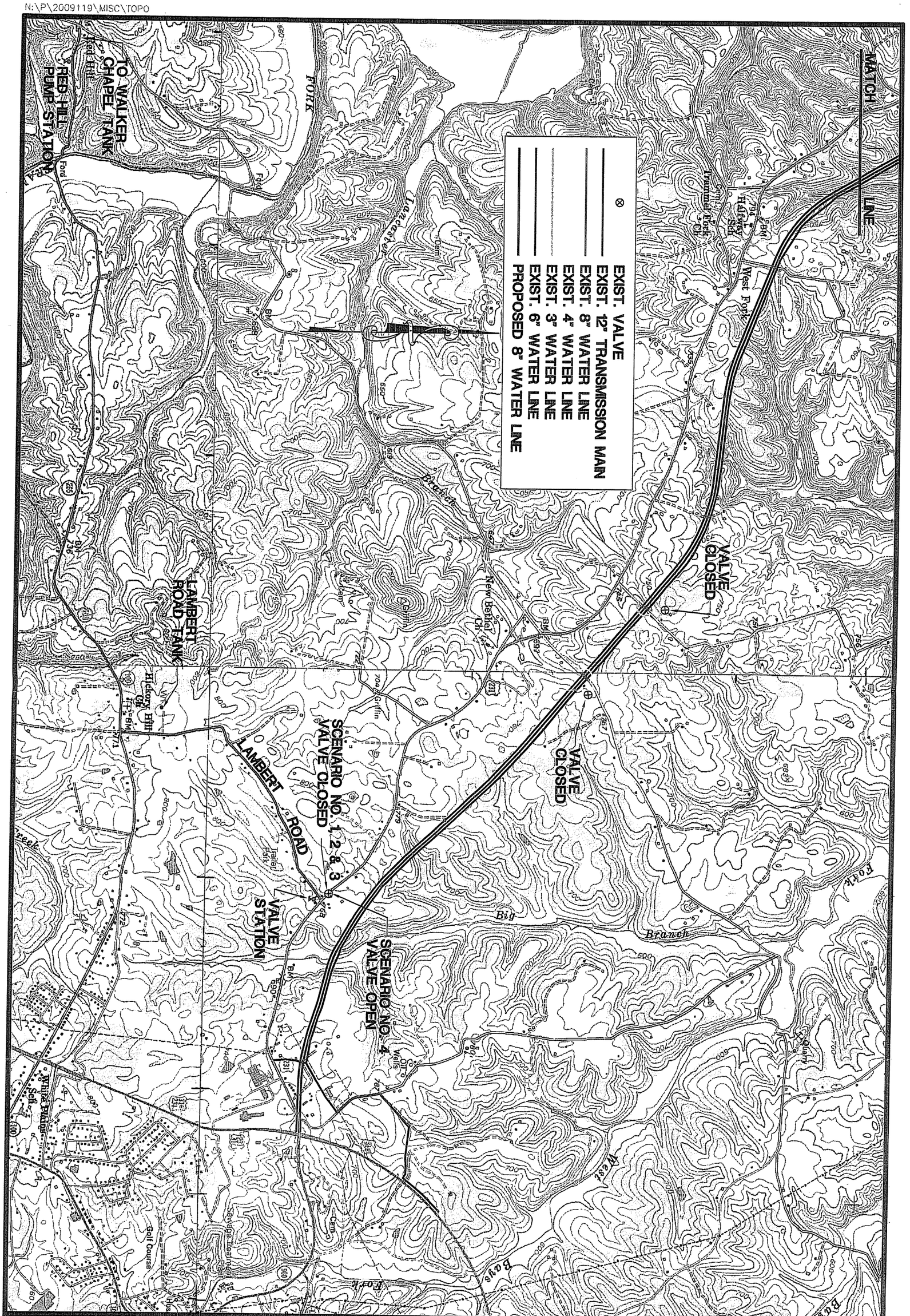
N:\P\2009119\MISC\TOPO



SHEET NO. 2 of 2	PROJECT NO. 2009119	**KENVIRONS, INC.** FRANKFORT, KENTUCKY	DRAWN BY: JKP CHECKED BY: CFM CHECKED BY: DATE: 08/03/09 SCALE: 1"=2,000' REV:	**ALLEN COUNTY WATER DISTRICT** **OPERATION OF 12" TRANSMISSION MAIN** **ALLEN COUNTY, KENTUCKY**

