RSA	ROSS, SINCLAIRE & ASSOCIATES
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P.O. Box 398			
Frankfort, KY			
40602			
502/695-7353			
fax: 502/695-2897			October 24, 2005
www.rsamuni.com			
INVESTMENT	Ma D	eth A. O'Donnell, Executive Director	RECEIVED
BANKING			NED AND
		icky Public Service Commission	
FINANCIAL		ower Boulevard	007 <u>3</u> 1 2005
ADVISORY		ox 615	PURING
	Frank	fort, Kentucky 40602-0615	PUBLIC SERVICE
PUBLIC	1917	D. C. A. K. Ander Deriv	
FINANCE	RE:	Boone County, Kentucky - Revise	1 Filing
BROKERAGE	Dear	Ms. O'Donnell:	
SERVICES			
		I am enclosing herewith one (1) orig	inal and 10 copies of an application, with
	accon	npanying exhibits, requesting that the	Public Service Commission grant a purchase
700 Walnut Street	water	adjustment to the County of Boone, K	entucky as it relates to their plans to finance,
Suite 600	consti	ruct, operate and maintain a public wa	ter distribution system to an unserved area in
Cincinnati. OH			nown as the Subdistrict B area. This application
45202			ustomer base in the rural area of this portion of
513/381-3939			bt. Therefore, the County has agreed to issue and
fax: 513/381-0124			nty will enter into an agreement with the Boone
		ty Water District to operate and mainta	
1219 Assembly Street			
Suite 202			ormal conferences held between me and the staff
Columbia: SC		C to determine the proper course of ac	
29201			ation has been filed by the County and we are
803/765-1004	hopef	ful this filing contains the requisite info	ormation.
fax: 803/765-1088			
			tance. Please feel free to contact me should you
1900 Envoy Circle	have	any questions concerning the project o	r the application.
Suite 1920			
Louisville. KY			Yours truly,
40299			
502/491-3939			
fax: 502/491-9979			
			Vince Gabbert
5217 Maryland Way			Attorney-at-Law
Suite 302			
Brentwood. TN	Enclo	osures	
37027			
615/370-6262	cc:	Distribution List	
fax: 615/370-9669			

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#### COMMONWEALTH OF KENTUCKY

#### BEFORE THE PUBLIC SERVICE COMMISSION

RECEIVED OCT 3 1 2005 PUBLIC SERVICE COMMINSION

In the Matter of:

APPLICATION OF THE COUNTY OF BOONE, FOR AN ADJUSTMENT OF RATE

CASE NO. 2005-00291

#### **PETITION**

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COMES NOW, the County of Boone ("County"), through counsel, and pursuant to KRS 278.180; 807 KAR 5:001, and all applicable law, respectfully petitions the Public Service Commission (the "Commission") for an order authorizing an adjustment in the existing water rates of Boone County, and in support thereof provides the following information in accordance with the Commission's regulations:

1. The County's address is P.O. Box 900, Burlington, KY 41005. The County is a political subdivision of the State of Kentucky. The County is governed by a fiscal court consisting of one publically elected county Judge/Executive and three publically elected commissioners. The current members of the County's fiscal court is shown herein under Exhibit A.

2. The County is applying for an adjustment in water rates pursuant to KRS 278.180; 807 KAR, Chapter 5, and all applicable law. Adjustment of the County's water rates is necessary to permit Boone County to recover additional revenue to meet the increases cost of purchased water when the County, by and through the Boone County Water District commences and increases the amount of purchased water from the Boone-Florence Water Commission. Boone County seeks to recover revenue necessary to cover the increased cost of purchased water. 3. Boone County's annual reports, including the annual report for the most recent fiscal year are on file with the Commission in accordance with 807 KAR 5:006, Section 3 (1).

4. The County has heretofore issued \$5,286,736 in Revenue Bonds to finance the costs of construction and implementation of the Subdistrict A project area, a previously unserved area of the County. The Revenue Bonds issued for the Subdistrict A project were issued in 2002 with a final maturity of 2027, with the Project being owned by the County under the existing Operating and Maintenance Agreement by and between the County and the Boone County Water District ("BCWD").

5. Boone County's proposed rate structure is attached as Exhibit B.

6. The proposed project is necessary to provide a potable supply of water to an unserved area of the County where it is not currently economically feasible to extend a public water supply without a subsidy by the County to meet the scheduled principal and interest requirements of the bonds.

7. Customer notice has been given in compliance with 807 KAR 5:001, Section 10 (3) & (4). Notice of the project and surcharge to customers is attached as Exhibit C. Notice will be published once per week for (3) consecutive weeks in a prominent manner in the Boone County Recorder, which is the newspaper of general circulation in Boone County's service area.

8. A complete description and quantified engineering reports of the proposed adjustment and project is attached as Exhibit D.

9. It is in the best interest of the County and the customers of Subdistrict B that the County issue the bonds to finance the project. It is expected that the rates and the other charges paid by the customers of the Subdistrict B Project area <u>will not</u> be adequate to meet the debt service of the bonds and that the County will need to subsidize the Project in order that there is no default of the bonds. The County is financially sound as shown in its most recent audit and has the financial

capability to meet all or a portion of the debt payments due on the project bonds and that said payment will not jeopardize other county services and projects. The County has a "Aa2" rating from Moody's Investors Service, which rating is in the highest rating that is assigned to any county in Kentucky by this nationally recognized rating agency. See Exhibit E for an analysis of the County's underlying bond rating by Moody's Investors Service.

10. Summary of Boone County's determination of its revenue requirements based on return on net investment rate base, return on capitalization, interest coverage, debt service coverage, or operating ratio, is not applicable and/or a waiver is requested. Boone County has determined its revenue requirements by making the calculations which would be utilized for a purchased water adjustment. The County is requesting an increase in rates only to raise sufficient revenue to cover the increased cost of purchased water. Please find attached as Exhibit F a financial analysis of the financing of the project. This analysis is based on a total construction cost of approximately \$4,000,000, of which \$2,750,000 will be financed at a projected rate of 4.450%, with the balance funded through federal, state and local grants. You will also find specific numbers as projected debt schedules for the life of the bonds as well as growth and revenue projections based on moderate growth of the water system. The debt will be secured through the proposed revenue from purchased water as well as subsidized, if needed, from the backing of the County.

11. The County proposes that it will issue in its name approximately \$2,750,000 of bonds or bond anticipation notes, which notes or bonds will mature serially over a period of thirty (30) years. The revenue from Subdistrict B is expected to consist of the following customer revenues (the "Project Revenues"):

> the consumption and use of water based on the approved tariffs for the Subdistrict B area;

- the normal and customary meter charges and installation fees charged by the BCWD;
- iii) an additional charge of \$25 each month to be added to each customers bill.

Collectively, i, ii and iii are referred to in the Operation and Maintenance Agreement between the BCWD and the County as the "District Charges." The BCWD, by agreement with the County (see Exhibit H herein for a copy of the Operation and Maintenance Agreement), will read the meters to measure the customer consumption of water and then bill, collect and account for all the Project Revenues as does its own customers. The BCWD will deduct from the District Charges its cost of the treated water and its cost of operating and maintenance ("O&M") of the Subdistrict B waterworks system, computed by multiplying the total gallons used by the Subdistrict B system times the O&M cost per 1,000 gallons (the "Adjusted Gross Project Revenues"). The O&M cost shall be adjusted each calendar year based on the then most recent audited O&M cost for the prior calendar year as reported to the Kentucky Public Service Commission by the BCWD in its annual report. The Adjusted Gross Project Revenues will be paid to the County, or to the Paying Agent bank as agent for the County, to be used exclusively for meeting the scheduled principal and interest payment of the Bonds.

If the Adjusted Gross Project Revenues are not adequate in any fiscal year (ending June 30) to meet the scheduled principal and interest payments of the bonds, the County has covenanted to make up any shortfall in payment (the "County Subsidy Payment"). The County will accrete, without interest, and keep an accounting of all the County Subsidy Payments made in support of the Project through the last maturing bond. The Adjusted Gross Project Revenues, when and as received, shall be used by the County in this priority and order:

- i) to meet the scheduled interest payment of the bonds;
- ii) to meet the scheduled principal payment of the bonds;

- iii) to repay the County for any accreted amount owing of its County Subsidy Payments;
- iv) to redeem bonds earlier than their scheduled maturity as is provided in the trust indenture or bond ordinance that secures the payment of the bonds.

The County has covenanted that when all the bonds are redeemed, whether by scheduled maturity or earlier redemption, the County will convey, without any costs, to the BCWD the Subdistrict B waterworks system.