RURAL DEVELOPMENT
SUMMARY / ADDENDUM

SUMMARY ADDENDUM
TO
PRELIMINARY ENGINEERING REPORT

DATED February, 2010

FOR

Allen County Water District
Phase 8: Old Highway 231 Transmission Pipeline and Pump Station
(NAME OF PROJECT)

APPLICANT CONTACT PERSON Bobby Petty

APPLICANT PHONE NUMBER (270) 622-3040

APPLICANT TAX IDENTIFICATION NUMBER (TIN) 61-0997995

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 both be taken as security for the loan, all user information and characteristics of both utility systems will be needed even though the project will benefit only one utility.***

Feasibility reviews and grant determinations 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.

Installation of 18,000 LF of 8-inch PVC pipe and one pump station.

II. FACILITY CHARACTERISTICS OF EXISTING SEWER SYSTEM

A. Sewage Treatment:

1. Type _____

2. Method of Sludge Disposal _____

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

*$*_____

4. Date Constructed _____

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 Collection 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.

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.

See page 3A

If the applicant purchases water:

Seller(s);

1. City of Glasgow
2. City of Scottsville
3. _____

Price/1,000 gallons:

1. $ 1.95
2. $ 3.31
3. _____

Present Estimated Market Value of Existing System: $ 12,106,300

ITEM III.

Allen County Water District's purchases, during January through December, 2008, were 342,588,300 gallons from the City of Glasgow and 5,299,700 from the City of Scottsville. The present Glasgow water treatment capacity is 12 MGD at the lake facility and 2.5 MGD at the in town facility. The present production at the lake facility is an average of 7 MGD with a peak of 8 MGD. The present water purchase contract with Glasgow provides for One (1.0) MGD and has 19 years remaining. The average daily demand of ACWD from the Glasgow system during 2008 was 938,598 GPD (0.94 MGD).

B. Water Storage:

Type:	Ground Storage Tank		Elevated Tank	1	
	Standpipe	4	Other		
Number of Storage Structures		5			
Total Storage Volume Capacity		1,040,000			
Date Storage Tank(s) Constructed		1977 to 2000			

C. Water Distribution System:

Pipe Material		PVC and Ductile			
Lineal Feet of Pipe:	3" Diameter	332,000	4"	1,387,000	
2" 40,131	6"	592,400	8"	75,700	
	10"	28,000	12"	165,600	
Date(s) Water Lines Constructed		1977 through 2000			
Number and Capacity of Pump Station(s)		(1) 1000 GPM; (1) 180 GPM;			
(1) 400 GPM; (1) 120 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 excellent condition. After this project, the major item Needed would be increased storage capacity depending on growth.

E. Percentage of Water Loss Existing System 7.8%

IV. EXISTING LONG-TERM INDEBTEDNESS

A. List of Bonds and Notes:

Date of Issue	Bond/Note Holder	Principal Balance (1)	Payment Date	Bond Type Water/Sewer*		Amount on Deposit in Reserve Account
1990 Issue	RD	$ 197,000	Jan 1	%	%	
1994 Issue	RD	$ 514,000	Jan 1	%	%	
1997 Issue	RD	$ 556,500	Jan 1	%	%	
1999 Issue	RD	$ 1,807,000	Jan 1	%	%	
2001 Issue	KRWFC	$ 310,000	Varies	%	%	
2007 Issue	RD	$ 1,614,000	Jan 1	%	%	

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

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

		Payment Year 2010		Payment Year 2011		Payment Year 2012	
Date of Issue	Bond/Note Holder	Principal Payment	Interest Payment	Principal Payment	Interest Payment	Principal Payment	Interest Payment
1990 Issue	RD	6,000	9,600	6,000	9,300	6,000	9,000
1994 Issue	RD	11,000	22,635	12,000	22,140	12,000	21,600
1997 Issue	RD	9,000	26,715	9,500	26,276	10,000	25,813
1999 Issue	RD	29,000	84,503	31,000	83,125	32,000	81,653
2001 Issue	KRWFC	16,000	15,330	16,000	14,490	18,000	13,597
2007 Issue	RD	17,500	71,865	18,500	71,078	19,000	70,245
Totals		88,500	230,648	93,000	226,409	97,000	221,908

(1) Per December 31, 2008

V. EXISTING SHORT-TERM INDEBTEDNESS

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

Lender or Lesser	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

VI. LAND AND RIGHTS - EXISTING SYSTEM(S)

Number of Treatment Plant Sites:	Water		***Sewer***	
Number of Storage Tank Sites:	Water	5	***Sewer***	
Number of Pump Stations:	Water	4	***Sewer***	
Total Acreage:	Water	6 Acres	***Sewer***	Acres
Purchase Price:	Water	$ 0.00	***Sewer***	$

VII. NUMBER OF EXISTING USERS

	Water	***Sewer***
Residential (In Town)*	4,555	
Residential (Out of Town)*		
Non-Residential (In Town)	308	
Non-Residential (Out of Town)	4,863	
Total		
Number to Total Potential Users Living in the Service Area	5,000	

*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"	$ 500	*$*
1-Inch	$ 700	*$*
2-Inch	$ 1100	*$*

IX. SEWER RATES - EXISTING SYSTEM

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

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 @	$ 17.47	Minimum.
Next	3,000	Gallons @	$ 6.86	per 1,000 Gallons.
Next	5,000	Gallons @	$ 5.81	per 1,000 Gallons.
Next	60,000	Gallons @	$ 5.31	per 1,000 Gallons.
Next		Gallons @	$	per 1,000 Gallons.
Next		Gallons @	$	per 1,000 Gallons.
All Over	70,000	Gallons @	$ 4.86	per 1,000 Gallons.

Date This Rate Went Into Effect July 1, 2009

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

U.S. Army Corps of Engineers

First	55,000	Gallons @	$ 330.55	Minimum Bill
Next	15,000	Gallons @	$ 5.31	per 1,000 Gallons.
Over	70,000	Gallons @	$ 4.86	per 1,000 Gallons.

Trailer Parks

First	10,000	Gallons @	$ 61.20	Minimum Bill
Next	60,000	Gallons @	$ 5.31	per 1,000 Gallons.
Over	70,000	Gallons @	$ 4.96	per 1,000 Gallons.

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

For Period _____ *to* _____.

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

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

For Period January 1 to December 31, 2008 .

All Meter Sizes	Monthly Sewer Usage		Average	Residential		Non-Residential	
				No. of Users	Usage (1000)	No. of Users	Usage (1000)
0 -	2,000 Gal.		1,000	12,060	16,044	1,579	943
2,000 -	3,000 Gal.		2,500				
3,000 -	4,000 Gal.		3,500	23,781	81,301	1,124	3,925
4,000 -	5,000 Gal.		4,500				
5,000 -	6,000 Gal.		5,500				
6,000 -	7,000 Gal.		6,500	10,080	67,343		
7,000 -	8,000 Gal.		7,500				
8,000 -	9,000 Gal.		8,500			635	5,629
9,000 -	10,000 Gal.		9,500				
10,000 -	11,000 Gal.		10,500				
11,000 -	12,000 Gal.		11,500				
12,000 -	13,000 Gal.		12,500				
13,000 -	14,000 Gal.		13,500				
14,000 -	15,000 Gal.		14,500				
15,000 -	16,000 Gal.		15,500				
16,000 -	17,000 Gal.		16,500	2,170	35,759		
17,000 -	18,000 Gal.		17,500				
18,000 -	19,000 Gal.		18,500				
19,000 -	20,000 Gal.		19,500			244	4,736
over -	70,000 Gal.		200,100	42	8,406		
over -	70,000 Gal.		432,000			99	42,766
			Total	48,133	(208,853)	(3,681)	(57,919)
			Average Usage		(4.3)		(15.8)