12. Pursuant to Section 10(6)(h), a reconciliation of the rate base and capital used to determine revenue requirements is not applicable and a waiver is therefore requested. Increased revenue was not determined by rate base or capital used. See response above.

13. Current chart of accounts if more detailed than the uniform system of accounts prescribed by the Commission is not applicable. Boone County utilizes the Commission's chart of accounts.

14. The independent auditor's annual opinion report, with any written communication from the independent auditor to the utility which indicates the existence of the material weakness in the utility's internal controls is attached as Exhibit G.

15. The County respectfully requests a waiver of the cost of service study, pursuant to 807 KAR 5:001, Section 10 (11).

16. The County respectfully requests a waiver of the latest depreciation study, pursuant 807 KAR 5:001, Section 10(6)(n). This section is not applicable to the current filing and a waiver is requested.

17. A general description of the property is attached Exhibit L, pursuant to Section11(1)(a).

18. There are no mortgages or deeds of trust in relation to this project and the County respectfully requests a waiver of Section 6(4).

19. There are no notes outstanding nor any other indebtedness in regards to SubdistrictB, and the County respectfully requests a waiver pursuant to Section 6(6).

20. There is no other indebtedness in regards to Subdistrict B, and the County respectfully requests a waiver of Section 6(7).

21. A detailed income statement and balance sheet has been provided through the filing of the Annual Reports and a waiver pursuant to Section 6(9) is respectfully requested.

22. The County respectfully requests a waiver of Section 10(6)(o) in providing a full list of commercial or in-house computer software or programs.

23. The County respectfully requests a waiver of Section 10(6)(p) due to the fact that the County has no stock offerings or prospectuses and the section is thus inapplicable.

24. The County respectfully requests a waiver of Section 10(6)(r).

25. Section 10(6)(t) is not applicable and the County respectfully requests a waiver of said section.

26. As part of the financing information duly enclosed as Exhibit E, please find a detailed income statement reflecting the impact of all proposed adjustments pursuant to Section 10(7)(a) as well as the proposed number of customers to be added as end level customers as it relates to increased revenue through moderate growth pursuant to Section 10(7)(e). It is projected that 406 customers will be added through the Subdistrict B project

27. The County believes that it is in the public interest that this certificate be granted.

28. The County proposes that the customers of Subdistrict B pay the same rates as are being paid by the customers of the Boone County Water District, which rates and charges are shown herein under Exhibit B. It is also requested that at the same time there is an increase in the rate tariff charges by the BCWD to their customers that are approved by the PSC, that those rate tariffs be the same at all times as the Boone County Subdistrict B customers. 29. The most recent capital construction budget is not applicable because no pro forma adjustment has been proposed for plant additions and the County respectfully requests a waiver pursuant to Section 10(7)(b) - Section 10(7)(d).

30. The current and ongoing Operating and Maintenance Agreement by and between Boone County and the Boone County Water District is attached as Exhibit H.

31. Pursuant to KRS 278.180, please accept this filing as notice of rates with no effective date yet determined pending Commission approval.

32. The following information is provided in response to 807 KAR 5:001(8):

a. Articles of Incorporation - None, County is a statutorily created county by Kentucky's General Assembly as provided under Kentucky's Constitution;

33. The following information is supplied pursuant to 807 KAR 5:001(9):

a. The County has determined through public meetings and public surveys that the Project is in the best interest of the public since:

- i) the area is not served by any public water supply;
- the persons and businesses residing in the Subdistrict B area must rely on cistern and well water or truck transported haul water that may contain contaminants;
- the cost of truck transported water is substantially more costly to the public, especially the elderly and disabled that may be on fixed incomes; and,
- the current supply of water is usually not adequate to meet the needs of families and businesses that reside in the Project area.

b. There were no formal public hearings concerning the specifics of the projects, but there have been numerous presentations to the Fiscal Court. Also, the County has received a very positive response from the public through calls to their offices from businesses and families expressing a desire to tap onto the water system once it is constructed. The County reportedly receives five to ten calls per week from individuals wanting to know when the system will be constructed.

c. No new franchises are required. Copies of the DOW permits are attached as Exhibit I.

c. Diagrams of the proposed construction and construction specifications, description of the location, route, description of facilities, manner of construction are all included in the preliminary and final engineering reports attached as Exhibit J.

d. Maps of the area showing location of the proposed facilities are in Exhibit K.

e. The construction costs will be funded by the issuance of general obligation bonds of the County. The Plan of Financing and sources and uses of the bond funds are shown herein under Exhibit F.

f. Additional operating costs for operation and maintenance are minimal due to the scope of the Project and its being new construction. Additionally, the Operation and Maintenance Agreement between the BCWD and the County provides for an annual adjustment in the O&M costs based on prior years actual O&M expenditures.

g. There is no existing waterworks system in the Subdistrict B project area.