Total Water Purchased and/or Produced	347,888	
Total Water Sold	290,785	

U.S. Army Corps of Engineers

			Bills	Gallons
First	55,000	Gallons	9	69.8
Next	15,000	Gallons	2	130.9
Over	70,000	Gallons	1	77.6
			12	278.3

City of Scottsville

Flat Rate per 1,000 gallons	12	23,655

XIII. FACILITY CHARACTERISTICS OF PROPOSED SEWER SYSTEM

A. Sewage Treatment:

1. *Type* _____
2. *Method of Sludge Disposal* _____

_____

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

$ _____

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	*$* _____

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.

See page 3, Item III-A

B. Water Storage: N/A

Type: Ground Storage Tank _____ Elevated Tank _____

Standpipe _____ Other _____

Number of Storage Structures _____

Total Storage Volume Capacity _____

C. Water Distribution System:

Pipe Material PVC

Lineal Feet of Pipe:	3" Diameter		4"	
	6"		8"	18,000
	10"		12"	

Number and Capacity of Pump Station(s) (1) 350 GPM

XVI. LAND AND RIGHTS - PROPOSED WATER SYSTEM N/A

Number of Treatment Plant Sites	
Number of Storage Tank Sites	
Number of Pump Stations	1
Total Acreage	Acres
Purchase Price	$ 5,000

XVII. NUMBER OF NEW SEWER USERS

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

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 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.

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

Meter Size	Connection Fee
5/8" x 3/4"	$ 500
1-Inch	$ 700
1-1/2 Inch	$
2-Inch	$ 1,100
3-Inch	$
4-Inch	$
5-Inch	$
6-Inch	$

XXI. SEWER RATES - PROPOSED

A. Proposed Rate Schedule without RUS Grant:

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

Percentage of Water Bill _____ *%* *Minimum Charge* *$* _____
Other: (If Charge Not Based on Water Bill) _____

Proposed 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 - GENERAL CUSTOMERS

A. Proposed Rate Schedule Without RUS Grant:

First	2,000	Gallons @	$ 19.74	Minimum.
Next	3,000	Gallons @	$ 7.75	per 1,000 Gallons.
Next	5,000	Gallons @	$ 6.57	per 1,000 Gallons.
Next	60,000	Gallons @	$ 6.00	per 1,000 Gallons.
Next		Gallons @	$	per 1,000 Gallons.
Next		Gallons @	$	per 1,000 Gallons.
All Over	70,000	Gallons @	$ 5.49	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 @	$ 19.29	Minimum.
Next	3,000	Gallons @	$ 7.58	per 1,000 Gallons.
Next	5,000	Gallons @	$ 6.42	per 1,000 Gallons.
Next	60,000	Gallons @	$ 5.86	per 1,000 Gallons.
Next		Gallons @	$	per 1,000 Gallons.
Next		Gallons @	$	per 1,000 Gallons.
All Over	70,000	Gallons @	$ 5.37	per 1,000 Gallons.

If more than one rate, use additional sheets.

XXII. WATER RATES – PROPOSED **U.S. CORPS OF ENGINEERS**

A. Proposed Rate Schedule Without RUS Grant:

First	55,000	Gallons @	$ 373.52	Minimum.
Next	15,000	Gallons @	$ 6.00	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	70,000	Gallons @	$ 5.49	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	55,000	Gallons @	$ 365.26	Minimum.
Next	15,000	Gallons @	$ 5.86	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	70,000	Gallons @	$ 5.37	per 1,000 Gallons.

If more than one rate, use additional sheets.

XXII. WATER RATES – PROPOSED **TRAILER PARKS**

B. Proposed Rate Schedule Without RUS Grant:

First	10,000	Gallons @	$ 69.16	Minimum.
Next	60,000	Gallons @	$ 6.00	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	70,000	Gallons @	$ 5.49	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).

C. Recommended Rate Schedule with RUS Grant:

First	10,000	Gallons @	$ 67.63	Minimum.
Next	60,000	Gallons @	$ 5.86	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	70,000	Gallons @	$ 5.37	per 1,000 Gallons.

If more than one rate, use additional sheets.

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

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	Gal.	1,000							
	2,000	-	3,000	Gal.	2,500							
	3,000	-	4,000	Gal.	3,500							
	4,000	-	5,000	Gal.	4,500							
	5,000	-	6,000	Gal.	5,500							
	6,000	-	7,000	Gal.	6,500							
5/8 x 3/4	7,000	-	8,000	Gal.	7,500							
Inch	8,000	-	9,000	Gal.	8,500							
	9,000	-	10,000	Gal.	9,500							
	10,000	-	11,000	Gal.	10,500							
	11,000	-	12,000	Gal.	11,500							
	12,000	-	13,000	Gal.	12,500							
	13,000	-	14,000	Gal.	13,500							
	14,000	-	15,000	Gal.	14,500							
	15,000	-	16,000	Gal.	15,500							
	16,000	-	17,000	Gal.	16,500							
	17,000	-	18,000	Gal.	17,500							
	18,000	-	19,000	Gal.	18,500							
	19,000	-	20,000	Gal.	19,500							
		-		Gal.								
		-		Gal.								
		-		Gal.								
					Subtotal		( )	( )	( )	( )	( )	( )
					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".*

1-Inch			*Gal.*											
			Gal.											
			Gal.											
			Gal.											
			Gal.											
				Subtotal		( )	( )	( )	( )	( )	( )			
1-1/2 Inch			*Gal.*											
			Gal.											
			Gal.											
			Gal.											
			Gal.											
				Subtotal		( )	( )	( )	( )	( )	( )			
2-Inch			*Gal.*											
			Gal.											
			Gal.											
			Gal.											
			Gal.											
				Subtotal		( )	( )	( )	( )	( )	( )			
3-Inch			*Gal.*											
			Gal.											
			Gal.											
			Gal.											
			Gal.											
				Subtotal		( )	( )	( )	( )	( )	( )			
4-Inch			*Gal.*											
			Gal.											
			Gal.											
			Gal.											
			Gal.											
				Subtotal		( )	( )	( )	( )	( )	( )			

* ***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".***

			Gal.										
			Gal.										
5-Inch			Gal.										
			Gal.										
			Gal.										
				Subtotal		( )	( )	( )	( )	( )	( )		
			Gal.										
			Gal.										
6-Inch			Gal.										
			Gal.										
			Gal.										
				Subtotal		( )	( )	( )	( )	( )	( )		
				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

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	Gal.	1,000							
	2,000	-	3,000	Gal.	2,500							
	3,000	-	4,000	Gal.	3,500							
	4,000	-	5,000	Gal.	4,500							
	5,000	-	6,000	Gal.	5,500							
	6,000	-	7,000	Gal.	6,500							
5/8 x 3/4	7,000	-	8,000	Gal.	7,500							
Inch	8,000	-	9,000	Gal.	8,500							
	9,000	-	10,000	Gal.	9,500							
	10,000	-	11,000	Gal.	10,500							
	11,000	-	12,000	Gal.	11,500							
	12,000	-	13,000	Gal.	12,500							
	13,000	-	14,000	Gal.	13,500							
	14,000	-	15,000	Gal.	14,500							
	15,000	-	16,000	Gal.	15,500							
	16,000	-	17,000	Gal.	16,500							
	17,000	-	18,000	Gal.	17,500							
	18,000	-	19,000	Gal.	18,500							
	19,000	-	20,000	Gal.	19,500							
		-		Gal.								
		-		Gal.								
		-		Gal.								
					Subtotal		( )	( )	( )	( )	( )	( )
					Average Monthly Rate	( )						
					Average Monthly Usage			( )			( )	