34. The County has also already published and received bids for construction of the Subdistrict B project. Please find attached as Exhibit M, the bid tabulations with all applicable numbers in regards to phases of the project. Please also find attached as Exhibit N, projected total construction costs of the project.

35. A copy of this petition has been served on the Attorney General.

The County requests that it be granted an order authorizing:

- i) construction of the Subdistrict B waterworks distribution system;
- the issuance of approximately \$2,750,000 of bonds scheduled to mature for a period not to exceed thirty (30) years from their date of issue, which amount may initially be issued in the form of five (5) year bond anticipation notes and renewal five year notes; and
- iii) a schedule of rates that are the same rates charged the customers of the Boone
  County Water District, plus a surcharge be paid by each customer equal to
  \$25.00 for each 10,000 gallons or any portion thereof of water consumed
  each month.

IN WITNESS WHEREOF, the County has caused this Petition to be executed in their name

by their duly authorized officer and a copy of this Petition served on the parties listed below.

## BOONE COUNTY, KENTUCKY

Lary W. Moore County Judge/Executive

Copies:

Greg Stumbo Attorney General

Marilyn K. Rouse County Clerk

Boone County Water District 2005 Filing Case No. 2005-00291

List of Attached Exhibits -

- Exhibit A Current members of the Boone County Fiscal Court
- Exhibit B Proposed rate structure to be applicable to Subdistrict B customers
- Exhibit C Notice of the project and surcharge to Subdistrict B customers
- Exhibit D Quantified Engineering Reports
- Exhibit E Analysis of the County's underlying bond rating by Moody's.
- Exhibit F Financial Analysis and proposed financing structure of the Project
- Exhibit G Independent Auditors Annual Report
- Exhibit H Operation and Maintenance Agreement b/t the County and BCWD
- Exhibit I Copies of the DOW permits
- Exhibit J Preliminary and Final engineering reports
- Exhibit K Map of the proposed Project area
- Exhibit L General description of the property
- Exhibit M Bid tabulations for publically advertised bid costs
- Exhibit N Total Construction Costs of the Proposed Project

# <u>EXHIBIT A</u>

# CURRENT MEMBERS OF THE BOONE COUNTY FISCAL COURT

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### Members of the Boone County Fiscal Court

Gary Moore, County Judge/Executive 2950 Burlington Pike PO Box 900 Burlington, KY 41005 859-334-2242

Cathy Hudson Flaig, Commissioner 4072 Limaburg Road Hebron, KY 41048 859-689-4255

Terri Moore, Commissioner 10447 Jason's Bluff Florence, KY 41042 859-283-9338

Charles Kenner, Commissioner 10673 Bridlepath Lane Union, KY 41091 859-334-2281

## EXHIBIT B

# PROPOSED RATE STRUCTURE TO BE APPLICABLE TO SUBDISTRICT B CUSTOMERS

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Tap In Fees:	3/4" meter 1" meter	\$625.00 \$825.00
	2" meter	Actual Cost – \$1,500.00
	ver deposit amoun	funded any difference in cost less than deposit and t. All meters, over 2" will be installed by
<b>Reconnect Fee:</b>	Reconnect due \$25.00	ring normal business hours (8:00 am to 4:30 pm)
-	Reconnect aft \$37.50	er normal business hours
<b>Return Check</b>		
Charge:	For any check \$20.00	returned to the District as uncollectible
Wholesale/		
Tank Sales:	\$3.60 per 1,00	00 gallons

## **Monthly Usage Rates**

Schedule A:	All customers except r	nultiple occupancy buildings and mobile home parks.
First 3,	000 gallons:	\$15.45 minimum charge
Next 2,	000 gallons:	\$4.65 per 1,000 gallons
Next 5,	000 gallons:	\$4.40 per 1,000 gallons
All ove	er 10,000 gallons:	\$3.65 per 1,000 gallons

Schedule B: Multiple occupancy buildings and mobile home parks.