* *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".*

1-Inch			*Gal.*													
			Gal.													
			Gal.													
			Gal.													
			Gal.													
				Subtotal			( )		( )		( )		( )		( )		( )
1-1/2 Inch			*Gal.*													
			Gal.													
			Gal.													
			Gal.													
			Gal.													
				Subtotal			( )		( )		( )		( )		( )		( )
2- Inch			*Gal.*													
			Gal.													
			Gal.													
			Gal.													
			Gal.													
				Subtotal			( )		( )		( )		( )		( )		( )
3- Inch			*Gal.*													
			Gal.													
			Gal.													
			Gal.													
			Gal.													
				Subtotal			( )		( )		( )		( )		( )		( )
4-Inch			*Gal.*													
			Gal.													
			Gal.													
			Gal.													
			Gal.													
				Subtotal			( )		( )		( )		( )		( )		( )

* ***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".***

			Gal.											
			Gal.											
5-Inch			Gal.											
			Gal.											
			Gal.											
				Subtotal		( )	( )	( )	( )	( )	( )			
			Gal.											
			Gal.											
6-Inch			Gal.											
			Gal.											
			Gal.											
				Subtotal		( )	( )	( )	( )	( )	( )			
				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

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	Gal	1,000	19.29	12,060	16,044	232,637	1,579	943	30,459
	2,000	-	3,000	Gal	2,500							
	3,000	-	4,000	Gal	3,500	30.66	23,781	81,301	729,125	1,124	3,925	34,462
	4,000	-	5,000	Gal	4,500							
	5,000	-	6,000	Gal	5,500							
	6,000	-	7,000	Gal	6,500	51.66	10,080	67,343	520,733			
5/8 x 3/4	7,000	-	8,000	Gal	7,500							
Inch	8,000	-	9,000	Gal	8,500	64.50				635	5,629	40,958
	9,000	-	10,000	Gal	9,500							
	10,000	-	11,000	Gal	10,500							
	11,000	-	12,000	Gal	11,500							
	12,000	-	13,000	Gal	12,500							
	13,000	-	14,000	Gal	13,500							
	14,000	-	15,000	Gal	14,500							
	15,000	-	16,000	Gal	15,500							
	16,000	-	17,000	Gal	16,500	112.22	2,170	35,759	243,517			
	17,000	-	18,000	Gal	17,500							
	18,000	-	19,000	Gal	18,500							
	19,000	-	20,000	Gal	19,500	129.80				244	4,736	31,671
	over	-	70,000	Gal	200,000	1123.83	42	8,406	47,202			
	over	-	70,000	Gal	432,000	2369.67				99	42,766	234,597
					Subtotal		48,133	208,853	1,773,214	3,681	57,999	372,147
					Average Monthly Rate	(36.84)						
					Average Monthly Usage			(4.3)			(15.8)	

* 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". **(Reflects number of Annual Bills)**

Added Customers on Existing Lines

5/8 x 3/4			Gal	4,000	34.45	360	1,440	12,402			
			Gal								
			Gal								
			Gal								
			Gal								
			Subtotal			(360)	(1,140)	(12,402)	( )	( )	( )
			Gal								
			Gal								
			Gal								
1-1/2 Inch			Gal								
			Gal								
			Gal								
			Subtotal			( )	( )	( )	( )	( )	( )
			Gal								
			Gal								
2- Inch			Gal								
			Gal								
			Gal								
			Subtotal			( )	( )	( )	( )	( )	( )

City of Scottsville

		Gal	23,655	3.31				12		78,298
		Gal								
3- Inch		Gal								
		Gal								
		Gal								
		Subtotal			( )	( )	( )	(12)	(23,65)	(78,298)

U.S. Corps of Engineers

First	55,000	Gal		365.26				9	70	3,290
Next	15,000	Gal	65,500	399.36				2	131	799
4-Inch Over	70,000	Gal	77,000	463.32				1	77	463
		Gal								
		Gal								
		Subtotal			( )	( )	( )	(12)	(278)	(4,552)

* 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".