First 3,000 gallons:	\$15.45 minimum charge
Next 2,000 gallons:	\$5.15 per 1,000 gallons
Next 5,000 gallons:	\$4.65 per 1,000 gallons
Next 140,000 gallons:	\$4.40 per 1,000 gallons
Next 150,000 gallons:	\$3.65 per 1,000 gallons

### Monthly Minimum Charge by Meter Size

•	0
5/8" - 3/4" meter	3,000 gallons
1" meter	5,000 gallons
11/2" meter	9,000 gallons
2" meter	11,000 gallons
3" meter	21,000 gallons
4" meter	29,000 gallons
6" meter	100,000 gallons
Over 6" meter	100,000 gallons

Meter Size	Schedule A	<u>Schedule B</u>
5/8" - 3/4"	\$15.45	\$15.45
1"	\$24.75	\$25.75
11/2"	\$42.35	\$44.35
2"	\$50.40	\$53.40
3"	\$86.90	\$97.40
4"	\$116.10	\$132.60
6"	\$375.23	\$445.00
Over 6"	\$375.23	\$445.00

### **Monthly Surcharge**

Each costumer of Subdistrict *g* vill pay a surcharge of \$25.00 for each 10,000 gallons or any portion thereof of water consumed each month.

# EXHIBIT C

# NOTICE OF THE PROJECT AND SURCHARGE TO SUBDISTRICT B CUSTOMERS

#### BOONE COUNTY, KENTUCKY

#### NOTICE TO CUSTOMERS

#### PETITION TO ESTABLISH WATER RATES AND ISSUE BONDS PUBLIC SERVICE COMMISSION

Pursuant to the Regulations of the Kentucky Public Service Commission (Commission), Boone County, Kentucky (the "County") hereby gives Notice that it has filed a Petition with the Commission for a certificate of convenience and necessity to construct and finance a public water system in certain unserved areas of the County (the Subdistrict B service area") and a rate tariff schedule that will apply to each customer of the Subdistrict B service area. The County has proposed the rates and charges listed below to be effective January 1, 2006. Further information may be obtained from the Commission or the County. The rates proposed in this Notice may be modified by the Commission. Such action by the Commission may result in the rates being higher or lower than those proposed by the County.

Any corporation, association, body politic or person may by timely motion, within 30 days of this Notice, request intervention in this case. Intervention beyond the 30 day period may be granted for good cause shown. The Motion must be submitted to the Public Service Commission, 211 Sower Boulevard, PO Box 615, Frankfort, Kentucky 40602 and should state the grounds for the request, including the interest and status of the party. Interveners may obtain copies of the Application and any testimony filed by contacting the County at the address below. A copy of the Application is available for public review at the office of the County and at the Public Service Commission, 211 Sower Boulevard, Frankfort, Kentucky 40601, (502) 564-3940.

Mr. James E. Parsons County Administrator P.O. Box 900 2950 Washington Square Burlington, KY 41005 (859) 334-2240

Proposed Rates:

Tap In Fees:	3/4" meter	\$625.00
-	1" meter	\$825.00
	2" meter	Actual Cost – \$1,500.00
	ver deposit amour	efunded any difference in cost less than deposit and nt. All meters, over 2" will be installed by applicant
Reconnect Fee:	Reconnect du \$25.00	ring normal business hours (8:00 am to 4:30 pm)
	Reconnect af \$37.50	ter normal business hours
<b>Return</b> Check		
Charge:	For any checl \$20.00	k returned to the District as uncollectible
Wholesale/		
Tank Sales:	\$3.60 per 1,0	00 gallons

#### **Monthly Usage Rates**

Schedule A:All customers except multiple occupancy buildings and mobile home parkFirst 3,000 gallons:\$15.45 minimum chargeNext 2,000 gallons:\$4.65 per 1,000 gallons	
Next 2 000 gallons: 54.05 Der 1.000 gallolis	
Next 5,000 gallons: \$4.40 per 1,000 gallons	
All over 10,000 gallons: \$3.65 per 1,000 gallons	
Schedule B: Multiple occupancy buildings and mobile home parks.	
First 3,000 gallons: \$15.45 minimum charge	
Next 2,000 gallons: \$5.15 per 1,000 gallons	
Next 5,000 gallons: \$4.65 per 1,000 gallons	
Next 140,000 gallons: \$4.40 per 1,000 gallons	
Next 150,000 gallons: \$3.65 per 1,000 gallons	
Monthly Minimum Charge by Meter Size	
5/8" - 3/4" meter 3,000 gallons	
1" meter 5,000 gallons	
1½" meter 9,000 gallons	
2" meter 11,000 gallons	
3" meter 21,000 gallons	
4" meter 29,000 gallons	
6" meter 100,000 gallons	
Over 6" meter 100,000 gallons	
Meter Size Schedule A Schedule B	
<u>5/8" - 3/4"</u> \$15.45	
1" \$24.75 \$25.75	
1½" \$42.35 \$44.35	
2" \$50.40 \$53.40	
3" \$86.90 \$97.40	
4" \$116.10 \$132.60	
6" \$375.23 \$445.00	
Over 6" \$375.23 \$445.00	

### **Monthly Surcharge**

Each costumer of Subdistrict B will pay a surcharge of \$25.00 for each 10,000 gallons or any portion thereof of water consumed each month.

# <u>EXHIBIT D</u>

# QUANTIFIED ENGINEERING REPORTS



July 1, 2005

Mr. James Parsons, County Administrator Boone County Fiscal Court 2950 Washington Square Burlington, Ky. 41005

## Re: Boone County Rural Water Project Engineering Report

Tetra Tech, Inc. has prepared this engineering report for the Boone County Fiscal Court, which describes the Boone County Rural Water Project. This report was prepared as a part of the Phase II planning and design for this project. The report outlines the program objectives of the County and the planning and public participation involved in developing the project and the final scope of the Phase II project. This report will also be utilized to support the funding application and Public Service Commission application for the implementation of the project.

### BACKGROUND

The Boone County Fiscal Court has initiated a water system program to extend water service to the rural areas of Boone County. This program is to address the concerns that Boone County has significantly less water service available to County residents than the other Kentucky Counties. The overall objective of the program was to allow many of the County rural areas to have the opportunity for public water service.

This program began in 2000 with initial planning for extending water service throughout the County. The initial effort, Phase I of the project has been designed and constructed. The Phase I project, identified as "Sub-district A" provides service to the following areas:

- 1A: Big Bone Rd/Rice Pike/Beaver Rd./U.S. 42
- 1C: Idlewild Rd./ Idlewild by-pass to I-275-Ky. 20/Bullitsburg Church Rd. Side Streets: Idlebrook Subv./ Blackberry Hill/Rasberry Ct.
- 1D: Bullittsville Rd./Fawn Ln.
- 1C: Idlewild Side Streets; Feeley Rd./Eason Ln./ Akin Ln.



# TETRA TECH, INC.

The construction of the Phase I project was initiated in July 2002. The work included some 140,900 feet (26.7 miles) of 8" and 12" water main with appurtenances for a total construction cost of approximately \$4,595,000. Construction was substantially completed for the transmission main areas in October 2003 and in the remaining Idlewild Road side street areas by December 2004.

The Phase II program, referred to as "Sub-district B", was initiated in March of 2003 to assess further extension of the water mains to the rural area customers. The Phase II program is more fully described in this report.

#### **Rural Program Planning**

The overall rural water program plan was initially prepared for the Boone County Fiscal Court in July 2000. This plan included extension of the water mains to the Phase I area and to the west and south sections of the County to the following areas:

- Ky. 20 from Idlewild Rd to Petersburg to Belleview to Ky 18 to loop and along Ky. 18 back to Burlington (existing water system)
- Ky. 338-East Bend Rd to Waterloo to McVille and to Ky 18 proposed main as noted above. This would provide a 12 " water main loop in central Boone County
- From Big Bone Church Rd to Beaver Rd to loop with the existing Big Bone Rd water main
- Water mains on side streets along these water main routes with significant residents/potential customers

Water mains in the communities of Petersburg and Belleview/McVille

This service area and original plan would include some 220,000 feet (41 miles) of water main at a construction cost of some \$10,000,000. The new water service would provide service to some 1,110 existing residents. In addition to the water mains, additional water storage and pressure reducing valves would have to be provided to extend the water service to the western most areas of the County.