5- Inch			Gal.									
			Gal.									
			Gal.									
			Gal.									
			Gal.									
				Subtotal		( )	( )	( )	( )	( )	( )
6- Inch			Gal.									
			Gal.									
			Gal.									
			Gal.									
			Gal.									
				Subtotal		( )	( )	( )	( )	( )	( )
				TOTALS		(48,133)	(210,293)	(1,785,616)	3,705	81,932	454,997

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 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	Gal.	1,000							
	2,000	-	3,000	Gal.	2,500							
	3,000	-	4,000	Gal.	3,500							
	4,000	-	5,000	Gal.	4,500							
	5,000	-	6,000	Gal.	5,500							
	6,000	-	7,000	Gal.	6,500							
5/8 x 3/4	7,000	-	8,000	Gal.	7,500							
Inch	8,000	-	9,000	Gal.	8,500							
	9,000	-	10,000	Gal.	9,500							
	10,000	-	11,000	Gal.	10,500							
	11,000	-	12,000	Gal.	11,500							
	12,000	-	13,000	Gal.	12,500							
	13,000	-	14,000	Gal.	13,500							
	14,000	-	15,000	Gal.	14,500							
	15,000	-	16,000	Gal.	15,500							
	16,000	-	17,000	Gal.	16,500							
	17,000	-	18,000	Gal.	17,500							
	18,000	-	19,000	Gal.	18,500							
	19,000	-	20,000	Gal.	19,500							
	_____	-	_____	Gal.	_____							
	_____	-	_____	Gal.	_____							
	_____	-	_____	Gal.	_____							
					Subtotal					( )	( )	( )
					Average Monthly Rate	_____						
					Average Monthly Usage			_____			( )	

* 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".

1-Inch			Gal.									
			Gal.									
			Gal.									
			Gal.									
			Gal.									
			Subtotal			( )	( )	( )	( )	( )	( )	
1-1/2 Inch			Gal.									
			Gal.									
			Gal.									
			Gal.									
			Gal.									
			Subtotal			( )	( )	( )	( )	( )	( )	
2- Inch			Gal.									
			Gal.									
			Gal.									
			Gal.									
			Gal.									
			Subtotal			( )	( )	( )	( )	( )	( )	
3- Inch			Gal.									
			Gal.									
			Gal.									
			Gal.									
			Gal.									
			Subtotal			( )	( )	( )	( )	( )	( )	
4-Inch			Gal.									
			Gal.									
			Gal.									
			Gal.									
			Gal.									
			Subtotal			( )	( )	( )	( )	( )	( )	

* 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".

5- Inch			Gal.										
			Gal.										
			Gal.										
			Gal.										
			Gal.										
				Subtotal		( )	( )	( )	( )	( )	( )		
6- Inch			Gal.										
			Gal.										
			Gal.										
			Gal.										
			Gal.										
				Subtotal		( )	( )	( )	( )	( )	( )		
				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 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)

(As of the last full operating year.)

A. Operating Income:

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

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

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

C. Non-Operating Income:

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

D. Net Income *$*

E. Debt Repayment:

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

F. Balance Available for Coverage *$*

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

A. Operating Income:

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

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

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

C. Non-Operating Income:

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

D. Net Income *$*

E. Debt Repayment:

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

F. Balance Available for Coverage *$*

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

Year Ending _____

A. *Operating Income:*

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

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

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

C. *Non-Operating Income:*

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

D. *Net Income* $

E. *Debt Repayment:*

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

F. *Balance Available for Coverage* $

XXX. CURRENT OPERATING BUDGET (WATER SYSTEM)

(As of the last full operating year.)