A more detailed evaluation of the customer counts and locations was performed relative to the proposed water mains. To address the feasibility the customer density was determined, which is defined as the number of customers per mile. The feasibility point utilized for determining the potential water main extension was a minimum of 17 customers/mile. Customer counts were estimated utilizing the existing Boone County GIS mapping initially, but site visits were conducted to confirm the final estimates. Utilizing this criteria the next phase of the water program (Phase II) was defined as



TETRA TECH, INC.

shown in the attached Figure Phase I & II Location Map. The following project areas were defined and the project descriptions are provided as follows:

### Phase 2A - Big Bone Church Road to Gum Branch Rd.

The Phase 2A Project consists of extending the water main from Big Bone Rd. approximately 8,200 feet of 8" ductile iron water main along Big Bone Church Road to Gum Branch Rd.. In addition, water mains are proposed for side streets including Michelle Dr., Brian Ct., Kirby Ln., and Forest View Dr. (approx. 6,500 feet). The water mains will be constructed along the County roadways, primarily within the road right of way. There are 2 properties that require easements on private property which would be acquired. The construction will mainly be open cut excavation as shown in the plans. The project will extend water service to rural areas and provide fire protection.. This water main would potentially provide service to some 60 existing homes in this service area. The estimated construction cost for the Phase 2A water main extension is \$665,000.

### PHASE 2B AND PHASE 2D – EAST BEND RD. (SR338) TO LOCUST GROVE RD. (PHASE 2B) AND SIDE STREETS (PHASE 2D).

The Phase 2B and 2D Projects consists of installation of approximately 21,500 feet of 12" water main along East Bend Rd from Burlington to Locust Grove Rd (Phase 2B). In addition, 8" water mains are proposed on side streets including, Emerald Dr., Possum Path, Kirby Dr., Wolfe Rd., and Locust Grove Rd (17,000 feet-Phase 2D). The water mains will be constructed mainly along the State and County roadways, primarily within the road right of way. There are 2 properties on Phase 2D that require easements on private property. The construction will mainly be open cut excavation as shown in the plans. The project will extend water service to rural areas and provide fire protection. This water main would potentially provide service to approximately 270 existing homes in this area. The estimated construction cost for Phase 2B and 2D combined is approximately \$2,000,000.

### PHASE 2C - PETERSBURG RD. (KY 20) FROM IDLEWILD RD. WEST.

The Phase 2C Project consists of installation of approximately 10,500 feet of 8" water main along Ky 20/Petersburg Rd. west of Idlewild Rd. to approximately 2000 feet west of Ashby Fork Rd. In addition, 8" water mains are proposed on side streets including, Anson Ln., Brewer Ln., and Caribou Dr. (6,900 feet). The water mains will be constructed mainly along the State, County, and private roadways, primarily within the road right of way/edge of road. There is one property owner (2 parcels) where an easement is required and an agreement with the Homeowner Association for access along the private drive. The construction will mainly be open cut excavation as shown in the





A summary table for the proposed Phase II project indicating the potential customers, density, and estimated construction and project cost is shown in Figure II. The total estimated project cost for Phase II is approximately \$4,000,000 including a 10% contingency and engineering, legal, and finance costs. The estimated potential customers for Phase II as described above is some 400 residents.

#### **Public Meetings and Customer Commitments**

The Boone County Fiscal Court conducted public meetings to solicit interest and general commitment and support of the proposed water main project. A general public meeting was held in 2004 at Burlington Elementary School to outline the overall plan for the Phase II system. Descriptions of the project areas and maps and preliminary plans of the proposed project was presented. A sign up sheet for those interested in connecting was provided as a preliminary indication of interest. The County reviewed this information and other comments received during and after the meeting and the proposed project was adjusted to the location plan as presented above and in the attached Figure (Phase I & II Location Plan). A proposed water main on Ky. 18 and Woolper Rd was eliminated as were some streets off East Bend Rd. due to the comments received at these meetings.

Final public meetings were held on the project in March 2005. Three meetings were held to solicit final comments and commitments from the residents along the water main routes. The three meetings covered separately the 2A area, 2B and 2D area, and the 2C area of the project locations. At the meeting the residents were advised of the project scope, plans and specifications, cost estimate, schedule, and proposed user fees.

They were requested to indicate their commitment by paying the tap in fee (\$625). Based on these commitments the final project scope and limits will be determined. Boone County has received commitments for over 50% of the residents to tap into the water main through June 2005 and are proceeding to finalize the project for bidding and construction.

#### **Design Plans/Specifications/Permits**

Tetra Tech, Inc. prepared the final design plans and specifications for the Phase II project for the locations approved by the County. The detailed plans/specs were coordinated with the Boone County Water District and submitted to the Kentucky Division of Water (KDOW) for approval. As a part of the KDOW permit, a hydraulic model of the proposed water system was provided. Originally a system wide model for the entire Boone County system was developed by CDM as a subcontract to Tetra Tech. This model was initially completed in September 2003 and then finalized for Boone County in



# TETRA TECH, INC.

November 2004. This system wide model was provided to KDOW and the Public Service Commission. Tetra Tech completed a hydraulic analysis of the Phase II project areas to address the main routes and side streets as part of the KDOW permit submission.