A. Operating Income:

Water Sales	$ 1,819,588
Disconnect/Reconnect/Late Charge Fees	58,980
Other (Describe) Forfeited Discounts	40,249
Less Allowances and Deductions	( )
Total Operating Income	$ 1,918,817

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

Source of Supply Expense	$ 610,247
Pumping Expense	44,720
Water Treatment Expense	--
Transmission and Distribution Expense	147,262
Customer Accounts Expense	157,457
Administrative and General Expense	584,243[1]
Depreciation	342,695
Total Operating Expenses	$ 1,886,624
Net Operating Income	$ 32,193

C. Non-Operating Income:

Interest on Deposits	$ 171,408
Other (Identify)	
Total Non-Operating Income	$ 171,408

D. Net Income $ 203,601

E. Debt Repayment:

RUS Interest	$ 231,209
RUS Principal	64,500
Non-RUS Interest	12,663
Non-RUS Principal	12,700
Total Debt Repayment	$ 331,051

F. Balance Available for Coverage $ (127,450)

[1] Includes taxes ($34,774) + interest on customer deposits ($446) + unamortized debt discount + ($2,275) = $37,495

XXXI. PROPOSED OPERATING BUDGET (WATER SYSTEM) EXISTING SYSTEM AND NEW USERS
(1st Full Year of Operation) Year Ending 2012

A. Operating Income:

Water Sales	$ 2,240,613
Disconnect/Reconnect/Late Charge Fees	58,980
Other (Describe) Forfeited Discounts	40,249
Less Allowances and Deductions (Taxes)	( )
Total Operating Income	$ 2,339,842

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

Source of Supply Expense	$ 749,056
Pumping Expense	61,329
Water Treatment Expense	--
Transmission and Distribution Expense	185,072
Customer Accounts Expense	192,827
Administrative and General Expense	618,652
Depreciation	292,384
Total Operating Expenses	$2,099,320
Net Operating Income	$ 240,522

C. Non-Operating Income:

Interest on Deposits	$ 150,000
Other (Identify)	
Total Non-Operating Income	$ 150,000

D. Net Income $ 390,522

E. Debt Repayment:

RUS Interest	$ 236,225
RUS Principal	87,200
Non-RUS Interest	13,597
Non-RUS Principal	18,000
Total Debt Repayment	$ 355,022

F. Balance Available for Coverage $ 35,500

XXXII. PROPOSED OPERATING BUDGET (WATER SYSTEM) NEW USERS EXTENSION ONLY N/A

(1st Full Year of Operation) Year Ending _____

A. Operating Income:

Water Sales	$
Disconnect/Reconnect/Late Charge Fees	
Other (Describe)	
Less Allowances and Deductions	( )
Total Operating Income	$

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

Source of Supply Expense	$
Pumping Expense	
Water Treatment Expense	--
Transmission and Distribution Expense	
Customer Accounts Expense	
Administrative and General Expense	
Total Operating Expenses	$
Net Operating Income	$

C. Non-Operating Income:

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

D. Net Income $

E. Debt Repayment:

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

F. Balance Available for Coverage $

XXXIII. ESTIMATED PROJECT COST - SEWER

(Round to nearest $100)

	COLLECTION	*TREATMENT*	*TOTAL*
Development			
Land & Rights			
Legal			
Engineering			
Interest			
Contingencies			
Initial Operating and Maintenance			
Other			
TOTAL			

XXXIV. ESTIMATED PROJECT FUNDING - SEWER

	COLLECTION	*TREATMENT*	*TOTAL*
Applicant - User Contribution Fees			
Other - Applicant Contribution			
RUS Loan			
RUS Grant			
ARC Grant (If applicable)			
CDBG (If applicable)			
Other (Specify)			
Other (Specify)			

XXXV. ESTIMATED PROJECT COST - WATER

Development	$ 840,200
Land and Rights	15,000
Legal	12,300
Engineering	153,500
Interest	37,000
Contingencies	84,000
Initial Operating and Maintenance	
Other (Administration)	5,000
TOTAL	$ 1,147,000

XXXVI. PROPOSED PROJECT FUNDING

Applicant - User Connection Fees	$
Other Applicant Contribution	150,000
RUS Financial Assistance	698,000
RUS Grant	299,000
ARC Grant (If applicable)	
CDBG Grant (If applicable)	
Other (Specify)	
Other (Specify)	
TOTAL	$ 1,147,000