In addition, the plans were submitted to the Kentucky Division of Highways and the Boone County Public Works Department for an Encroachment permit and approvals. These permits were approved in June 2005 and have been incorporated into the project requirements.

### **Financing Plan**

The Boone County Fiscal Court plans to finance this \$4.0 million project through the Kentucky Infrastructure Authority (KIA) with a low interest loan. In addition, the County has received a grant for the project engineering and construction for \$1,000,000. The projected loan amount would be approximately \$3.0 million with a 2.73% interest rate subject to final approval of the loan by KIA. The proposed user charge would be the same as for the Phase I project. The customers would pay the normal Boone County Water District base rate for usage and tap fees. A surcharge of \$25.00/month will be added to the monthly bill to pay back the Phase II project cost/debt. A financing plan was prepared by RSA, the financial consultant to Boone County for this project. This is also included in the Public Service Commission (PSC) application documentation as part of the approval for the project and user charges.

#### **Operations Plan/Agreements**

The water system is being constructed by the Boone County Fiscal Court who is paying for the project related costs. The system will be operated by the Boone County Water District in accordance with an Agreement with the Boone County Fiscal Court. This Agreement identifies specific requirements for the water supply from the Boone-Florence Water Commission, who provides the water supply from Cincinnati Water Works. It also includes Boone County Water District's responsibilities for operation, maintenance, meter reading, user charge collections, and customer service for these water mains. Upon repayment of the loan/debt for the Phase II project costs, the water mains and ownership will be turned over to the Boone County Water District per the terms of the Agreement. The proposed Agreement regarding this Operations plan are included in the PSC application for this project as well.

### **Proposed Project Schedule**

A preliminary schedule for implementation of the project has been prepared based on assumptions that the timely approvals from PSC will be received. The anticipated schedule for the project and milestone completion dates are summarized as follows:





Approval of Permits KDOW Complete/Submit PSC Application Easement Acquisition (6 properties) Application for KIA funding Approval PSC/Authorization to Award

Bid Projects:

Contract 2C
Contract 2B
Contract 2D
Contract 2A

June 2005 July 15, 2005 August 15, 2005 July 2005 September 1, 2005

September 1, 2005 November 1, 2005 January 1, 2006 March 1, 2006

The schedule from bidding to the award of the construction contract to the selected Contractor is estimated to take approximately 60 days. This may be impacted by approvals related to the KIA loan requirements. The project is phased to allow additional commitments from residents to tap in. However, the County may modify the schedule to increase or decrease the overall time frame based on final commitments and needs. Construction completion time for each contract is estimated as follows based on the bid and award date assumptions as noted above:

Complete Construction

Contract 2C	(6 months)	May 2006
Contract 2B	(7 months)	August 2006
Contract 2D	(6 months)	September 2006
Contract 2A	(5 months)	October 2006

Tetra Tech appreciates the opportunity to work with Boone County on this important project. Should you have any questions on this project, please advise.

Sincerely,

S. Huhn

Dennis P. Huber, P.E. Principal

Attachments:

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			Proposed	Phase II Pr	oject Summ	ary		[	
					Number of	Density		F	stimated
					Customers		Footage		Budget
					Potential		¥		Cost
		e Church Ro		ranch Rd.	36	23.0	8,250		354,740
		rive/Brian Co			6	14.8	2,138	\$	91,915
	Kirby Lane	/Forest View	Drive		23	28.2	4,312		
				Subtotal	65	23.3	14,700	\$	632,040
Contract 2	R East Bon	d Rd, Ky 338	to Locust (		187	45.9	21 500	¢	1,130,950
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Contract 2	O Side Stre	ets off East E	Bend Road						
	Emerald R				17	33.9	2,650	\$	112,225
	Possum Pa	atch/Kirby Dri	ive		23	17.1	7,120		301,390
	Wolfe Roa	d			10	30.5	1,730	\$	73,230
	Locust Gro	ve Road			33	31.7	5,500		232,865
				Subtotal	83	25.8	17,000	\$	719,710
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		urg Road, Ky			41	20.6	10,500		452,230
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